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THE POLITICS OF CONTENT PRIORITISATION ONLINE

GOVERNING PROMINENCE AND DISCOVERABILITY ON DIGITAL MEDIA PLATFORMS

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Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

I declare that my thesis consists of 99,849 words.

I can confirm that my thesis was copyedited for conventions of language, spelling, and grammar by Judith Barrett.

Abstract

This thesis examines the governing systems and industry practices shaping online content prioritisation processes on digital media platforms. Content prioritisation, and the relative prominence and discoverability of content, are investigated through a critical institutional lens as digital decision guidance processes that shape online choice architecture and influence users' access to content online. This thesis thus shows how prioritisation is never neutral or static and cannot be explained solely by political economic or neoclassical economics approaches. Rather, prioritisation is dynamically shaped by the institutional environment and by the clash between existing media governance systems and those emerging for platform governance.

As prioritisation processes influence how audiovisual media services are accessed online, posing questions about the public interest in such forms of intermediation is key. In that context, this research asks how content prioritisation is governed on digital media platforms, and what the elements of a public interest framework for these practices might be. To address these questions, I use a within case study comparative research design focused on the United Kingdom, collecting data by means of semi-structured interviews and document analysis. Through a thematic analysis, I then investigate how institutional arrangements influence both organisational strategies and interests, as well as the relationships among industry and policy actors involved, namely, platform organisations, pay-TV operators, technology manufacturers, content providers including public service media, and regulators.

The results provide insights into the 'black box' of content prioritisation across three interconnected dimensions: technical, market, and regulatory. In each dimension, a battle between industry and policy actors emerges to influence prioritisation online. As the UK Government and regulator intend to develop new prominence rules, the dispute takes on a normative dimension and gives rise to contested visions of what audiovisual services should be prioritised to the final users, and which private- and public-interest-driven criteria are (or should) be used to determine that.

Finally, the analysis shows why it is crucial to reflect on how the public interest is interpreted and operationalised as new prominence regulatory regimes emerge with a variety of sometimes contradictory implications for media pluralism, diversity and audience freedom of choice. The thesis therefore indicates the need for new institutional arrangements and a public interest-driven framework for prioritisation on digital media platforms. Such a framework conceives of public interest content standards as an institutional imperative for media and platform organisations and prompts regulators to develop new online content regulation that is appropriate to changing forms of digital intermediation and emerging audiovisual market conditions. While the empirical focus is on the UK, the implications of the research findings are also considered in the light of developments in the European Union and Council of Europe initiatives that bear on the future discoverability of public interest media services and related prominence regimes.

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List of Abbreviations

ACT	Association of commercial television
All4	BVOD of Channel 4
AVM	Audiovisual media
AVMSD	Audiovisual media service directive
AWS	Amazon web services
BBC	British broadcasting company
BVOD	Broadcaster video on demand
CMA	Competition & markets authority
CRTC	Canadian radio-television and telecommunications commission
DMA	Digital markets act
DMU	Digital markets unit
DSA	Digital services act
DTT	Digital terrestrial TV
DVB	Digital video broadcasting
EBU	European broadcasting union
EECC	European electronic communication code
EPG	Electronic programme guide
EU	European Union
IoT	Internet of things
IP	Internet protocol
IPTV	Internet protocol TV
ITC	Independent television commission
ITV	Independent television company
JTI	Journalism Trust Initiative
LCN	Logical channel numbering
Ofcom	Office of communications

OS	Operating system
OTT	Over-the-top
PSB	Public service broadcaster
PSM	Public service media
SEO	Search engine optimisation
SERP	Search engine results page
STV	Scottish television company
SVOD	Subscription-based video-on-demand
TVOD	Transactional video-on-demand
TWF	Television without frontiers directive
UI	User interface
UK	United Kingdom
UTV	Ulster television company
VOD	Video-on-demand

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Chapter 1

Introduction: Opening the 'Black Box' of Content Prioritisation

1.1. The Ongoing Battle for Prominence

> Prominence contributes to a virtuous circle of reach, funding and high levels of investment in UK content. However, these benefits are at risk if consumption of quality UK-originated PSB content falls because audiences don't have a real opportunity to be told about, to find, or simply to stumble across the full range of PSB programming available. A market primarily driven by global commercial principles does not have the right incentives to make PSB content easy to find and, over time, such a market will fail to deliver the diversity and range of content UK society as a whole would benefit from. (BBC, 2018a: 4)

In online media environments, content prioritisation processes determines prominence and discoverability of content and services. Content prioritisation is as important as content moderation processes: they are two sides of the same coin that have great influence on how audiovisual media (AVM) content is distributed, accessed and discovered. Thus, gaining prominence and discoverability is a priority for any content provider, while granting it is a valuable trading asset for technology manufacturers and platform organisations. In an era of content overabundance with limited audience attention, being recommended and prioritised on a feed, featuring more prominently on a user interface (UI) or simply being more visible and easier to discover on a TV screen is of paramount importance for any AVM service provider.

But how do these processes work and what influences them?

In the pre-digital, linear world, where broadcasts run in real-time showing the same content to everyone who tunes in to watch, prominence on television and electronic programme guides (EPG) is regulated through broadcasting and telecommunication law. Specifically, in the UK, public service media (PSM) are granted prominence on EPG and logical channel numbering (LCN) through the EPG Code (Ofcom, 2010).

However, none of this applies online, and EPGs are no longer the primary ways in which users access AVM content (MTM and Ofcom, 2019; Ofcom, 2018a). As described by Catherine Johnson (2019), we are currently living in an 'internet era' for media, which is characterised by the development of the internet into a medium for accessing AVM content. Increased broadband access, ownership of smartphones and tablets, roll-out of internet-connected television sets and the rise of numerous over-the-top (OTT)[1] media services have created

[1] An over-the-top (OTT) media service is a media service offered directly to viewers via the Internet. OTT bypasses cable, broadcast, and satellite television platforms

the conditions for these developments and have significantly changed the AVM industry (Johnson, 2019: 1–2). The relations and interdependencies between industry actors in this system are complex, as gateways to content increase and control over them is highly fragmented and contested (Evens and Donders, 2018; Johnson, 2019). In particular, the ability to control content prioritisation and discovery is rapidly shifting away from audiences and traditional content providers, while moving towards a much more layered and networked system (see Fig. 1.1).

In this context, what is prioritised to the final users online is the result of opaque processes and complex industry dynamics that demand our attention. Achieving a fair distribution of prominence online raises challenges not only for PSM that have lost the regulatory benefits of the pre-digital world, but also for smaller and local players that do not have the scale or resources to compete with global actors. Thus, as the UK Government and regulator intend to update the existing regulatory framework, prominence and discoverability online have gained significant cultural, economic, and political importance (see also Hesmondhalgh and Lobato, 2019; Hesmondhalgh and Lotz, 2020; Johnson, 2020b; McKelvey and Hunt, 2019).

Culturally, prominence relates to the varying ways in which individuals can access and consume content online. Users' ability to find content in a carefully curated digital environment that profiles them and nudges their choice also influences the diversity of their viewing experiences. Economically, prominence influences how providers of AVM services providers reach their audiences and stay relevant in an increasingly competitive environment. Reach and relevance are key to maintaining their audience and market shares and therefore affect the financial sustainability of these organisations. Politically, these developments also bring a new set of challenges for regulators that strive to adapt existing prominence regulation to the digital environment, as these new rules require a careful balancing act between state and private influence, users' freedom of choice, and media freedom.

Prominence is perceived by all actors in the AVM industry as a valuable asset, and given its perceived value and benefits, granting it to certain services rather than others can be a controversial decision. It is a site of contestation where different stakeholders use commercial and financial strategies alongside public policy tools and technical means to gain some control over gateways and relative content prioritisation processes.

These contestations are particularly relevant at a time of institutional change for media and platform governance systems, in the United Kingdom (UK) as well as at European and the wider international level. In the UK in particular, PSM organisations are going through a profound crisis and under increasing political pressure in the face of growing competition, declining audiences (Ofcom, 2020c), and an unstable political situation that is threatening the British Broadcasting Company's (BBC) funding (House of Lords, 2022a; Mazzucato, 2021; Sandle and Holton, 2022), and the future status of Channel 4 (DCMS, 2022b, 2022c; Morris,

2022; Waterson, 2022b).[2] More broadly then, the almost-saturated AVM market is reaching a critical point: commercially funded providers struggle to compete over subscribers and advertising revenue, while a general lack of audiences' trust in legacy players, such as PSM and traditional news providers, is affecting their sustainability, as audiences shift to online sources of information (Arguedas et al., 2022; Newman et al., 2020, 2022; Reuters Institute for the Study of Journalism, 2020).

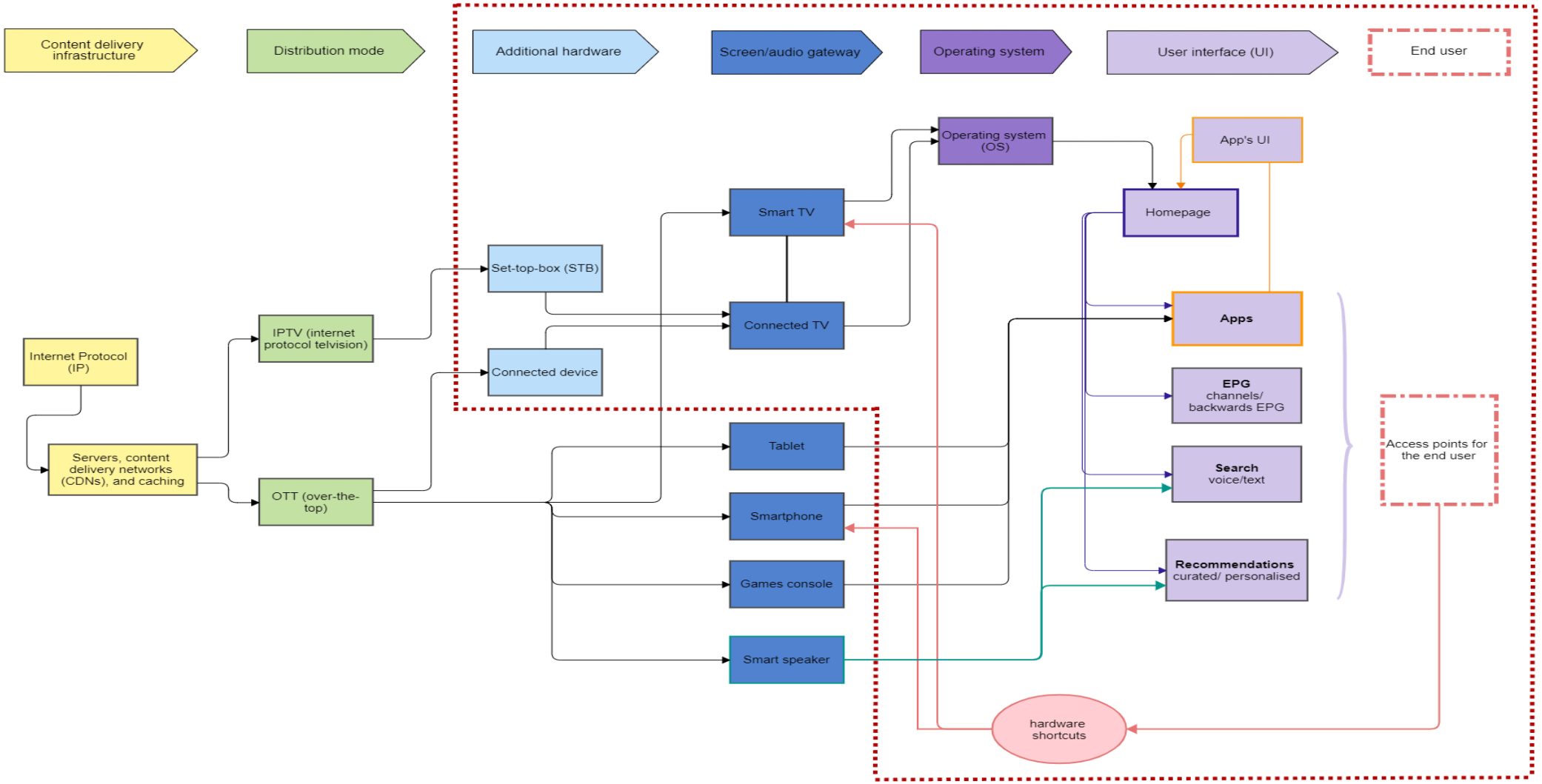
Global platform organisations, like Google Alphabet, Amazon, Apple and Meta, are not immune to these changes either. On the contrary, their digital dominance and powerful role as intermediaries are under increased scrutiny and criticised, as researchers investigate the negative effects that these organisations may have on access to and consumption of AVM content and information online (see Evens and Donders, 2018; Flew and Martin, 2022; Gillespie, 2010, 2018; Klonick, 2018; Mansell, 2015; Moore and Tambini, 2018, 2021; Nielsen and Ganter, 2022; Tambini and Labo, 2016a).

Within this context, since 2016 we have seen an intensification of the political turmoil in the UK and Europe that has increased the pressure on policymakers and regulators to act, or rather to react to some of these changes (see Chapter 2). Among these developments, my thesis is specifically concerned with the industry and policy debate around the creation of new prominence rules (García Leiva, 2020; García Leiva and Albornoz, 2020; Lobato and Scarlata, 2022; Mazzoli, 2020; Mazzoli and Tambini, 2020; Parcu et al., 2022).

In the UK, as well as in European member states and countries around the world (see Chapter 2), we are seeing a rapid institutionalisation of content prioritisation practices through the creation of new prominence regimes that can mandate prominence on different online services and internet-connected devices through regulatory intervention. However, as we move from what used to be industry-led content governance (Mazzoli, 2020), towards some form of new, positive obligations for technology manufacturers and platform organisations, strongly diverging views are emerging about how these processes should be governed and regulated.

[2] Channel 4 is a commercially funded PSM organisation governed by a public service remit, which is set in legislation and agreed by the UK Parliament. Its public service status was however questioned in recent years and the 2022 Media Bill proposed by the UK Government had established to privatised the company (DCMS, 2022e). Since such proposal though, the UK Government fell twice and in this political turmoil, the decision to privatise Channel 4 was officially discarded in January 2023 (DCMS, 2023; Waterson, 2023). The Secretary of State for Digital, Culture, Media and Sport at the time (Michelle Donelan) decided that "the broadcaster will remain in public ownership but with greater commercial flexibility, increased investment in skills and jobs across the UK as well as new production arrangements to support its long-term sustainability and growth."(DCMS, 2023) Whether this will remain the case with the new Secretary of State and new Government Department is yet to be seen. These developments nevertheless demonstrate how the broader politics of a given country can impact the future of its PSM organisations.

Fig. 1.1. Illustrative value chain of the online AVM sector: distribution segment[3]



Source: Author

[3] The diagram is inspired by a previous version of the value chain by the author (Mazzoli, 2020) and by the MTM Ofcom report (MTM and Ofcom, 2019). It represents a schematic visualisation of the distribution segment of internet-distributed AVM industry. The area circled in red represents the focus of the empirical analysis of this thesis.

As a result, a battle for prominence is developing between national governments, regulators, private companies and public service broadcasters to establish who should have the power to decide what content is deemed to be in the public interest and therefore to be made prominent to the users (Mazzoli, 2021). The question of whether governments and regulators should use law and policy to intervene and deliberately create regimes of prominence for the online world, or instead step back from the ongoing process of ad hoc private construction of a new prominence regime, requires careful consideration as it raises complex issues at the intersection of freedom of expression and media pluralism (see also Mazzoli, 2020; Mazzoli and Tambini, 2020).

My research unpacks this set of issues and contestations by investigating the politics of content prioritisation.

As the results of these politics have impacts not only on industry dynamics but also on users' access to content, it is pivotal to understand what the roles of different industry and policy actors are, the institutional arrangements influencing these processes, and their implications for media pluralism, diversity and freedom of choice online. An institutional and organisational perspective on online prioritisation processes and the relative prominence and discoverability of AVM services has allowed me to address these issues and pose questions about the public interest in this context.

1.2. Questions of Public Interest in Negotiating Prominence

When I began my PhD at the end of 2018 , the attention of regulators was mainly on content moderation and disinformation, while content prioritisation on digital media platforms was less scrutinised and was often related to issues of recommender systems and their algorithmic 'black boxes'. Even though prominence and discoverability measures were deemed very impactful on users and content providers, due to the lack of transparency and understanding of these industry practices, it was still difficult to see whether interventions where needed and what their implications would be.

However, as industry and policy practices rapidly developed, posing questions about the public interest in these forms of intermediation became key. In particular, as governments and regulators started to consider the creation of new prominence regimes fit for the online world, the questions of whether and how law and policy should regulate these processes in digital media platforms and their intermediary services emerged as a crucial issue to address. And that is also what triggered my interest in this topic.

I would argue that unpacking the politics of prioritisation is a way to both advance knowledge in this area and to contribute to these ongoing policy debates. To do so, theoretically I situate myself within the interdisciplinary field of media governance, taking a critical institutionalist approach. As Philip Napoli also argued, given the political and cultural impacts of various forms of media content, it is pivotal to understand

the institutional forces that affect content outputs, especially in today's automated and complex media systems (Napoli, 2014a). To investigate such forces, the core questions that my thesis asks are:

RQ1: How is content prioritisation governed on digital media platforms?

RQ2: Inspired by the UK case, what would be the elements of a public interest framework for new prominence regimes?

A within case study comparative research design and data gathered by means of semi-structured interviews and document analysis provide a foundation for a thematic analysis that can address my research questions by investigating the UK online AVM industry on the organisational and institutional levels. To do so, I have analysed organisations' strategies, discourses, and the relations among the different industry actors involved in the UK revision of the EPG prominence framework, drawing attention to a selected sample of key stakeholders, comprising of platform organisations, pay-TV operators, technology manufacturers, content providers like PSM organisations and regulators.

What makes the UK and its specific regulatory revision a particularly interesting and relevant case study for this research is the unique character of the policy process, the proposed regime that derived from it, the fact that Ofcom is understood internationally to have taken a lead on this issue, and the specificities of the UK media industry. As outlined in my *Methodology* (see Chapter 4), an in-depth analysis of this case has allowed me not only to reflect on the advantages and limitations of its specific prominence rules, but also to draw lessons that inform a broader reflection on how governments and regulators could develop new prominence regimes to safeguard media pluralism and diversity, while avoiding undue state and/or private interference with freedom of expression, human autonomy, and media freedom (see Chapters 7 and 8). Thus, the implications of the results of the empirical focus on the UK are also considered in light of developments in the EU and Council of Europe[4] initiatives that bear on the future discoverability of public interest media content.

The research findings provide insight into the 'black box' of content prioritisation across three interconnected dimensions: technical; market; and regulatory:

- Technical dimension, where organisations use technical strategies and socio-technical criteria to make certain content and services more or less prominent and discoverable on internet-connected devices and UIs;
- Market dimension, where organisations use different kinds of business strategies and commercial negotiations to influence prominence and discoverability on internet-connected devices and UIs;

[4] The Council of Europe is an institution with 46 member states, 27 of which are also member states of the European Union, and it plays a central role in advocating for human rights. All members have signed up to the European convention of human rights, a treaty designed to protect human rights, democracy and the rule of law, which are the core values driving any initiative of the Council of Europe. This institution indeed advocates mainly for freedom of expression and of the media, freedom of assembly, equality, and the protection of minorities.

- Regulatory dimension, where organisations use advocacy strategies to shape the policy debate and influence how governments and regulators develop new prominence regimes online through self-regulatory standards, co-regulatory frameworks and statutory interventions.

Examination of these different dimensions shows that, behind what seemed to be an algorithmic black box for policymakers, there is a complex set of relations among industry actors, their organisational strategies and their different organisations' motivations. It is not just a matter of opaque algorithmic processes, but there are also socio-technical criteria, economic considerations, and regulatory factors that influence what content and services are ultimately prioritised to users and how.

Content choices do not happen in a vacuum. On the contrary, they take place in carefully curated and personalised choice architectures which nudge content consumers in particular directions by means of cognitive and behavioural influences (Yeung, 2016; Yeung and Lodge, 2019). Choice architecture features that are relevant for this research include traditional programme guides, recommender systems, user interface (UI) design, search functions (text and voice) and related ranking systems, and hardware short cuts for internet-connected devices (Desjardins, 2016a, 2016b; Johnson, Dempsey, et al., 2020; McKelvey and Hunt, 2019). Even if these features vary from service to service, they all influence user behaviour and choices and strengthen gatekeeping power and control over key access points to content.

For instance, without being the only influence on users' choice, industry studies and academic research have shown that high EPG positions lead to larger potential audiences and therefore greater viewing reach, with generally a sharp decline in reach occurring between the first and fifth EPG slots, followed by a more gradual decline from slot six onwards (see Expert Media Partners, 2018; Klein et al., 2012; Ofcom, 2018a). Similar observations have been made for the video-on-demand (VOD) space, as recent evidence indicated that the position of content on a TV interface and VOD's catalogue is one of a range of factors that drives users to click on a particular app or programme (Johnson et al., 2022; Johnson, Dempsey, et al., 2020; Ofcom, 2018a).

However, what my research reveals is that content prioritisation is never static or neutral, and it cannot be explained solely in terms of neoclassical economics with rational market actors and users, or by politico-economic considerations. These choice architectures are deeply embedded in the governance and institutional arrangements of the actors that created them. We therefore need to look at institutional settlements, organisational strategies and the discursive level of value negotiations. This clarification of the underlying theory is key to understand not only how content discoverability and prominence function on different hardware and software services, but also to reflect on the implications that a private- or state-driven prominence regime might have for users' freedom of choice, media pluralism and diversity of exposure.

The ongoing institutional battle among the industry actors for prominence and discoverability arises from their need to accumulate and sustain their gatekeeping power *and* as a result of contested understandings of what content is or should be valued by final consumers of online audiovisual content. These contested

understandings also are shown to give rise to diverging visions of which private and public interests and values are (or should) be prioritised by online audiovisual service providers.

This battle takes place within all three dimensions – technical, market, and regulatory – and the main source of contestation concerns two core aspects: firstly the definition of what services should be granted prominence, also described as public interest services, and secondly, what would constitute fair and appropriate prominence on different services and devices. However, the definition of public interest services and related public value criteria are highly contested, as they create regimes of positive discrimination that could have both negative and positive impacts depending on their governing systems.

On the one hand, promoting a category of public interest services that is accountable, universally accessible, independent and internally pluralistic could indirectly help people to access a more diverse range of content as they would be more likely to be exposed to a diversity of genres and viewpoints. Prominence has the potential to foster a space for an information utility that is designed around a set of social goods, rather than the financial performance of shareholders.[5] On the other hand, new prominence regimes could also be exploited for soft forms of censorship and propaganda, especially in authoritarian countries or troubled democracies (Council of Europe, 2021; Mazzoli, 2021; Mazzoli and Tambini, 2020). This is a concrete risk that is already emerging in China for instance, with its new set of rules for platforms and algorithms (Cyberspace Administration of China-CAC, 2019).

Thus, as both industry and policy practices rapidly develop, the thesis' results demonstrate why it is crucial to reflect on how the public interest is interpreted as new content prominence regulatory regimes and industry practices emerge in the UK with sometimes contradictory implications for media pluralism, diversity and audience freedom of choice. The analysis indicates the need to consider how we could create a public interest framework in this space, which is accountable, independent and will avoid undue interference from both private corporations and states.

Given their positive and normative nature, online prominence regimes offer an instructive case through which we can examine broader governance and institutional developments and reflect on the feasibility of creating a new public interest framework suitable for the online AVM space. So, while the battle for prominence continues through technical strategies, lengthy commercial negotiations, and policy debates, this thesis concludes that there is potential for change.

According to the findings of this research, such change could be achieved through new institutional arrangements and a public interest-driven framework for online AVM content, and relative prominence and discoverability. Essential to achieving this is a concept of public interest as an institutional imperative and

[5] This is informed by my empirical analysis and interviews from PSM and platforms representatives, which will be further discussed and elaborated in the empirical chapters (5, 6, 7 and 8).

regulatory mandate (Napoli, 2019) for media and platform organisations and regulators alike, ensuring the development of new online content standards appropriate to changing forms of digital intermediation and emerging audiovisual market conditions.

This is not something new. The public interest as institutional imperative and regulatory mandate has traditionally been used to intervene in the media and communication sector in the form of self-regulatory standards, co-regulatory frameworks and statutory interventions (Napoli, 2015, 2019). For instance, the creation of PSM organisations themselves was based on an institutional imperative to serve the public interest, as expressed in the organisations' legal obligations regarding their services and content. Independent news media organisations have also developed and maintained self-designed and self-imposed behavioural codes that embody their definition of public interest, together with a set of values at the operational level that the organisations seek to uphold in their daily practices. These codes can be found both at national level, and at European and the wider international level (Chapter 2).

Using incentive structures and process-based standards to intervene in the context of prominence and broader content prioritisation processes, could contribute to filling the public interest vacuum at the institutional level of platforms and manufacturers. Ideally, this could also allow for the development of broader and more explicitly articulated institutional norms and values to guide both public and private organisations and incentivise alternative models to content prioritisation online, fostering longer-term solutions that can positively shape our online media environments.

1.3. Thesis Structure

To address these points, my thesis' narrative is organised into nine chapters. After this introduction, *Chapter 2 – Regulatory Context: Emerging Online Prominence Regimes,* provides an overview of the relevant regulatory context within which this thesis is framed. While the thesis focuses on the UK and its ongoing revision of EPG prominence rules, the implications of the findings are considered in the light of developments in the EU and Council of Europe initiatives that also bear on the future discoverability of public interest media services and related prominence regimes. In Chapter 2, I therefore describe the context and discuss the new prominence regimes emerging at national, European and the wider international level (2.2.1, and 2.2.2), advance a typology of prominence rules (2.2.3), and outline the different policy areas and regulatory instruments that are being used to develop such regimes.

Within this context, *Chapter 3 – An Interdisciplinary Theoretical Approach* sets out my theoretical approach and presents the key conceptual building blocks. I situate myself within the interdisciplinary field of media governance (3.2), taking a critical institutionalist approach informed by Philip Napoli's work (Napoli, 2014a, 2015, 2019). I explain how my approach addresses a gap between critical media studies on media content

curation, prioritisation and discoverability, and law and policy work on prominence rules within AVM and platform regulation.

I then define the main concepts underpinning this thesis and their interrelations (3.3), explaining how new forms of gatekeeping power influence the creation and use of choice architecture for digital media services which, in turn, influences content prioritisation processes and the contested understanding of which public interest services should be made more prominent and how. The chapter concludes with a statement of my core research questions (3.4).

Moving from theory to practice, *Chapter 4 – Methodology and Research Design* offers the rationale, tools, and methods chosen for the empirical portion of the project. Informed by the discussion developed in the previous chapters, Chapter 4 starts by explaining what led me to adopt a qualitative methodological framework to investigate how content prioritisation processes are governed online and why prominence and discoverability benefits are granted to certain AVM services.

I explain how the combination of semi-structured expert interviews and document analysis allowed me to investigate the organisational strategies and interests that influence content prioritisation processes (4.2), and how prominence and discoverability are negotiated in three related dimensions: technical, market, and regulatory ones. The chapter then introduces the overarching structure of my analysis and coding framework, which led to the formulation of the subsequent empirical chapters (4.4). I conclude the chapter by reflecting on my positionality as a policy researcher embedded in and actively participating in the ongoing policy debate on public interest-driven online prominence regimes (4.5).

The subsequent four chapters present the core elements of my analysis. The first three (Chapters 5 to 7) set out my empirical findings and each of them addresses one of the key three aforementioned dimensions through which prominence and discoverability measures are negotiated and contested. Chapter 8 brings these empirical findings into conversation with my theoretical framework, thus responding to my overarching research questions.

Chapter 5 – Designing Choice Architecture: Technical Means and Criteria Behind Content Prioritisation delineates the technical dimension of content prioritisation processes. This part of my empirical analysis examines the role of organisations' technological innovation strategies, and the technical means and socio-technical criteria that are used to shape UI design and influence the prioritisation of content and services. The chapter firstly discusses software and hardware solutions used by organisations to nudge users' choices and their journeys (5.2). The solutions include, for instance, designing devices and app UIs in particular ways, curating and ranking content in the organisations' respective services, both editorially and algorithmically; personalising UIs through recommender systems and new algorithm-driven discovery means.

Secondly, Chapter 5 investigates the mix of commercial and vaguely defined public interest considerations that inform different prioritisation criteria and their metrics (5.3). The chapter shows how control over prominence and discoverability is fragmented between industry actors and varies depending on the technical features of the devices and services used to access content. The chapter also confirms that neither choice architecture nor content prioritisation processes are neutral. On the contrary, the analysis indicates that prioritisation criteria such as relevance, popularity and recency based on commercial considerations often prevail over public interest criteria such as quality, diversity and public value.

Building on the evidence that choice architecture is not neutral, *Chapter 6 – Trading Value: Prioritisation as Site of Strategic Commercial Negotiations* shows the extent to which content prioritisation is influenced by organisational forces and embedded in their institutional arrangements. By investigating the business strategies used to influence content prioritisation and the organisational interests driving them (6.2), Chapter 6 sheds light on prominence as a site of contested and strategic negotiations, which are embedded in market structures, the industry's competitive dynamics, and an uneven distribution of bargaining power among the different actors.

While interviewees described these negotiations as a 'zero-sum game', in which if one actor buys a prominent position for its app, the others lose, my analysis shows a more complex picture. The chapter depicts organisational strategies as often exercised in asymmetric ways, which tend to disadvantage national and local AVM PSM providers, and favour SVOD service offers by platform organisations. We therefore find that not all apps or services are equal; on the contrary, 'some are more equal than others,' and prominence can help to achieve that vantage point (6.2). As a means of positive content discrimination, successfully negotiating prominence and discoverability online is shown to provide a competitive advantage and allow an organisation to strengthen its capacity to gain power and control over key gateways to content (6.3).

To complement these first two dimensions, the technical and the market, *Chapter 7 – Debating Policy Interventions: Objectives and Principles of a New Regime* analyses the regulatory factors that influence content prioritisation in the context of the revision of the UK EPG prominence rules. The chapter draws the attention to this policy debate and discusses the two main stakeholder coalitions and their advocacy strategies in order to reveal the perceived advantages and disadvantages of a possible extension of UK PSM's prominence rules to the online world (7.2). Public interest objectives of media pluralism, diversity and freedom of choice are constructs created by different organisations to justify diverging policy positions, and the chapter highlights not only the contradictions of this political debate, but also how malleable these concepts can be and how they can be instrumentalised for opposing aims.

However, my analysis strives to move beyond the advocacy discourses of this policy debate and to identify the underlying challenges with today's content prioritisation processes. In doing so, the second part of this chapter (7.3) discusses the two core problems that emerged from my analysis: the concentration of algorithmic

gatekeeping power and its implications for external media pluralism, and the tendency towards an institutional isomorphism in nudging and profiling, which raises concerns for freedom of choice and internal pluralism online. Chapter 7 then paves the way for a broader reflection on how to develop new prominence regimes that could address these issues and improve modern prioritisation processes (7.4).

Chapter 8 - Towards a Public Interest Framework for Governing Digital Media Platforms builds on this reflection and on the insights of all previous chapters in order to conclude my analysis and respond to the overarching research questions of the thesis. In doing so, the chapter provides an overview of how content prioritisation is governed on digital media platforms, showing that there is a movement from an industry-led governance system, where content prioritisation on digital media platforms is influenced mainly by technical means and business relations among industry actors, towards a more institutionalised form of governance (8.2). This governance system is however fragmented and does not fully address the aforementioned issues with today's content prioritisation processes. The need to develop a public interest framework for new prominence regimes in order to overcome such limitations is emphasised and the chapter outlines its basic elements and principles.

In particular, I advance a framework that could be built on the notion of public interest as an institutional imperative for media and platform organisations and as a regulatory mandate for online content standards, including new prominence regimes (8.3). This could address the need for a more holistic approach that combines statutory interventions with soft laws that could nudge companies into changing their prioritisation processes in the long term. I suggest that this could foster the development of alternative models to existing choice architectures and content prioritisation processes and complement industry practices with content standards that can positively shape the AVM industry.

One place to start is the development of a set of public value criteria that define the public interest services which should be prioritised. The chapter therefore concludes by advancing a set of public value criteria that could be applicable to both public and private AVM services. These criteria should not be considered exhaustive nor as commonly agreed by all stakeholders, but they could be used as a starting point to further develop public interest frameworks for new prominence regimes.

Finally, *Chapter 9 – Conclusions* recapitulates the findings of the thesis, with an emphasis on how my theoretical approach and the empirical findings advance knowledge in an area of digital media platform governance that is still under-scrutinised (9.1). The chapter discusses the strengths and limitations of this thesis (9.2) and concludes by outlining future research avenues (9.3).

Informed by the UK case, this thesis provides a topical and relevant investigation into how questions of prioritisation, prominence and discoverability are being addressed, drawing attention to the technological, economic and political drivers and related measures behind processes of prioritisation online. The implications of the findings can be considered also in light of broader developments in European Union and Council of

Europe initiatives that bear on the future discoverability of public interest services online. Thus, this thesis contributes to future developments around prominence and broader content standards for digital media platforms, providing new insights and reflections that can help Governments and regulators address the issues signalled by my research.

Chapter 2

Regulatory Context: Emerging Online Prominence Regimes

2.1. Introduction

Ofcom's review of the EPG prominence rules takes place at a crucial moment for media and communication policy that conceptually lies at the intersection between traditional media governance and emerging platform governance systems. While this policy debate is situated primarily within existing broadcasting regulation, as Ofcom and the UK Government strive to extend these prominence rules to the online world, they move from a traditional media regulatory area to less-charted territories of platform regulation.

This chapter presents an overview of these policy questions discussing how different instruments and policy interventions have been used at national, European and wider international levels to influence content prioritisation processes on digital media platforms. While it is beyond the scope of this thesis to provide a comprehensive account of all the different approaches to prominence regulation, the aim of this chapter is two-fold. Firstly, it indicates how content prioritisation is influenced by regulatory interventions in different but related policy areas. It advances a typology of prominence regimes that illustrates differences and similarities between the UK approach and other emerging policy proposals at European and wider international levels.

Secondly, it examines the policy rationales that drive the creation of prominence regimes. Prominence rules could ensure the sustainability and visibility of specific categories of services and content, such as PSM or broader public interest services; or they could foster external or internal pluralism; or they could prompt organisations to expand users' diversity of exposure through positive nudges; or they could be justified on the premises of safeguarding competitive markets and consumer choice.

Rationales and motivations for interventions (and non-interventions) are therefore numerous, but they also rely on malleable concepts that are used by stakeholders to support diverging advocacy and policy strategies in this debate (Chapters 7 and 8). By clarifying in this contextual chapter how notions of media pluralism (internal, external), diversity (source, content, exposure), and other public interest objectives feed into new legislation concerning the prominence of public interest services, I aim to provide definitional clarity in a policy debate where these terms are often blurred and instrumentalised. These notions and developments are indeed part of the institutional representations and arrangements that are at the core of my theoretical approach (Chapter 3).

2.2. Situating New Policy Debates Within Existing EU Regulatory Frameworks

To investigate the creation of a new institutionalised prominence regime and reflect on its potential implications in a specific context, it is pivotal to clarify its origin, rationales and motivations, and reflect on how national specificities and industry dynamics impact these policy and regulatory developments.

While traditional prominence rules for EPGs and linear television sit within broadcasting and telecommunication laws, new policy debates on online content prioritisation move beyond that: but where do they land? The next sections review regulatory frameworks and related policy paradigms that are being used to influence how content and services are made prominent, findable and easy to discover on digital media platforms and their intermediary services.

2.2.1. Broadcasting and Telecommunication Laws

2.2.1.1. Protections for 'General Interest' Services, PSM and National Content

In the UK and Europe, policy debates on prominence and discoverability date back to earlier broadcasting and electronic telecommunication regulatory frameworks, in particular, to the European Electronic Communication Code (EECC), and the Audiovisual Media Services Directive (AVMSD).

Firstly, the EECC and its must-carry rules deal with prominence at the level of transmission and distribution. At European level, must-carry obligations are justified on media diversity and pluralism grounds as measures to ensure that certain services are available and universally accessible to the population at large. The minimum level of harmonisation of these rules has been achieved through electronic communication regulation, starting with the 2002 Universal Service Directive (USD), which allowed EU member states to impose reasonable must-carry obligations for the transmission of specified radio and television broadcast channels and services on electronic communications networks used for the distribution of television and radio broadcasts to the public.[6]

Since then, these provisions have been replaced,[7] but not substantially amended, by the EECC, which in 2018 replaced the USD. In practice, the EECC provisions allow for diverse national legal approaches and implementations, both with regard to the scope of applications (i.e. whether the obligations cover only cable and satellite, or also IP and digital terrestrial television), as well as the material scope of the beneficiaries of these rules (i.e. whether it is only PSM's channels or also other AVM services). As I will further explain, in the UK case the regulation of EPGs and relative prominence rules date back to the 2003 Communications Act and

[6] Article 31, USD (*Official Journal of the European Union*, 2002)
[7] Article 114, EECC (*Official Journal of the European Union*, 2018b)

must-carry obligations,[8] which established Ofcom's duties to develop a suitable code to regulate must-carry and prominence rules on EPGs.

Secondly, the term 'prominence' has also been used in the context of the AVMSD, which deals with prominence at the level of content in AVM and broadcasting regulation. Already in 1989, the Television Without Frontiers Directive (TWF), predecessor of the current AVMSD, included provisions to promote the production and distribution of 'European works' through 'broadcasting quotas'.[9] In the subsequent 2010 revision, the legislation introduced provisions that would foster the promotion of these works on both linear and non-linear AVM services – through prominence measures, for instance. While this form of prominence rule was just a possibility in the 2007 text, the most recent revision, in 2018, established prominence of European works as an obligation for all providers of linear and on-demand services, which are now requested to ensure that at least 30% of their catalogues are European works and that such content is given 'appropriate prominence' on their services.[10]

But the regulatory requirements that are most relevant to this thesis are the **prominence provisions introduced in the 2018 AVMSD, which gave member states the freedom to adopt rules that ensure 'appropriate prominence' of a vaguely defined category of AVM services, called in the legal text 'general interest' services**.[11] The rationale is to ensure the visibility and discoverability of AVM providers that cater for a broad public and produce content that is of 'general interest', which includes news, current affairs, cultural programmes etc. (ERGA, 2021a; Parcu et al., 2022). As I will further explain in Chapter 3 (section 3.4), this notion is to some extent linked to the normative concept of 'public interest services', but its definition and operationalisation into national law widely differ.

National governments and regulators have indeed taken slightly different approaches when transposing and implementing these European laws (ERGA, 2021a, 2021b; Parcu et al., 2022). The main differences in national implementation concern the type of intervention and regulatory instrument, and two core aspects of a prominence regime, respectively, the definition of the scope of application and the material scope of these rules. The former refers to those services and organisations that will have to comply with the new obligations, while the latter refers to the beneficiaries of these rules, the content providers seeking to be granted prominence and easy discovery. As my empirical analysis will show, both aspects are key in the creation of new prominence regimes, but they are also sources of disagreement and divergences between stakeholders.

Concerning the scope of application, with the 2018 AVMSD governments and regulators have started to implement provisions that not only cover linear broadcasting distribution, but also internet-distributed services. At the moment of writing, most of the existing and transposed prominence rules for general interest

[8] Section 64, Communication Act (*UK Public General Acts*, 2003)
[9] Articles 4 and 5, TWF (*Official Journal of the European Union*, 1989)
[10] Article 13(1), AVMSD (*Official Journal of the European Union*, 2018a)
[11] Article 7(a), AVMSD (*Official Journal of the European Union*, 2018a)

service cover traditional distribution networks and a narrow range of internet-connected devices that are primarily used to access broadcasting-like services, such as connected TVs and their UIs.

So far, no EU member state has extended similar prominence obligations to other online intermediary services, like social media or video-sharing platforms.[12] The main contentious point is how prescriptive new prominence regimes should be in determining what 'appropriate' prominence means for those organisations that have to comply with these rules. On the one hand, prescriptive regulation could interfere with the freedom to innovate and negatively impact product development of internet-connected devices and their UIs, while, on the other hand, a complete lack of guidance could lead to weak provisions that are easy to circumvent, with no positive impact for content providers (ERGA, 2020, 2021a; Parcu et al., 2022)

The material scope of prominence rules raises both practical and normative questions, since it is a form of soft paternalistic intervention (Thaler and Sunstein, 2008) through which governments and regulators strive to nudge users' choices and content diets. The prescriptive nature of European legislative texts, the differences in the national implementations of such obligations, and legislative proposals from countries beyond Europe are contributing to an uncoordinated approach and confusion around the definition of what 'general interest' services are. Since each member state has the power to decide what is classified as content or services of general interest, or public interest (ERGA, 2020: 7), the current framework leaves space for broader or narrower interpretations of this category of services (Mazzoli, 2021; Parcu et al., 2022).

Some Governments rely on established frameworks used to define specific types of 'niche-market failure content', which is content such as news and current affairs, cultural and educational programmes, that is deemed to carry societal and public value but is at risk of being lost due to market failure because of it is not as profitable as entertainment programmes (Bergg, 2004; Cowling and Tambini, 2002; Tambini, 2004). Others limit the definition of 'general interest' services to specific types of AVM service providers, such as PSM organisations, which have historically been granted this type of regulatory benefit in exchange for the numerous obligations that come with their public service remit. The UK case provides a prime example of this approach. In the UK, while the prominence rules for European works have been transposed as part of the 2020 AVM Services Regulation,[13] the broader provisions for general interest services were not included in this statutory instrument but informed the 2019 Ofcom revision of the EPG rules for PSM (Ofcom, 2018c, 2019c).

An example of a broader interpretation of this category of services is Germany, which has developed a set of public value criteria that could be applied to both public and private services that wish to benefit from new prominence rules (Die Medienanstalten, 2020). These public value criteria include, for instance, quotas of

[12] Only Germany has advanced new rules for these services through its Interstate Media Treaty (Die Medienanstalten, 2020), but they focus specifically on transparency and non-discrimination obligations (Art. 94) while limiting the new prominence rules (Art. 84) to media platforms and their UIs, defined as broadcasting-like platforms, thus EPG providers, technology manufacturers, such as connected TV manufacturers will have to comply but not internet platform organisations.

[13] Section 368CB, AVM Services Regulation (*UK Public General Acts*, 2020)

news and current affairs, regional and local information and content, coverage of general and niche audiences, ratio between in-house and third-party productions, etc. (Die Medienanstalten, 2020; Parcu et al., 2022: 125–126). This set of public value criteria automatically include within the category of 'general interest' all German PSM organisations and their content, which have to respect most of these quotas and criteria through their public service remits. But the criteria also extend to cover those commercial and private organisations that can prove that they produce and distribute public value content, insofar as they 'make a significant contribution to the diversity of opinions and offers in Germany' (Parcu et al., 2022: 125). The goal of this approach is therefore to ensure both findability and sustainability not only of PSM, as in the UK, but of public value content more broadly, by introducing a regulatory incentive for commercial organisations to invest in content such as news, current affairs, children's programming, etc. (Parcu et al., 2022).

2.2.1.2. Obligations to Ensure Media Plurality and Diversity Online

Prominence rules are also justified on media pluralism and diversity grounds in broadcasting and telecommunication regulation. This comes from the previous technological paradigm of linear broadcasting and spectrum scarcity, but they have been transposed into current debates around the regulation of content prioritisation online. Depending on what kind of prominence regime is developed and how it is implemented and enforced, the different aspects of media pluralism (internal and external pluralism)[14] and diversity (diversity of sources, content and exposure)[15] could be fostered. [16]

In today's digital platforms-based ecosystem, it can be argued that the fundamental challenge involving pluralism and diversity is not limitations on producing content, expressing divergent ideas and opinions, or access to distribution systems, but rather the ability to effectively reach audiences (Valcke et al., 2015: 2) – and prominence can help with that. Control over the ways in which content circulates and is curated and prioritised online becomes key in influencing pluralism and diversity in that space. This is where issues around content prioritisation and the emerging policy debates in this area intersect with discussions on how to safeguard media pluralism and diversity online. As clearly explained by Peggy Valcke et al.:

[14] In this thesis, external pluralism refers to the structure of the media markets, and to the presence of a plurality in media companies, ownership and operations; and internal pluralism concerns the provision and distribution of a variety of content and perspectives within a single media organisation (Karppinen, 2006; Valcke et al., 2015).

[15] In this thesis, source diversity refers to the extent to which the media system is populated by a wide array of content providers with different ownership models; content diversity concerns the presence of a range of programmes types, genres or formats and the provision of different ideas or viewpoints in each media organisation; and diversity of exposure refers to diversity of content and sources to which each individual media user is exposed to (Helberger, 2012; Napoli, 1999, 2011).

[16] Building on the work of Kari Karppinen and Peggy Valcke (Karppinen, 2006; Valcke et al., 2015), in this thesis I assume a conceptual hierarchy, whereby diversity is understood in a more neutral, descriptive sense, as heterogeneity on the level of sources, content and exposure; whereas media pluralism, as a broader socio-cultural and evaluative principle, is understood as referring to the acknowledgment of and preference for such diversity, which also requires some schematisation of its relationship to democracy or other societal values. Consequently, diversity refers primarily to the empirical fact of plurality, while pluralism refers more explicitly to a value orientation that considers multiplicity and diversity in ideas and institutions a virtue.

> Although digital media provide many more opportunities to be heard, the issue today is not 'share of voice,' but 'share of ear.' We need to seek ways to promote knowledge about alternative content and to make it more readily accessible. Otherwise the concentration of where the audience goes – in terms of aggregators and sites – is every bit as damaging to pluralism as limitations on spectrum and concentration of ownership. This is especially true of Internet service providers, content aggregators, search engines, and video-on-demand services that pursue their own interests through non-transparent practices and algorithms that skew the access to and distribution of information, even when it is 'personalized' by individuals. (Valcke et al., 2015: 3)

The 2018 AVMSD also highlighted the duty that EU member states have to uphold public interest objectives of media pluralism and diversity when introducing new prominence regimes (*Official Journal of the European Union*, 2018a). However, as the empirical analysis of this thesis will emphasise (Chapters 7 and 8), the relations between prominence regimes and these two public interest objectives are not always so straightforward.

Prominence regimes could enhance media pluralism and diversity by prioritising services that are internally pluralistic (e.g. they produce and distribute a diverse range of content, represent and give voice to a wide range of views and options, etc.), which would expose viewers to such plurality and nudge them to access a more varied content (Parcu et al., 2022: 159–160). For instance, as highlighted by Ofcom, the introduction of new prominence rules for PSM would also indirectly 'secure the availability throughout the UK of a wide range of high quality and diverse television and radio services' (Ofcom, 2018c: 11), as UK PSM have legal obligations to produce and distribute high quality content that represents diverse viewpoints and opinions.

Furthermore, Ofcom has also emphasised the possibility of introducing prominence benefits for a broader category of news media services and which would also be applicable to a wider range of intermediaries, such as search engines, social media and news aggregators (Ofcom, 2022a). Indeed, among the examples of policy remedies that could safeguard news media plurality online, Ofcom presents a list of direct interventions that includes 'statutory obligations for online intermediaries to put in place measures to support the visibility and discovery of a range of high quality journalism' (Ofcom, 2022a: 52). The aim of this would be to ensure users are exposed to and able to access accurate information and a wide range of viewpoints as part of the news content they get from online intermediaries (Ofcom, 2022a: 52–53).

At the same time, it is entirely possible that institutionalised prominence regimes could have a counter-productive effect on media pluralism and diversity. This is the case if a prominence regime is predominantly influenced by the state or private companies. On the one hand, if a statutory prominence regime was used by Governments to prioritise only state-administered or state-owned broadcasters, it would decrease the plurality of viewpoints and content that users can more easily accessed online. On the other, a self-regulatory prominence regime would *de facto* leave prioritisation processes under the influence of dominant digital media platforms, reducing the visibility of content and services that do not serve their private and commercial

interests. How prominence rules impact pluralism and diversity online therefore heavily depends on the definition of their material scope and scope of application, which should ideally be arrived at through an accountable, independent and transparent process (Parcu et al., 2022: 189–190).

2.2.2. Digital Policy and Platform Regulation

Alongside broadcasting and telecommunication laws, in recent years, policymakers and regulators have been debating new kinds of statutory interventions, co-regulatory frameworks and self-regulatory standards for digital platform organisations and their intermediary services, which could directly or indirectly influence content prioritisation practices.

Notions of prominence and discoverability, sometimes referred to as visibility and findability, have appeared in a number of national, European and wider international regulatory proposals that range across multiple areas, from digital services regulation to media freedom frameworks and online content standards. The following sections gives a sense of how content prioritisation measures are already influenced by self-regulatory standards, co-regulatory frameworks and statutory interventions in numerous areas, indicating the need for regulators and policymakers to take a more coordinated approach to this new policy area.

2.2.2.1. Codes of Practice to Reduce Online Mis- and Disinformation

A first policy area affecting content prioritisation measures concerns the range of self- and co-regulatory interventions to reduce the spread and virality of mis- and disinformation online. Since the Facebook-Cambridge Analytica scandal,[17] public pressure on regulators to intervene and improve content practices to reduce the spread of mis- and disinformation online has rapidly increased.

However, initially the focus was on content moderation practices. It is only in the past few years that policymakers have acknowledged that content moderation and content prioritisation are two sides of the same coin (Mazzoli and Tambini, 2020), and that they represent two key and intertwined policy priorities for digital media regulation. As one of my interviewees describes it:

> There are two facets to it: one is positive, and one is negative. One is around keeping bad content off platforms, but the other one is about promoting good content or credible information or European works or whatever. So there two sides of the policy issue: there is how we create a policy environment that enables and encourages companies to remove bad content, stop bad actors, remove harmful

[17] In the 2010s, personal data belonging to millions of Facebook users was collected without their consent by British consulting firm Cambridge Analytica, predominantly to be used for political advertising during numerous elections, including the 2016 Brexit referendum and the US political elections. Information about the data misuse was disclosed in 2018 by Christopher Wylie, a former Cambridge Analytica employee, in interviews with *The Guardian* and *The New York Times*. The revelation caused a public outburst and numerous court cases (BBC News, 2018; Financial Times, 2018; The New York Times, 2018).

> content; and then the flip[side] of that is, what are their roles in terms of encouraging good content, whether that's credible and reliable information (Platform 3, 2020).[18]

We can see this shift and the first attempt to advance a coordinated approach between policies that intervene on both moderation and prioritisation practices in the 2022 Strengthened EU Code of Practice on Disinformation (*Official Journal of the European Union*, 2022d).[19] In this revised code, 'prominence of authoritative information' appears among the proposed risk mitigation measures that platform organisations and their intermediary services could take to reduce the viral propagation of disinformation online[20] (*Official Journal of the European Union*, 2022d: 20).

In this context, content prioritisation measures that make 'authoritative', 'high quality' or 'trustworthy' services and information more prominent are part of a series of 'safe design' options for a choice architecture that complements other regulatory interventions aimed at reducing the spread of mis- and disinformation online. However, how to define such a category of services and information remains a controversial and much debated aspect of these kinds of interventions (EDMO, 2021; Nenadic, 2021; Parcu et al., 2022).

In this regard, projects such as the Journalism Trust Initiative proposed technical standards applicable to media organisations that could define 'trustworthy' news providers (Journalism Trust Initiative, 2019). Such standards could be used by platform organisations to comply with commitments in the Strengthened EU Code of Practice on Disinformation (*Official Journal of the European Union*, 2022d), or simply to improve their content prioritisation measures by either making more prominent those providers that respect such standards, or introducing similar criteria in their own content policies (Parcu et al., 2022).

Self-regulatory practices in this area are not actually new, as companies such as Google Alphabet and Meta have previously introduced 'trustworthy indicators' like those developed by the Trust Project in their own content moderation and prioritisation practices (Anker, 2017; The Trust Project, 2022). At the same time, such practices have not proven entirely successful in the fight against mis- and disinformation online, and this is why the EU has proposed new prominence obligations under its new co-regulatory framework, while others such as JTI continue to call for more statutory interventions in this area (Journalism Trust Initiative, 2019).

2.2.2.2. Competition Rules to Curb Dominance in Digital Markets

Since its creation in broadcasting and telecommunication laws, prominence regulation has been tightly related to the question of competition. As it is a form of positive discrimination, such regulation could raise competition issues and potentially distort market dynamics. This is why in the UK, for instance, the review of the EPG prominence rules (section 2.5) was accompanied by an assessment of the competition rules in the

[18] The quote is here used as part of the narrative while a more in-depth analysis of it can be found in Chapter 7.2.
[19] This is the revised and strengthened version of the 2018 EU Code of Practice on Disinformation.
[20] Commitment 18 of the 2022 Strengthened Code of Practice on Disinformation.

EPG Code (Ofcom, 2019c, 2020b), to ensure that any extension of the prominence regimes for PSM would not negatively impact competition in the EPG market nor in the broader AVM sector.

In the online space, questions of competition in relation to content prioritisation measures featured conspicuously in newly revamped competition frameworks that consider unfair self-prioritisation and self-preferencing practices as abuses of dominant position.[21] For instance, market studies conducted by the UK Competition & Markets Authority (CMA) indicated several examples of how Google was able to use its dominant position in the mobile and digital advertising ecosystems to prioritise and promote its own services on smart devices, app stores and search results (Competition & Markets Authority, 2020, 2022).

Self-preferential treatment and anti-competitive behaviours occur at hardware and software level when vertically integrated platform organisations hold a dominant position in certain markets. For instance, even if Google allows device manufacturers to license the Android operating system (OS), this comes with a range of conditions in its licensing agreements that support the use and prominence of Google's other key services (Competition & Markets Authority, 2022: 23).[22]

Moreover, as some of the big technology companies, such as Google Alphabet, Amazon and Apple, are expanding into content production and distribution (Evens and Donders, 2018), similar competition issues emerge in content prioritisation measures. In the context of search engines, Google Search's market power has given Google the ability to conduct exclusionary behaviour that privileges its own services and products, making it more difficult for other actors to compete (Competition & Markets Authority, 2020). This ability is often exercised through more or less subtle prioritisation practices, such as self-preferencing on search rankings or via dedicated 'one-boxes' which are placed prominently at the top of any search result page (SERP).[23] Such competitive advantages might also be strengthened thanks to Google's data power, which the

[21] Recent regulatory efforts at national and EU levels have targeted various forms of self-preferencing by dominant digital platforms. For example, Germany revamped its competition rules banning 'Undertakings of Paramount Significance' in multi-sided markets from presenting their own offers more favourably than those of rivals, and from pre-installing their own offers on devices when providing access to supply and sales markets (German Federal Ministry of Justice, 2022; Hartmann and Holznagel, 2022). Similarly, with the upcoming Digital Markets Regime, the Digital Markets Unit (DMU), which is part of the CMA, can designate certain undertakings as having 'Strategic Market Status', and develop code of conduct for each of them, which might include requirements to not engage in undue self-preferencing of its own services (UK Government, 2022). At the EU level, the Digital Markets Act (DMA) that entered into force in November 2022 prohibits digital platforms designated as a 'gatekeeper' from ranking their own products and services more favourably than those of third parties (*Official Journal of the European Union*, 2020; *Official Journal of the European Union*, 2022b).

[22] For instance, the pre-installation and prominent placement of Google Play Store mean that users have little incentive to use other Android app stores (Competition & Markets Authority, 2022: 105–106). Similarly Chrome is also pre-installed and featured prominently on most Android devices, where it is set as the default browser on at least 10–20% of Android devices (Competition & Markets Authority, 2022: 166). To some extent Apple goes even one step further by not even licensing its iOS to other device manufacturers, nor allowing consumers to install alternative OS on its devices; its closed mobile ecosystem thus ensures by default a self-preferential treatment for its other services (Competition & Markets Authority, 2022: 23).

[23] Numerous competitors in related markets raised concerns with the UK Competition & Markets Authority regarding prioritisation measures that nudge users to click on Google Flights, Google Hotel Ads, or Google Local Search's 'one-boxes' as they appear more prominently to users, diverting traffic away from other specialised and competing search providers (Competition & Markets Authority, 2020: 109–110). For example, a specialised search provider estimated that, for certain queries, being in position two rather than one (as Google Flights one-box occupied the first position) reduced its click through rate (CTR) by 46.5%. Thus, although some providers can integrate with Google's specialised search products, they are ultimately disintermediated and competitively disadvantaged as traffic is diverted from their websites and they have no influence over Google's ranking and prioritisation practices (Competition & Markets Authority, 2020: 110)

company has used to refine its own content prioritisation measures and recommender systems and adapt them to its own advantage (Competition & Markets Authority, 2020: 110).

These are all examples of a company abusing its dominant position – whether in mobile ecosystems, digital advertising, or online AVM markets. Moreover, where prioritisation is not always granted under fair and reasonable conditions; existing competition frameworks cannot provide *ex-ante* measures to prevent them, but only *ex-post* interventions through court cases and litigation procedures. Changes are in the pipeline, however, at European and national level.

At European level, for instance, the Digital Markets Act (DMA) aims to establish *ex-ante* regulation for platform organisations that have a 'gatekeeping position' in digital environments (*Official Journal of the European Union*, 2020). Alongside interoperability obligations that will enable third parties to work with the platform organisations' intermediary services, these gatekeeper companies will be prevented from leveraging their position to discriminate against other services. The regulation also affects content prioritisation measures as it forbids platform organisations from granting preferential treatment to their own products, content or information through legal, commercial or technical means, which includes, but is not limited to, their ranking and recommender systems.

2.2.2.3. Transparency and Accountability Obligations for Recommender Systems and Data Practices

Another set of statutory interventions concerns the newly introduced transparency and accountability obligations for platforms' recommender systems and data practices. These interventions are at the forefront of the Digital Services Act (DSA), which has introduced three types of transparency measures[24] for online platforms: (1) transparency over recommender systems and their algorithms; (2) routine and comprehensive transparency reporting; and (3) transparent disclosures to users about online advertising (*Official Journal of the European Union*, 2022c). These transparency obligations could allow users to be better informed about how content is recommended to them, which could start to shed light also on content prioritisation processes, and relative prominence and discoverability.

Transparency is not a panacea (Ananny and Crawford, 2018; Gorwa and Garton Ash, 2020; Leerssen, 2020), and it can also result in a checkbox compliance exercise rather than an instrument of change, but it is an important first step (Council of Europe, 2021; Forum on Information & Democracy, 2023). To prompt initial changes in certain content prioritisation practices, the DSA tackles the issue of 'dark patterns' by prohibiting platforms from 'deceiving or nudging recipients of the service and from distorting or impairing the autonomy, decision-making, or choice of the recipients of the service via the structure, design or functionalities of an

[24] Articles 15 and 24, DSA (*Official Journal of the European Union*, 2022c)

online interface or a part thereof.' [25] Depending on their implementation and enforcement, these provisions could reduce the use of exploitative design choices and nudging techniques that negatively affect users' freedom of choice online.

2.2.2.4. Safeguards for Media Freedom

Last but not least, the European Union has suggested additional safeguards for media freedom with the European Media Freedom Act (EMFA) (*Official Journal of the European Union*, 2022a),[26] which only tangentially address question of prioritisation and prominence. Indeed, while the legislation does not introduce any specific obligations in this area, it recognises the importance of prioritisation processes online, and suggests the need to issue guidelines on the implementation of prominence rules for AVM services of 'general interest' under the 2018 AVMSD (section 2.2.1). This could prompt those member states that have not yet transposed the 2018 AVMSD provisions to develop their own prominence regimes, while promoting best regulatory practices in this space.

2.3. International Developments

Notions of content prioritisation and prominence have also started to emerge in other policy contexts beyond the EU and its member states. Especially after the start of the Covid-19 pandemic in 2020, the institutionalisation of prominence and discoverability accelerated in numerous countries, but most of these policy debates remain in their infancy and only a limited number of countries have introduced new prominence regimes.

Among the international organisations, the Council of Europe commissioned a study in 2020 to explore this expanding policy area (Mazzoli and Tambini, 2020), which in turn informed its Guidance Note on Prioritisation of Public Interest Content Online (Council of Europe, 2021). The document outlines a list of guiding principles to be used as reference points for 'States and public authorities, platforms and intermediaries, media actors, and civil society organisations as they seek to shape, deploy and/or monitor content prioritisation and develop human rights risk assessment frameworks and codes of conduct' (Council of Europe, 2021: 3).

It builds on the assumption that prominence regimes have, on the one hand, the potential to promote trusted news and authoritative information, as well as to increase the diversity of content consumed online, while, on the other, they can also be used for the purposes of censorship or propaganda, with concomitant negative implications for democracy and human rights (Council of Europe, 2021).

[25] Recital 67, DSA (*Official Journal of the European Union*, 2022c)
[26] At the moment of writing the text proposed by the European Commission (*Official Journal of the European Union*, 2022a) is being discussed in the European Parliament and Council, thus, the final legal text might change depending on the outcomes of the trialogue negotiations.

To promote good practice in content prioritisation measures and prevent their potential misuse, the Council of Europe calls for shared standards of (i) transparency over the criteria and processes used to prioritise content and services; (ii) explainability to allow users to understand such processes; (iii) independence of decision-making about prominence from state, political and economic interests; (iv) openness and inclusiveness of these processes and related new prominence regimes: (v) oversight and accountability through independent auditing systems where appropriate; and higher users' control with (vi) opt-in/out options and (vii) appeal processes (Council of Europe, 2021: 5–7).

Moving beyond the Europe and looking at individual countries that have started to address issues of prominence and discoverability online, the most interesting and advanced cases include Canada, Australia and China. As previous authors have also argued (García Leiva, 2020; McKelvey, 2016; McKelvey and Hunt, 2019), the Canadian debate is one of the most mature ones. Already back in 2015 the Canadian Radio-television and Telecommunications Commission (CRTC) expressed concerns regarding the discoverability of Canadian content in the digital environment, which led to a Discoverability Summit in May 2016 and a nationwide consultation between 2016 and 2017 (Desjardins, 2016a, 2016b; García Leiva, 2020).

This culminated in a broader Broadcasting and Telecommunication Legislative Review (ISED Canada, 2020), and the creation of discoverability rules for Canadian programming services in the amended Broadcasting Act (Government of Canada, 2022). This text and the prior legislative review provide insights into a content-based approach to prominence regulation that is informed by the objective to support and sustain the distribution of and access to national content and programmes; consequently, the main criterion used to determine which services should be granted this regulatory benefit is their national/local origin (Mazzoli, 2021).

Canada's avowed need to regain and foster a cultural sovereignty, and to find alternative sources of support for a national media industry in crisis, constitutes the main rationale for proposing new prominence regimes and discoverability clauses. To some extent, these policy objectives recall the justifications given by European policymakers to support the introduction of quotas and prominence rules for European works in the revised AVMSD (García Leiva and Albornoz, 2020) (section 2.2.1.1). The Canadian bill goes one step further, however, as it translates this objective into a provision that grants prioritised placement to national and local programming services on a wider range of services, and it empowers the CRTC to impose 'appropriate' conditions on what discoverability and prominence might look (Government of Canada, 2021a: 10).

Another example of content-based criteria can be found in China, which has introduced a unique prominence regime that combines a narrower material scope with a wider scope of application. The Provisions on Ecological Governance of Network Information Content (Cyberspace Administration of China-CAC, 2019) prescribe that digital platform services should optimise their recommender systems to prioritise content and information that is aligned with the mainstream value orientation of the Chinese Government (Mazzoli, 2021).

On the one hand, these prominence obligations cover a range of intermediary services that is much wider than any of the aforementioned policy initiatives, as it includes not only the UIs of connected TVs, but also recommender systems and search ranking systems of blogs, news websites, search engines, audio visual services, app stores, and other smart devices used to access content and information online.[27] On the other hand, the only services granted such preferential treatment are those that are aligned with the views of the Government and Chinese Communist Party, and that produce or publish content that 'propagates Xi Jinping's thoughts on socialism with Chinese characteristics in the new era, and fully, accurately and vividly interpret the path, theory, system, and culture of socialism with Chinese characteristics'(Cyberspace Administration of China-CAC, 2019).[28]

This legislation was then strengthened by the 2022 Internet Information Service Algorithm Recommendation Management Regulations, a new set of regulations that demand more transparency but also require platforms to update and design their algorithms to promote 'positive content', intended as content that adheres to 'mainstream values' (Cyberspace Administration of China-CAC, 2022).[29] These examples show how the Chinese government has been conducting some of the earliest regulatory experiments in algorithmic transparency and prominence. However, they also show that as boundaries between media and digital intermediary services blur, some governments are attempting to control the latter through new forms of soft propaganda and censorship, since prominence and discoverability regulatory benefits are used to impose prominence only for approved discourses and channels while moderating away others (Mazzoli, 2021; Mazzoli and Tambini, 2020).

2.4. A Typology of Prominence Regimes

While it is beyond the scope of this thesis to present an in-depth account of all the regulatory initiatives currently underway, this overview demonstrates the spectrum of policy interventions that policymakers and regulators have advanced and serves to situate the UK case within these broader developments.

The heterogeneity of policy debates and prominence regimes at both European and wider international levels is striking and yet not surprising. The diversity of regulatory approaches to online prominence and discoverability is related to the specificities of each national context, which include, but are not limited to, the underlying market structures and power relations among industry actors, as well as the broader media governance systems and regulatory frameworks in which they are proposed (García Leiva, 2022; García Leiva and Albornoz, 2020; Lobato and Scarlata, 2022; Mazzoli, 2021; Parcu et al., 2022).

[27] Article 11, Provisions on Ecological Governance of Network Information Content. Translation through Google Translate services. Article 11, Provisions on Ecological Governance of Network Information Content. Translation through Google Translate services.
[28] Article 5, para 1, Provisions on Ecological Governance of Network Information Content. Translation through Google Translate services.
[29] Chapter II, Article 6, Internet Information Service Algorithmic Recommendation Management Provisions. Translation by Stanford University's DigiChina (Creemers et al., 2022)

These types of regulatory intervention also reflect the historical differences between neoliberal economic approaches, cultural policy approaches, and authoritarian approaches to AVM regulation (Mazzoli, 2021). Last but not least, as I will discuss in the next section, there are often different policy objectives driving the creation of a new prominence regime which are, in turn, underpinned by a variety of political, economic, societal and technological rationales.

To summarise this fast-developing policy area and its emerging approaches, I have proposed a typology of prominence rules, which includes existing frameworks in broadcasting and telecommunication regulation, as well as emerging rules in digital and platform regulation. This typology is informed by the neo-institutional approach to media governance and, in particular, by the work of Manuel Puppis (Puppis, 2010). It builds on my own work in this area (Mazzoli, 2021) and on collaborative research carried out in the context of the Study on Media Plurality and Diversity Online (Parcu et al., 2022). Approaches to prominence and discoverability rules are mapped by looking at the following key aspects of a prominence regime:

- Vertical extension, defined as the level of intervention, and categorised based on whether the level of intervention is national, regional or global;
- Horizontal extension, defined as the type of regulation, and categorised based on whether it is primary statutory regulation, co-regulation or self-regulation;
- Scope of application, defined as services that have to comply with the prominence rules, and categorised in linear AVM distribution, non-linear AVM distribution and online intermediary distribution;
- Material scope, defined as services benefitting from prominence rules, and categorised based on the definitional criteria. The definitional criteria have been divided into three main categories: (i) process/principles-based, intended as criteria that apply to the production, distribution and management processes of media organisations and are based on high level principles that such organisations should uphold; (ii) content-based, intended as criteria that apply to specific kinds of content, such as EU prominence rules for national and European works; and (iii) a combination of both process/principles- and content based criteria.

These aspects are used to map institutional prioritisation measures proposed throughout the duration of my thesis research, i.e. between 2018 and 2022. Table 2.1. below presents an overview of the measures mapped.

Table 2.1. Sample of the different types of measure[30]

Level of intervention (vertical extension)	Type of regulation (horizontal extension)	Examples	Scope of application and complying services	Material scope and beneficiary services	
				Material scope	Definitional criteria
National	Statutory	Germany Interstate Media Treaty (2020)	Linear and non-linear AVM distributors	AVM services of public value	Process/principles-based
		Canada Amended Broadcasting Act (2022)	Linear and non-linear AVM distributors	National and local AVM services	Mix of process/principles-based and content-based
		China Internet Information Service Algorithm Recommendation Management Regulations (2022)	Linear and non-linear AVM distributors, and online intermediary services	State-owned and state-aligned AVM services	Content-based
	Co-regulation	NF			

[30] This table is based on a mapping of legislation and legislative proposals that were published throughout the duration of this research (between 2018 and 2022). It was then further complemented by the mapping conducted by the author of this thesis and the researchers who co-authored Part A of the EU-funded study on "Media Plurality and Diversity Online" (Parcu et al., 2022).
"NF" stands for 'Not Found', which refers to the fact that an example of that specific type of intervention was not found in these mapping exercises.
"NS" stands for 'Not Specified', which refers to the fact that the specific criteria used to define the material scope of the identified interventions were not specified in the text. As discussed in Chapter 2, section 2.2.1.1, in the case of Article 7(a) of the AVMSD, if member states decided to transpose such article into national law, they could develop their own criteria, which is what Germany has done for instance. In the case of the EU Code of Practice instead, the text does not specify which criteria should be used and it only refers to existing examples of standards, such as the JTI, or other indicators, that have developed their own criteria.

	Self-regulation	NF			
Regional	Statutory	European Union European Union AVMSD (Art. 13.1)	Linear and non-linear AVM distributors	European works	Content-based
		European Union AVMSD (Art. 7a)	Linear and non-linear AVM distributors	AVM services of general interest	NS
	Co-regulation	European Union Strengthened code of practice on disinformation	Online intermediary services	News and journalistically edited services	NS
	Self-regulation	Journalism Trust Initiative CEN standards	Online intermediary services	Certified news and journalistically edited services	Process/principles-based
Global	Statutory	NF			
	Co-regulation	NF			
	Self-regulation	Council of Europe Guidance Note	Linear and non-linear AVM distributors, and online intermediary services	AVM services of public interest	Process/principles-based

2.5. Contextualising the UK Prominence Regime as Empirical Case Study

Within the context discussed so far, this thesis focuses its empirical analysis on the UK and its policy debate on the revision of the EPG prominence rules. Metaphorically, I take this case as a prism through which to refract light on how content prioritisation is governed on digital media platforms, and how a public interest framework for new prominence regimes might address the issues raised by such governing systems.

While the UK has transposed the AVMSD into its broadcasting legislative framework with the statutory instrument AVM Services Regulation 2020 that amended the UK Broadcasting Act (*UK Public General Acts*, 2020), only the prominence obligations for European works on VOD services were included in this transposition (section 2.2.1.1).[31] The policy debate that is at the core of this research therefore concerns a parallel revision of broadcasting regulation: the review of the EPG prominence rules for public service broadcasters, and the related EPG Code (Ofcom, 2010, 2019b, 2019c).

The question of prominence applied to EPG was first introduced in 1997 by the former regulator, the Independent Television Commission, to deal with a question of abundance of offerings, on the basis of media law principles of diversity and quality, fair market competition and general consumer law principles (Van Der Sloot, 2012: 139).

Subsequently, the 2003 Communications Act (*UK Public General Acts*, 2003) required the regulator Ofcom to draw up a code of conduct for 'appropriate prominence' permitting measures of positive discrimination in favour of PSM channels, which were then translated into the EPG Code. The EPG Code (Ofcom, 2010) was introduced for linear television because of the perceived inability of market forces to guarantee a wide range of broadcasters to articulate a diverse range of opinions to different audiences (Freedman, 2005: 17). Thus, while the original rationale behind government intervention was the equitable division of scarce transmission capacity, it later became the need to compel commercial broadcasters to serve potentially commercially unattractive groups and minorities and provide the desired diversity of content (Van Der Sloot, 2012: 138).

However, in today's AVM environment, EPGs are not the main routes to access content and services anymore, since the available routes for discovering content constantly multiply (See Fig.1.1). Ofcom's review was therefore aimed at expanding the current scope of prominence rules beyond EPGs in order to address issues of PSM's discoverability and availability online (Ofcom, 2018c). Thus, while the first part of the public consultation's questionnaire (Ofcom, 2018c: 22–32)[32] focused on PSM's prominence on EPGs and the revision of the existing code, the second part (Ofcom, 2018c: 33–41)[33] reflected on the changing market and considered how the prominence regime could be further adapted and changed to 'protect the benefits to PSM

[31] Section 368CB, Amended Broadcasting Act (UK Public General Acts, 2020)
[32] Section 5, Questions 1-12
[33] Section 6, Questions 13-19

into the future' and to address any potential issues around prominence and discoverability in 'a less TV-centric world' (Ofcom, 2018c: 33). This section of the consultation therefore sought stakeholders' input on a more 'future-proof' prominence regime.

It prompted interested stakeholders and individual citizens to reflect on the material scope, scope of application, and measurement and assessment frameworks, as well as on issues around users' freedom of choice, transparency, and accountability (Ofcom 2018). The aim was to look at ways in which policy interventions might be needed not only in linear broadcasting, but also in other internet-connected means of distribution and their related prioritisation measures, ranging from the UI design of connected devices,[34] to search, ranking and recommender systems of other online intermediaries, such as social media, search engines and video-sharing platforms.[35]

Together with the policy developments in Germany, which led to the proposal of the Interstate Media Treaty and its new prominence regime, Ofcom was at the leading edge of this emerging policy area, extending the debate beyond the scope of the AVMSD prominence rules. The results of the public consultation informed Ofcom's thinking and fed into its subsequent recommendations (Ofcom, 2019c) – though any change to the existing regime and EPG Code would require legislative change, and therefore UK Government intervention.

Thus, at the end of this first policy phase, Ofcom published its recommendations in July 2019 proposing new primary regulation to keep prominent PSMs not only on linear, but also on on-demand services, across a range of 'connected TV platforms', such as smart TVs, set-top boxes, and streaming sticks, with the primary goal of ensuring easy access to such content and to support PSM channels' future sustainability (Ofcom, 2019c: 1). Since then, while the Government has expressed its intention to intervene and adapt the code (DCMS, 2021a, 2021b), no primary legislation has yet been proposed.

In terms of my own typology of measures set out in Table 2.1 above, Ofcom is proposing a national statutory intervention that will revise the existing EPG Code for PSM specifically and extend the code's scope of application to a limited range of platforms and devices. The primary objective of this legislation would be to 'ensure that viewers can continue to find and access the PSBs' [public service broadcasters'] linear and on-demand services, across a range of connected devices' (Ofcom, 2019c: 1).

The regulator's proposal thus explicitly links the prominence debate to Ofcom's responsibility to support the fulfilment of PSM's remit (Ofcom, 2019c: 2). To achieve this, Ofcom makes a number of recommendations that are centred on two main aspects:

a) A material scope limited to the UK PSM, including the publicly funded BBC, the commercially funded PSM organisations - ITV, Channel 4, and Channel 5 - and the regional ones, such as S4C, STV and UTV.

[34] Section 6, Question 18
[35] Section 6, Question 19

This material scope is based on a combination of process/principles- and content-based criteria, which is however limited to PSM. Thus, this approach *de facto* takes PSM and their content as a proxy for public interest services. Under this regime, PSM channels, their broadcaster video on demand (BVOD) apps (such as BBC iPlayer, ITV Hub, All 4, My5, etc.)[36] and any of their content distributed in a 'disaggregated way'[37] would all be granted a more prominent position and increased discoverability through this framework.

However, Ofcom also recommends that prominence and discoverability benefits would be granted to PSM 'where they meet new qualifying criteria', which 'would be designed to ensure the player delivers an appropriate range of high quality, original content that contributes to the PSB purposes.' (Ofcom, 2019c: 5). The criteria have not yet been established, but the examples provided in the recommendations suggest that they would be content based, including 'specific requirements around particular genres, such as children's, current affairs and factual content, and content made specifically for UK viewers' (Ofcom, 2019c: 5).

b) A scope of application initially limited to connected TV platforms[38]

Initially, the proposed obligations will apply to those technology manufacturers and platforms providing connected TVs, but with the flexibility to respond to changes in technology, viewer behaviour, market developments and demographic variations (Ofcom, 2019c: 4). As stated in the recommendations, 'these [connected TVs] are currently the main ways that viewers select and watch TV online and on-demand', but 'other TV platforms and services may be subject to the prominence rules in the future, as technology and viewing habits change' (Ofcom, 2019c: 1).

Ofcom's recommendations on the scope of application are also prescriptive and provide suggestions for how to ensure the prominence and discoverability of PSM on connected TVs. For instance, they stipulate that PSM should be easy to find on TV platforms' homepages, for instance by giving 'a prominent position to an EPG on the homepage' or through other innovative ways such as 'a single PSB portal, or "tile", through which all of the PSBs' players are promoted and made available' (Ofcom, 2019c: 5–6). Lastly, to ensure the prominence also of disaggregated PSM content, it should not only be 'easy to find and quick to access from the homepage' but also 'within suitable recommendations and search results' (Ofcom, 2019c: 7).

[36] ITV Hub was rebranded as ITV X in December 2022, as ITV updated its BVOD and launched this new service. This thesis refers to ITV Hub since that was the name of the service during the data collection.

[37] By disaggregated way, the recommendations refer to the individual piece of content, such as TV series or programmes from UK PSMs, should also be surfaced more prominently in search or discovery areas, which distribute content in a disaggregated way.

[38] The precise definition of 'connected TV platforms' and which services will be regulated under this regime is still unclear since it significantly depend on the legal obligations of the upcoming Media Bill, which the Government has not yet published, as well as on the development and implementation of the subsequent Code of Practice by Ofcom. Based on Ofcom's recommendations though, connected TV platforms could include a range of connected TVs and relative devices, such as smart TVs, streaming sticks and set-top boxes (Ofcom, 2019c)

While the final regime had not been proposed at the time of writing,[39] the Government has announced its plan to introduce 'a new prominence regime for on-demand television to ensure that public service content is both available and easy to find on designated TV platforms' (DCMS, 2022e). Building on the recommendations made by Ofcom, the Government intends to introduce new prominence rules to ensure that PSM content is both 'available and easy to find' through 'a new principle-based legislative framework whereby the providers of designated TV platforms … will be required to give appropriate prominence to PSBs' designated on-demand services' (DCMS, 2022e). While the details of this framework have not been published, the new rules are expected to follow the proposed material scope and scope of application outlined by Ofcom, and cover technology manufacturers, pay-TV operators, and global TV platform providers.

Even if the content prioritisation measures of online intermediaries were not part of this debate and were omitted from the final recommendations, issues raised by content prioritisation are addressed in other, parallel policy initiatives: the Online Safety Bill (*UK Public General Acts*, 2023), Ofcom's review of media plurality in relation to online news (Ofcom, 2022a) and competition and market inquiries (Competition & Markets Authority, 2020, 2022). These are different pieces of a bigger regulatory puzzle that indicate how issues of prioritisation online lie at the intersection between existing systems of media governance and those emerging in relation to online platforms.

The Online Safety Bill at its core introduces a 'duty of care' for online intermediary services to improve current content moderation practices and make these online spaces safer for their users, but content prioritisation measures are also mentioned in relation to two of these duties, namely safety duties about illegal content and safety duties protecting children (*UK Public General Acts*, 2023). Thus, while no positive content regulation is introduced in this Bill, the text acknowledges that content prioritisation measures can be used to 'mitigate and manage the risks of harm to individuals', especially to children, and 'mitigate the impact of harm' (*UK Public General Acts*, 2023), indirectly recognising that content prioritisation is the other side of the coin of content moderation (Mazzoli, 2020), and could have a positive effect on individuals if used in an appropriate and proportionate manner.

In this sense the Online Safety Bill implicates prioritisation and acknowledges its importance, but at the same time, there is no clear proposal in the text that could improve current industry practices. At the time of writing, the bill has not yet become law and may still be subject to change. However, its overall approach treats content moderation differently from prioritisation processes, failing to recognise that these are two sides of the same coin that require concerted and coordinated approach at regulatory level (Council of Europe, 2021; Mazzoli and Tambini, 2020; Parcu et al., 2022).

[39] The new prominence regime is expected as part of the new Media Bill, which was announced by the UK Government in May 2022 but has not yet passed due to the political uncertainty and the fall of two governments. At the moment of writing the final text is not available and therefore was not part of my analysis.

Prominence questions have been partially addressed in the context of competition policy by the UK Competition & Markets Authority. While the links between these policy areas are starting to be noticed at European level (Parcu et al., 2022), in the UK, prominence has already raised competition concerns especially in the context of mobile ecosystems, search engine and digital advertising markets (Competition & Markets Authority, 2020), but it is unclear whether the existing competition regulatory framework will be reformed to cater for today's digital market developments.

Last but not least, Ofcom is revising its media plurality framework, recognising the key role that online intermediaries play in content curation, prioritisation and discovery, and raising concerns about the ways in which choice architecture can nudge and influence users' news and media consumption habits (Ofcom, 2022a). As previously mentioned, prominence emerges here as one of the potential policy remedies to safeguard media plurality and diversity online through positive content interventions that, ideally, would be coordinated with the restrictive content regulations envisioned in the Online Safety Bill (Ofcom, 2022a: 59–60).

2.6. Concluding Remarks

All these media and platform regulation developments and their associated political turmoil indicate that opaque content prioritisation measures on digital media platforms are raising concerns for regulators and policymakers around the world. Within this context, the UK has been at the forefront of this emerging policy area, presenting a particularly interesting empirical case for study. Indeed, the UK revision of prominence rules stands at the crossroads of these broader concerns and in the midst of potential institutional changes that could significantly impact the future evolution of our online media ecosystem.

Agreements on online prominence and discoverability started out as a technical and commercial question related to distribution strategies and negotiation processes between content providers and distributors. However, as the political pressures have increased and threats of regulation emerged, the political debate has raised deeper, normative public interest questions in a divided policy arena.

The creation of a new online prominence regime could be a useful means to achieve greater diversity, especially diversity of exposure, but that is not the sole or even the main public interest objective behind such interventions. Prominence regulation is also used to protect and safeguard specific categories of services and content through positive discrimination; a soft approach to policy that is assumed to be fostering a beneficial societal outcome, including ensuring a more diverse AVM diet.

If such rules are abused by states or governments, by prioritising services that they control (i.e. state-administered or state-owned broadcasters), prominence regimes can also create soft forms of propaganda and censorship (Mazzoli and Tambini, 2020; Parcu et al., 2022). A careful balancing act is therefore required

to achieve prioritisation objectives while avoiding any positive discrimination that might hinder users' fundamental rights and freedom of choice, and/or the freedom to operate and innovate of media and platform organisations.

This thesis aims to contribute to the future development of prominence regimes by providing insights and recommendations that can help policy makers and regulators address these issues. In this context, by focusing on the UK policy debate about the revision of the EPG prominence rules, this thesis provides a topical and relevant investigation of how questions of prioritisation, prominence and discoverability are being addressed.

To grasp the complexity of this policy process, it is necessary to consider the broad variety of actors and institutions involved and their entangled web of relationships. Hence, my analysis investigates the relationships among some of the key stakeholders involved in the prominence debate and their divergent visions of the institutionalisation of a new prominence regime. A deep dive into the UK case allows me to examine how organisational interests, objectives and strategies play out in a specific national context, but it also prompts broader reflection on an ongoing battle between national governments and private companies to influence users' access to content and information by the processes of prioritising certain services over others.

Chapter 3

An Interdisciplinary Theoretical Approach

3.1. Introduction

The notion of prominence is situated primarily in academic media and communication law and public policy. Scholars have discussed the emergence and implementation of prominence rules for EPGs, and related must-carry and must-offer regulations (Van Der Sloot, 2012). Recent work focuses on the new European prominence rules and their implications for AVM policy (García Leiva, 2020, 2022), and emerging discoverability rules in countries such as Canada (Hunt and Mckelvey, 2019; McKelvey, 2016) and Australia (Lobato and Scarlata, 2022; Scarlata and Lobato, 2019).

Concepts of online content curation, prioritisation and discoverability have entered strands of the broad field of media and communication. For instance, in research on media and platform governance, these concepts are indirectly addressed through studies on content moderation practices (Gillespie, 2010, 2017, 2018; Gorwa et al., 2020; Klonick, 2018) and on the regulation of algorithm-driven recommender systems in media and news (Helberger, 2015; Helberger et al., 2018; Helberger and Moeller, 2018; Napoli, 2014a; Van Drunen et al., 2019). In addition, recent scholarly works in critical media studies have started to pave the way for newer theorisations of prominence (Hesmondhalgh and Lobato, 2019; Hesmondhalgh and Lotz, 2020; Johnson, 2020b; Lobato, 2018; McKelvey and Hunt, 2019).

However, beyond a focus on a perceived novelty, there is also 'a sense of déjà vu' (Lobato, 2018). Conditional access to content and prominence have long been a result of contested negotiations and governing mechanisms among different actors, whether concerning the tightly controlled spaces of retail shelves or libraries, on EPG listings, or simply in a movie theatre foyer (Lobato, 2018). Thus, even if the technologies have significantly changed and the related terminology is different, the processes driving prominence and discoverability are part of a 'history of media studies concerned with power, concentration, and accountability in broadcasting systems' (McKelvey, 2016: 7).

Critical media scholarship on online prominence and discoverability is undertaken in a critical political economy tradition that investigates battles over the distribution of power and control in the television industry, now played out within the ongoing datafication and platformisation processes of this sector (Hesmondhalgh and Lobato, 2019: 965). Primary sites of these power struggles, or as Lotz and Hesmondhalgh describe it, of media circulation power, are screen interfaces which are controlled by a few actors that exercise

control over the technological infrastructure and the delivery means, as well as over the collection and analysis of users' data (Hesmondhalgh and Lotz, 2020: 405).

This research tradition has started to shed light on the distribution of power and control in the internet-distributed AVM industry by focusing on set-top-boxes (Hesmondhalgh and Lobato, 2019) and screen interfaces (Hesmondhalgh and Lotz, 2020), and the role of broadcasters' apps and technology manufacturers in this space (Johnson, 2020b). These accounts of prominence and discoverability are close to the critical cultural studies perspective of Fenwick McKelvey and Robert Hunt, who describe 'discoverability as a kind of media power constituted by content discovery platforms that coordinate users, content creators, and software to make content more or less engaging' (McKelvey and Hunt, 2019: 1).

What this expanding body of research lacks, however, is an understanding of the organisational strategies and practices from a governance perspective. My theoretical framework therefore fills the gap between critical media studies on content curation, prioritisation and discoverability on the one hand and, on the other, the law and policy tradition examining prominence rules in AVM regulation and platform regulation.

Theoretically I situate myself within the interdisciplinary field of media governance research and take a critical institutionalist approach. As Philip Napoli argues, given the political and cultural impacts of various forms of media content, it is crucial to understand the institutional forces that affect content outputs, especially in today's automated and complex media systems (Napoli, 2014a). Since this research does not aim to investigate current industry practices of prominence and discoverability of content online, my conceptual framework integrates an institutionalist approach to organisational analysis with analytical tools from the media governance field (Puppis, 2007, 2010), theories on behavioural nudges and algorithmic regulation (Yeung, 2016; Yeung and Lodge, 2019), and public value innovation literature that is relevant to the media industries (Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016).

Given the complexity of these developments, I advanced a novel and interdisciplinary conceptual framework which brought a critical institutional lens to the study of media governance and the public interest. Such interdisciplinary was in my view needed to understand the nuances of these processes and to ask questions about the public interest in these new forms of intermediation. The following sections discuss this interdisciplinary theoretical foundation, situating this work in the broader literature on media and platforms governance, outlining the conceptual framework of this thesis and defining the core building blocks that drive my investigation into choice architecture, content prioritisation processes and the contested notion of public interest services (section 3.2 and 3.3, visually exemplified in Fig. 3.4). The Chapter then concludes by explaining how this theoretical and conceptual foundation informs my research questions (section 3.4) and subsequent analysis.

3.2. A Critical Institutional Lens on Digital Media Platform Governance

I build theoretically on institutional theories elaborated by Manuel Puppis on media governance and Philip Napoli on governing social media in the public interest (Napoli, 2014b, 2019). I integrate these with organisational theories developed by Paul DiMaggio and Walter W. Powell (Powell and DiMaggio, 1991), to better understand the role of organisations and their nuances. As my research progressed, I realised that this theoretical foundation was insufficient to explain how and why content prioritisation processes are governed in today's digital media platform systems. I therefore further integrated this framework with insights from research on behavioural nudges and regulation by design, specifically with the work of Karen Yeung (Yeung, 2016, 2019; Yeung and Lodge, 2019).

To reflect on how regulatory reforms are understood to take place, I complement Philip Napoli's approach to the public interest as an institutional and regulatory mandate for social media (Napoli, 2014b, 2019) with Mariana Mazzucato's insights into market shaping and public value innovation in media (Mazzucato, 2018; Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016). By doing so, I pave the way for a discussion about how change can be enacted in the context of these institutional arrangements and propose a public interest framework and related public value criteria to govern content prioritisation of public interest services on digital media platforms.

The following sections set out my theoretical approach and my key conceptual building blocks.

3.2.1. The Institutionality of Content Prioritisation in Industry Practices

To conduct an analysis at organisational level, I initially built on the work of Richard Scott and later interpretations through an institutional lens by Paul DiMaggio and Walter W. Powell. From an organisational perspective, Scott (2014) drew attention to three means by which institutions guide the social and economic actions of individual and collective actors:

(i) regulative, defined as rules, laws, sanctions, formal governance frameworks and operating procedures that individuals comply with for essentially pragmatic reasons (costs/benefits);

(ii) normative, described as values, norms, roles, conventions and binding expectation, providing frameworks of moral governance that both constitute informal constraints upon individuals and enable social obligations (rights/duties); and

(iii) cultural-cognitive, constituted by symbolic representations, systems of belief and shared frameworks for producing meaning that provide individuals with 'cultural rules establishing the logics of practice within a particular organisational context' (Scott, 2014: 76).

These notions are difficult to operationalise, and this is why institutionalist approaches may be prone to criticism when applied empirically. DiMaggio, Powell, and Scott addressed this by showing how empirical analysis at the organisational level could benefit from adding a layer of complexity to the understanding of organisations.

These scholars followed a new institutional economics approach, where actors are assumed to be by bounded by rationality and commercial contracts (see Nee, 2003; Powell and DiMaggio, 1991; Scott, 2014; Zucker, 1987). However, while commercial relations and negotiations are key parts of governing systems of content prioritisation, they arguably are just one piece of the puzzle. Other scholars like Manuel Puppis and Patrick Donges also argue that new institutionalism is a fruitful theoretical foundation to analyse the influence of media governance on media organisations. But they draw upon new sociological institutionalism which defines institutions as being comprised of a cultural-cognitive, a normative and a regulative pillar (Donges, 2007; Puppis, 2010), and do not consider actors to be bounded by rationality and commercial contracts.

In situating myself within this institutional and media governance tradition, I adopt a critical lens inspired by the work of Napoli. This approach enables me to address the issues of gatekeeping power, data-driven nudges and positive interventions in content regulation that are at the centre of my analysis. While in linear broadcasting, media organisations had a gatekeeping role in content production and distribution, since the advent of new forms of intermediation online, this role has profoundly changed. Online intermediary services and internet-connected devices have decoupled production and distribution, and new forms of 'algorithmic' and 'individual' gatekeeping have intruded on a process once dominated by media organisations and their editors (Napoli, 2019). This thesis is concerned mainly with algorithmic gatekeeping power – and the role of organisations and their strategies underlying those algorithms.

The technical and commercial strategies of different actors are linked not only to the regulative dimensions of formal governance, but also to the normative and cultural-cognitive dimensions of institutions. As illustrated by Napoli:

> Key points of focus for this body of research involve how organisational and supra-organisational forces affect media organisations and industry structures, behavioural patterns, environmental cognitions, and (and perhaps most significantly) content. In many ways, it is this need to understand the institutional forces that affect content outputs and flows that is the driving force behind this body of research, given the political and cultural impacts of various forms of media content. (Napoli, 2014a: 343)

Napoli proposes an institutional theory of automated media (Napoli, 2014a), arguing for the need to apply institutional theory to the so-called 'algorithmic turn' of media (Uricchio, 2011) and paving the way for further research. Through this lens, Napoli highlights the need to investigate those 'institutional forces' that are feeding into the wide range of design and algorithmic process that nowadays influence the ways in which

content is consumed and distributed (Napoli, 2014a: 351–352). This theoretical perspective allows me to investigate those organisational and institutional forces that feed into the wide range of design and algorithmic decisions over what content should be made more prominent and discoverable, on the basis of what criteria and interests.

The institutionality of algorithms is implicit – even if not directly addressed - in Lawrence Lessig's notion that 'code is law' , an analogy he used to illustrate the ways in which the programming that controls the operation of communications networks and platform services is a powerful tool for regulating the behaviour of users in ways that are not always obvious. Nudging user choices and viewing behaviours is at the core of discoverability and prominence strategies of any media and/or platform organisation as they fight over users' time and attention.

Thus, informed by these theoretical approaches, **I understand organisations as institutional arrangements with governance structures, processes and strategies that are influenced by their organisational context, their institutional environment and by informal constraints and incentives that guide the normative and cultural-cognitive elements of individuals' and collective actions.**

3.3. Developing a Framework at the Intersection Between Media and Platform Governance

The organisational analysis in this thesis focuses on the UK online AVM industry, its key players and governing system (Chapter 1, Fig. 1.1). Given the increasingly important role of digital platforms and their intermediary services in this segment of the industry, existing media governance systems intersect with emerging platform governance systems. This intersection is what I describe as digital media platform governance. What do I mean by this?

The study of governance is not an invention of media and communication scholarship, as its origins can be traced back in the social sciences, including economics and politics. The governance concept has become increasingly prominent in the discourse surrounding AVM, including digital media (see also Council of Europe, 2009; Karppinen & Moe, 2013; Napoli, 2019; Puppis, 2010) and platforms (see also Dijck, 2020; Gorwa, 2019; Mansell, 2012; Mansell and Steinmueller, 2020; Nieborg and Poell, 2018; van Dijck et al., 2018). My understanding of media governance builds on the work of Manuel Puppis and Philip Napoli.

As highlighted by Napoli, the notion of media governance 'emerged as a reflection of, and a response to, the distinctive characteristics of the internet as a medium in which (a) national legal and regulatory jurisdictions are more difficult to define and enforce; (b) the very origins of the technology and how it operates reflect a somewhat decentralised, interconnected, collectivist undertaking of governmental, commercial and non-

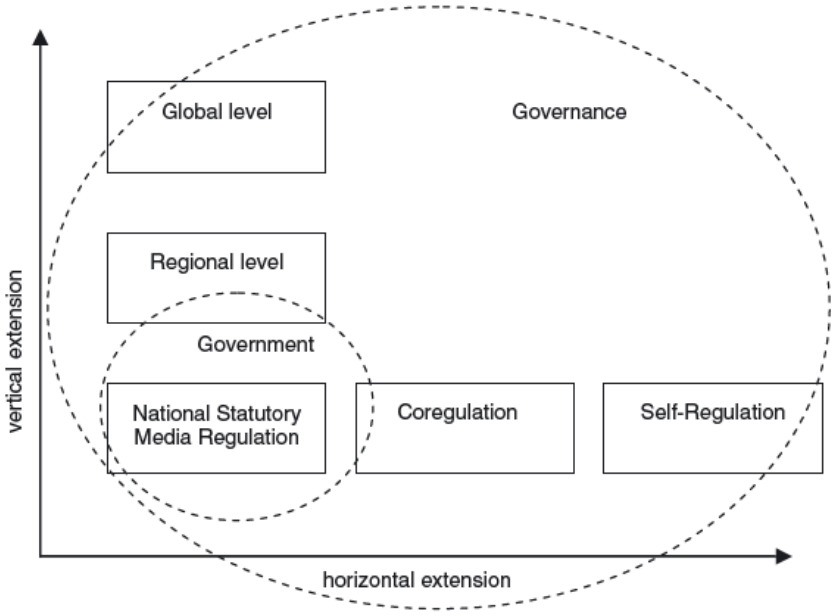
profit stakeholders; and (c) the traditional rationales for government regulation often lack clear applicability and relevance' (Napoli, 2019: 133).

Media governance is broader and more inclusive than traditional notions of regulation or policy insofar as it concerns the whole regulatory and policy structure, defined as 'the entirety of forms of rules that aim to organise media systems' (Puppis, 2010: 138), covering both collective and organisational governance and including a broader range of stakeholders that are seen as participating in the process, not only regulators and policymakers, but also industry organisations, NGOs and civil society organisations, and even audiences (Napoli, 2019: 132–133).

Thus, I understand **media governance as a framework of practices, regulatory deliberations and processes, rules and institutions that set limits and give incentives for the performance of the media**. The horizontal and vertical extensions of the concept of media governance are tightly interlinked as increasingly governance decisions are made in complex and global networks that encompass supranational, national and subnational actors, whether they are public, semi-public or private ones (Puppis, 2010).

Within this institutional view of media governance, policy processes are understood as a struggle or a competition between different stakeholders, or coalitions of stakeholders, which have different beliefs about and visions of policy, problems and solutions. In short, governance refers to the dynamic structures and institutional arrangements of rules among industry and policy actors that are linked in the online AVM sector and negotiate at various levels. As an analytic approach, governance focuses on the impacts of these structures and institutional arrangements on the actors and their behaviour (Puppis, 2007, 2010) as shown in Figure 3.1

Fig. 3.1. Media governance as analytical concept and its horizontal and vertical extensions



Source: Puppis, 2007: 331

As we move towards an ever greater digital convergence, media governance systems are increasingly impacted by platform organisations and their intermediary services. The influence of corporations like Google Alphabet, Meta, Amazon and Apple in the media sector has been examined by numerous scholars as researchers have sought to understand the role of these complex socio-technical developments in modern societies. Research documenting the impacts of platform organisations and their intermediary services on cultural production and consumptions (Nieborg and Poell, 2018; Van Dijck, 2013, 2020; van Dijck et al., 2018) has been complemented with research on their impacts on television and its industry (Evens and Donders, 2018; Johnson, 2019; Lotz, 2017), on the news media sector (Eskens et al., 2017; Helberger, 2019; Helberger and Moeller, 2018; Möller et al., 2018; Tambini and Labo, 2016), and on many other aspects of our public and individual lives.

Within this expanding body of research, I focus in particular on the governance of today's digital media systems, which lie at the intersection between existing media governance systems and those of emerging digital platforms. Precisely because digital media systems lie at the intersection between the two, each with their own institutional arrangements, tensions and contestations among AVM services providers and digital platforms are particularly evident here.

3.3.1. Choice Architecture of Digital Media

A key aspect of digital media platform governance is the technological architecture of its actors and their intermediary services. Researchers have shown that the design of technological architectures of hardware and software services is not neutral as it always reflects to some extent the objectives of the designers and the interests of the organisations behind them (e.g. Möller et al., 2018; Napoli, 2014; Powell, 2016). Users' choices about what content and/or service to access and consume therefore do not happen in a vacuum. On the contrary, they take place in a carefully curated technological environment, which inevitably constrains human autonomy and freedom of choice. Such architecture therefore plays a significant role in nudging users by making certain content and information more or less prominent and discoverable on different interfaces (Woodard and Baldwin, 2008; Yeung, 2016).

The intellectual heritage of 'nudges' and 'choice architecture' rests in experiments in cognitive psychology (Kahneman and Tversky 1974; 1981) and behavioural economics (Sunstein, 2015; Thaler et al., 2013; Thaler and Sunstein, 2008) that seek to understand human decision-making. In particular, Thaler and Sunstein describe a nudge as 'any aspect of choice architecture that alters people's behaviour in a predictable way, without forbidding any options or significantly changing their economic incentives' (Thaler and Sunstein 2008:6). From this perspective, what is made prominent greatly matters as it influences individuals' consumption choices and behaviours.

Therefore, it can be argued that the screen environment in which users make their choices are intentionally designed in ways that systematically influence their decision-making in particular directions. In regulation, this

reasoning is often used as justification for what are deemed to be paternalistic interventions intended to make people's lives go better, for instance by promoting food safety, protecting the planet, or reducing harms to health.

While building on these notions of choice architecture and nudges, Karen Yeung moves beyond the limits of individual choice theory and neoclassical approaches to behavioural economics and provides a theorisation of data-driven nudges and algorithmic regulation that was inspirational for my work (Yeung, 2016; Yeung and Lodge, 2019). Yeung investigates data-driven processes in today's online intermediary services as a form of *regulation by design* (Yeung, 2016) – later described as *algorithmic regulation* (Yeung and Lodge, 2019) – that governs and influence our choices and behaviours online.

Hypothetically, in today's online media environment we are free to search, access and consume whatever content we like, whenever we want, and on a myriad of services. However, in practice each individual click-through behaviour is subject to the 'priming' effect of the designed and algorithmic configuration of the informational choice architecture (Yeung, 2016: 4). On Google Search for instance, even if we are in theory free to review all the potentially relevant pages, in practice each individual searcher is likely to visit only those on the first page or two as his/her behaviour is often influenced by the framing of choice architecture and its default settings (Competition & Markets Authority, 2020: 194–196).

Thus the criteria used to rank content on intermediary services, such as search engines, can affect users' access to content. Depending on such criteria, SERP can be used to increase reach and advertising revenues when the most prominently displayed sites are paid-for sponsored listings (Pasquale 2006), but also to decrease the visibility of mis- and dis-information online. For instance, during the Covid-19 global pandemic, Google Search, as well as other major digital intermediary services, actively promoted fact-checked and high quality news on Coronavirus, prioritising not sponsored links, but sources considered reliable and trustworthy, such as the World Health Organisation, national Departments of Health, or the most recent news articles from established news media organisations (Mazzoli and Tambini, 2020: 5).

As argued by Yeung, the application of data analytics, automated decision-making processes and digital decision guidance processes complicates the types of nudges and choice architecture, as these constantly adapt and change as they gather and analyse users' behavioural data (Yeung, 2016). These mechanisms can be helpful and transparent, or harmful, complex and exploitative (Yeung, 2016: 4). Since any architecture will exercise some form of control over its users, it is crucial to investigate how these mechanisms function in the context of digital media platforms and how they relate to the gatekeeping power and governing dynamics between different actors.

Without underestimating the role and agency of individuals, this study does not investigate the impacts of nudges on them. Instead, it researches how design choices of content prioritisation processes are part of broader governance systems where the institutional arrangements influence the means and strategies used

by different organisations. As argued by Napoli, organisational strategies and their institutional and governance arrangements are key determining factors of automated media and their content policies (Napoli, 2014a). Thus, **I understand choice architecture as the design of hardware devices and software-based UI that shapes access to content at different levels and which is assumed to nudge users' choice of content.** From this perspective, both paid-for Amazon Prime Video's or Netflix's buttons on a remote control and personalised screen interface are part of this choice architecture and they are influenced by organisational strategies, interests and institutional arrangements.

Nudges and choice architecture can be understood as a form of digital decision guidance process that seeks to guide peoples' access to and consumption of content online. This is done through soft technical means, i.e. their underlying software algorithms which offer 'suggestions' to prompt the user to make the decisions preferred by the choice architect (Sellinger and Seager 2012, Yeung 2016). These nudges can also be reinforced automatically and dynamically, with both the standard and its execution being continuously updated and refined through users' data, related targeting and profiling mechanisms, and optimisation techniques (Yeung, 2016: 6).

3.3.1.1. Defining Content Prioritisation Processes, Prominence and Discoverability

Within the numerous facets of digital media platforms' choice architecture, I am particularly concerned with content prioritisation processes and relative prominence and discoverability decisions. So, **content prioritisation processes and related prominence and discoverability decisions are part of broader content curation strategies, that are understood in this thesis as digital decision guidance processes** (Yeung, 2016).

In today's digital media platform systems, the definition of curation is expanded from museums and libraries to mainstream media, platforms and online intermediary services. As one of the industry gurus in this area, Steven Rosenbaum, has claimed the sheer volume of digital information and content that is available makes curation – both editorially and algorithmically driven – a necessity for users and industry actors (Rosenbaum, 2012, 2014).[40] Content curation is therefore broadly defined as the act of selecting, aggregating, designing, up-ranking and prioritising digital media content accessible through internet-connected devices and intermediary services. **It is therefore about positive discrimination, rather than the negative discrimination typical of content moderation processes.** It is the other side of the coin of content moderation, and both are an essential, constant and definitional part of what digital intermediary services do (Fig. 3.2).

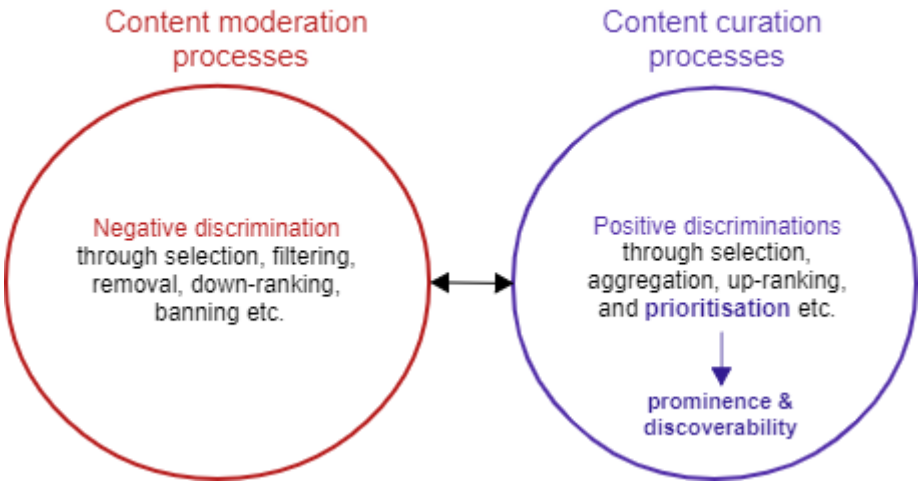
The ability to curate, select and filter what content is accessed, seen or found online not only relies on algorithm-driven, automated processes of search and recommendation systems, but is also related to the objectives of the designers and the interests of the organisations behind them (see also Gillespie, 2018;

[40] Steven J. Rosenbaum is an American author, entrepreneur and filmmaker, specialised in video curation and advertising technology, areas where he holds two patents.

Moeller et al., 2018; Napoli, 2014a). We should not simply 'blame algorithms' or automated recommendation systems, as their nature and purpose is – and should be – to organise and rank content in today's era of ever greater abundance of content, where media organisations inevitably compete for the limited attention of audiences and screen spaces (Helberger, 2019; Helberger et al., 2018; Moeller et al., 2018).

From this perspective, I **conceptualise discoverability and prominence as interlinked outcomes of digital decision guidance processes that influence how AVM content and services are curated and prioritised online. The assumption is that these decisions are not neutral but are influenced by the institutional environment of digital media governance systems as shown in Figure 3.2.**

Fig. 3.2. Content curation processes and related decisions over discoverability and prominence.



Source: Author

In policy and regulatory debates, notions of prioritisation, prominence, discoverability and findability are often used interchangeably, and conflating these terms means they emerge as vague policy objectives in recent media and digital regulatory proposals (Chapter 2). To clarify these terms and frame them within broader content curation processes, I therefore propose new definitions.[41]

Prominence

The notion of prominence has been used primarily in media policy scholarship and in content regulation to describe positive discrimination in favour of specific services, such as services and channels offered by PSM organisations, which are traditionally deemed to fulfil a public interest mission for the benefit of individual users and society as a whole. As outlined in Chapter 2, from a regulatory perspective, prominence rules are inscribed in legacy regulatory frameworks applied to AVM services and their distributors, and they are part of those traditional content rules that take a positive or promotional approach.

[41] These definitions are based on already published work that I wrote and co-authored (Mazzoli, 2020; Mazzoli and Tambini, 2020).

Theoretically, the term prominence has been mainly associated with media policy and legal scholarship on PSM, broadcasting and electronic communication regulation (García Leiva, 2020; García Leiva and Albornoz, 2020). Critical media scholars also have recently started to expand this notion to include other forms of prominence that takes place on VOD and subscription VOD (SVOD) services and their interfaces (Hesmondhalgh and Lobato, 2019; Hesmondhalgh and Lotz, 2020; Johnson, 2020b).

In this thesis, the notion of prominence does not simply refer to EPGs or LCN listings, nor is it linked solely to positive discrimination in favour of PSM. More broadly, prominence is understood to concern the degree to which certain kinds of channels and services stand out from others not only on EPGs, but also on other online intermediary services and their automated systems, such as screen interfaces, streaming services' homepages and their catalogues' listing, search ranking results and recommendation systems. Prominence is therefore understood as an outcome of content curation processes, which concerns the location, be it visual, physical or virtual, and prioritised placement of a channel, an application or a service compared to others, in time and/or space on a given interface (Mazzoli, 2020; Mazzoli and Tambini, 2020).

Discoverability

Discoverability is a term that has migrated into AVM industry debates from the world of information science, web and software design (Lobato, 2018; McKelvey and Hunt, 2019). Discoverability was used as a proxy for the efficiency of software and web design and for their ability to improve the visibility of certain content in online catalogues and searches by nudging user searches and leveraging search engine techniques and metadata tagging to game online platforms' distribution systems (see also Bohyun, 2013; Chambers, 2013; Elder et al., 2012; Graham and Hosburgh, 2014; Somerville, 2013).

As audiovisual content increasingly moves online, 'content discoverability' has emerged in industry and policy discourses as the next biggest challenge for content creators and providers, as they fiercely compete for audience attention within an overabundance of content (see also Desjardins, 2016a, 2016b; Ofcom, 2018, 2020). Building on my previous work in this area and on the framework for analysis proposed by myself and Damian Tambini (Mazzoli, 2020; Mazzoli and Tambini, 2020), I define discoverability as the outcome of content curation processes that concern the likelihood of discovery of content, and therefore the likelihood of its consumption. The emphasis here is on the serendipitous aspect of searching for and discovering content, when users have not yet made a choice about what they want to watch and might be more easily nudged or influenced by the choice architecture of the hardware and software systems used to access content.

Thus, I argue that the notions of prominence and discoverability are tightly interrelated as they both heavily depend on organisational strategies, industry standards, technical constraints, and negotiation processes between different industry actors. From this perspective, any decision about the prominence and discoverability of public interest content is understood to relate to broader content curation strategies, which are crafted and adapted to different types of interface. These strategies are meant to attract viewers'

attention, and to guide and nudge audiences in their searches in order to influence what they access and consume.

While, on the one hand, user agency is paramount, on the other, as a recent UK audience study has shown, strategies to increase the discoverability and accessibility of content, such as UI design, recommendation systems and default TV options, to some extent nudge audience's awareness and influence their choices (Johnson, 2020b; Johnson, Dempsey, et al., 2020). In other words, whether Amazon Prime Video is a default app on your smart TV; whether a video clip is presented in the 'Recommended' section of your YouTube homepage; or whether a TV show is included in Netflix's 'Top 10' row rather than in the last tile of the last row of its catalogue plays a significant role in what you are more likely to watch.

Despite their importance, how prominence and discoverability decisions are taken is often undisclosed, protected by industry trade secrets, as in the case of recommendation systems, or by sensitive commercial negotiations and agreements, as in the case of prominence placement (Hesmondhalgh and Lotz, 2020; Johnson, 2020b; Mazzoli, 2020). Furthermore, the mechanisms through which content providers negotiate access, discovery and prominence of their content and services on video streaming services (e.g. Netflix, Amazon Prime Video), device interfaces (e.g. Apple TV or Google Chromecast TV) or aggregated video interfaces (e.g. Amazon Fire homepage) are different. Within digital media platform governance systems, agency and control are distributed in a nuanced way, leading to complex interdependencies among all actors, from platform organisations, to pay-TV operators, hardware and software manufacturers and broadcasters, like PSM and community media organisations[42] (see also Mazzoli, 2020).

Prominence and discoverability therefore concern how different actors and their institutional arrangements influence the curation and prioritisation of content online, exerting more or less control over a user's journey to content, and ultimately influencing what content is deemed worthy – economically, culturally, or socially – to the final users (Mazzoli and Tambini, 2020: 23). Hence, in this thesis, these concepts are not narrowly linked to PSM services, but refer to broader negotiations among a wide range of industry actors around what content and content providers are (or should be) of interest to the public. However, one of the starting assumptions of my research is that the selective prominence and discoverability of AVM content and services is deceptive, especially given the opacity of choice architecture and our sheer lack of data about these processes. It is therefore important to question whether trust in such industry dynamics as a vehicle for securing the visibility of public interest services and so that the industry will act in the public interest is misplaced.

As policy debates continue as to whether regulators should intervene in new online prominence regimes or step back from current curation and prioritisation practices (Chapter 2), it is crucial to examine the organisational and supra-organisational forces that influence them. Raising questions about how the public

[42] Community media organisations refer to community and not-for-profit media organisations.

interest is conceived in new forms of intermediation is key to this process. This leads me to a discussion of another key conceptual building block in this thesis: the notion of *public interest services* and related *public value criteria*.

3.3.2. Public Interest Services and Public Value Criteria in New Prominence Regimes

Informed by a critical institutional lens, content prioritisation processes can be understood as being based on contested understandings of what is deemed worthy to the final users, and on contested visions of what private and public interests and values should be prioritised.

Organisations use a wide range of criteria to award priority to certain content or content providers, which are based often – but not solely – on economic interests and commercial transactions, by granting prominence in exchange for money, or promoting content that is most likely to be selected by audiences. Alongside such privately and commercially driven objectives, in policy debates on new prominence regimes, a growing number of organisations claim to use vaguely defined public interest objectives and public value criteria in their prioritisation processes. The extent to which these interests and values are codified and operationalised into internal content policies is unclear. However, notions of 'public interest services' and related 'public value criteria' appear to be central to these industry and policy discussions.

It is because of media organisations' unique potential for cultural and political influence that the concept of the public interest has long been central to the operation of media organisations (see also Barkin, 2003; Croteau and Hoynes, 2005; McCauley et al., 2002; McQuail, 1992; Napoli, 2006), especially PSM (see also Bardoel and D'Haenens, 2008; Feintuck and Varney, 2006; Knoll, 2012; Lowe and Martin, 2013; Mazzucato et al., 2020). The public interest concept encompasses concerns and objectives that go beyond utilitarian economic individualism approaches to media centred around audiences or profit maximisation. In the early 1990s, Denis McQuail identified the term public interest in the media context as 'the complex of supposed informational, cultural and social benefits to the wider society which go beyond the immediate, particular and individual interests of those who communicate in public communication, whether as senders or receivers' (McQuail, 1992: 3).

Media communications professionals tend to be infused with an ethical obligation to serve the public interest, an obligation that has been transcribed into media regulation as it accompanied non-economic ideologies and non-market rationales to inform the understanding and formulation of policy objectives to benefit the public at large, focusing on creating wider societal benefits and public value (Bozeman, 2007; Feintuck and Varney, 2006; Knoll, 2012; Napoli, 2015). However, as a concept, public interest is often contested and ill-defined, vague and malleable. For instance, it has been used as an ideological means to support regulatory interventions in the media and communication sectors, but also to call for deregulation and liberalisation, or

to push unjustified regulatory ambitions that might limit fundamental liberties of expression (McQuail, 1992: 3).

It is beyond the scope of this section to review the different conceptualisations of the public interest notion in the context of media. I focus on how the notion has been operationalised in specific forms of media arrangements, particular content genres, and sets of principles and public value criteria applicable to media organisations and practitioners. This discussion will inform how the notion of public interest services is used within the prominence debate that this thesis analyses.

Historically in the UK, as well as in its erstwhile fellow European member states, public interest services were identified mainly with one form of media arrangement, that of public service broadcasting and programmes. This idea has been transposed into public service remits and legal obligations for these organisations that prescribe guiding organisational and management principles, such as diversity requirements, investment quotas for national and local productions, universality of service, high quality and accountability standards, etc. (European Broadcasting Union, 2014, 2017). Obligations varied depending on the national context and they were often counterbalanced by regulatory benefits for PSM, including stable sources of public funding and positive discrimination, including prominence on EPG listings.

In the case of the BBC for instance, its public service mission prescribes that the BBC should 'act in the public interest, serving all audiences through the provision of impartial, high quality and distinctive output and services which inform, educate and entertain'[43]. This mission is operationalised into principles and public value criteria with which the BBC's services are required to comply through the BBC Charter and Agreement (BBC, 2016a, 2016b). Thus, in the case of the UK and others organised on a similar basis, PSM organisations were taken as a proxy for public interest AVM providers, and their content and services were given public value attributes, as long as they respected their obligations and remits (Coyle and Woolard, 2010; Mazzucato and O'Donovan, 2016).

Neoclassical economic thinking proposed an even narrower definition of public interest services, focusing primarily on types of AVM content that market forces alone might have not been able to provide. In other words, the notion was limited not just to one type of media organisation, but to those 'niche-market failure genres' that are less commercially viable and present significant risks for the organisations providing them, in particular, news, current affairs, arts, culture, religion, and documentaries (Cowling and Tambini, 2002: 14).

However, considering all PSM services or only specific content genres as proxies for public interest services is arguably too limited an interpretation of these notions. This is because it does not take into account that other media organisations might strive to achieve public interest objectives, and that commercially viable content might be of public interest (Coyle and Woolard, 2010; Mazzoli and Tambini, 2020; Mazzucato et al., 2020).

[43] BBC Charter, paragraph 5.

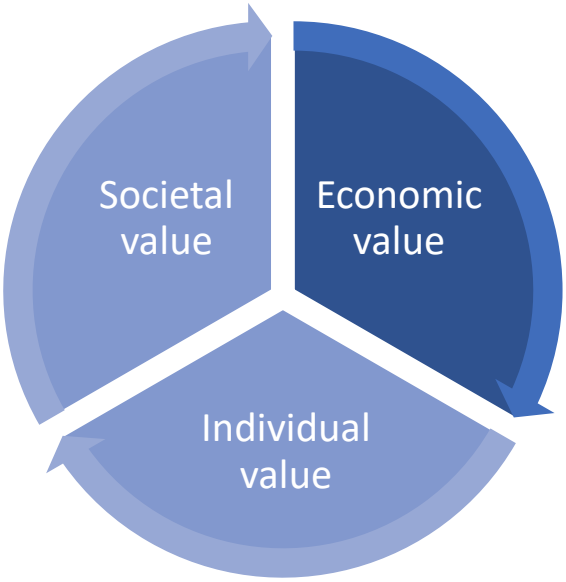
In this research, the concept of public interest services is used in two distinct ways.

Firstly, theoretically, I start with a broad understanding of public interest services that goes beyond existing categories of PSM organisations or specific content genres such as news. Consistent with a critical institutional lens, public interest is defined as a normative policy objective: an ideal outcome of media and providers of information and content that are best serving a social collective. As Napoli argues (2019), the public interest in media governance systems features both as a regulatory mandate and as an institutional imperative for media organisations. Secondly, heuristically and empirically, public interest services are those AVM services (and their providers) that should be granted a prioritised placement by any new prominence regime because they are deemed to create public value on an individual, industry and collective level.

My theoretical framework initially focused on the notion of public interest services, drawing in particular on my interpretation of Napoli's work on the public interest and media governance (Napoli, 2015, 2019). However, his work does not explicitly address notions of public value, nor does it explain how public value relates to public interest objectives as a regulatory mandate and institutional imperative. My understanding of public value is therefore based on the work of Mariana Mazzucato on media's public interest mission and public value innovation (Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016).

Mazzucato's heterodox economic approach to public interest and public value brings a valuable insight to this thesis. Building on her work, in this study I define public value as a multifaceted concept constituted by three main value components: societal, individual and economic value (see Fig. 3.3). Mazzucato et al. argue that the kind of public value that PSM organisations such as the BBC produce cannot be captured by a narrow economic definition of *the public good*, which assumes an existing market failure of the private sector (Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016). Public value instead is a more 'dynamic concept' that focuses on the process by which value is generated in social, collective and economic ways (Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016). Thus, public interest-driven organisations can also positively shape markets, and not simply fix them.

Fig. 3.3. Public value components



Source: Author

But how can this kind of market-shaping effect be achieved? It is achieved through the creation of all three components of public value. In the case of the BBC, for instance, the broadcaster has created value for individuals in their experiences as consumer; for society in providing diverse, universally accessible and high quality services and content; and for the industry as a whole in economic terms by taking the kinds of risks necessary for new markets to emerge, and investing in the local and national media and creative sector (Mazzucato et al., 2020: 8).

The creation of public value is one of the arguments used to justify why PSM such as the BBC should be granted prominence on both linear and non-linear services. However, pay-TV operators and increasingly SVOD services are appropriating this narrative, arguing that they contribute to public value creation in similar ways, and should therefore also be granted prominence online. Institutional arrangements and organisational interests drive policy debates and influence the choices that different actors make when they prioritise content on their services and UIs, and when they ask to be prioritised in new prominence regimes. While I assume that public value creation does not necessarily rest only in the hands of PSM organisations, this study assumes that it is tightly linked to a public interest mission, whether that is an institutional imperative or a regulatory mandate.

As my analysis will show, this notion of public value as comprised of three components (Fig. 3.3.) allows me to categorise the various normative criteria that emerged from my data collection, and to suggest a framework for defining those AVM services requiring to be granted prominence and discoverability benefits through regulation.

3.4. Conceptual Framework and Research Questions

This chapter establishes the theoretical and conceptual building blocks for this research.

My conceptual framework is positioned within relevant research in media and platform governance field, and I employ an interdisciplinary framework. The preceding sections outlined my understanding of core concepts and how they relate to each other in this research project (Fig. 3.4).

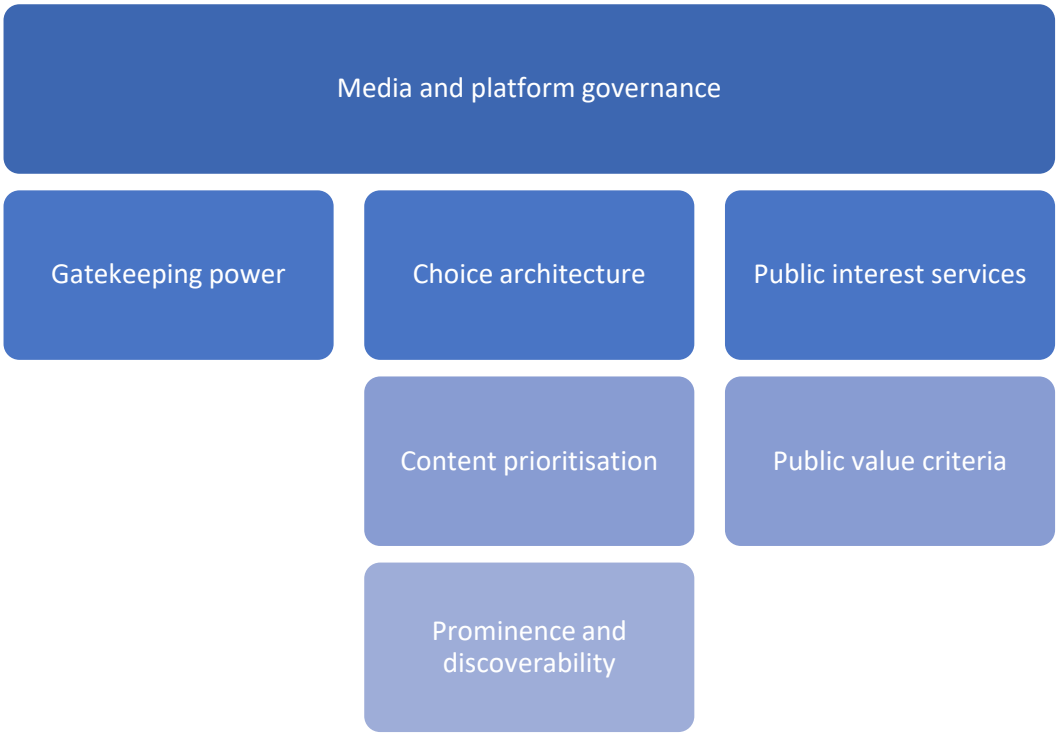
In this context, content prioritisation processes are understood to take place in a carefully curated technological environment, also described as choice architecture. Choice architecture concerns the design of hardware devices and software-based UI that shape access to content on different levels and is assumed to nudge user choices of content. Nudges and choice architecture are conceptualised as forms of digital decision guidance processes that seek to direct or guide peoples' access to and consumption of content online (Sellinger and Seager 2012, Yeung 2016). This is done through soft technical means, that include content prioritisation measures. Thus, prominence and discoverability are defined as interlinked outcomes of digital decision guidance processes that influence how AVM content and services are curated and prioritised online.

These processes are understood to be deeply embedded in and influenced by the institutional arrangements of the organisations that control them. Control over choice architecture allows industry actors to strengthen their gatekeeping power (Napoli, 2019) over the ways in which content is distributed and accessed online. This is why the politics of prominence that this thesis investigates are conceived of as a battle among governments, regulators and industry actors to establish who has the power to decide what content is deemed to be in the public interest and therefore made prominent to the users.

When new prominence regimes arise, content prioritisation processes raise questions about what *public interest services* should be deemed worthy of these regulatory benefits, and contested visions of what private and public interests and values are (or should) be prioritised emerge at the centre of these policy debates.

My conceptual framework allows me to investigate how organisational strategies and the formal and informal constraints of the institutional environment feed into the governance of content prioritisation processes in today's internet-distributed AVM sector. By advancing a governance and institutional perspective to content curation and prioritisation processes, my aim is to develop insight that is currently lacking in research in the media and communications field.

Fig. 3.4. Schematic visualisation of the thesis' conceptual building blocks[44]



By investigating factors that feed into such governing processes and related institutional arrangements, this conceptual framework makes it possible to answer the following questions:

> *RQ1: How is content prioritisation governed on digital media platforms?*
>
> *RQ2: Inspired by the UK case, what would be the elements of a public interest framework for new prominence regimes?*

I operationalise my core concepts in empirical sub-research questions based on my conceptual framework and three dimensions of my analysis – technical, market and regulatory dimensions. The next methodology chapter (section 4.5) explains how I developed the empirical questions and how my thesis examines them over the course of three empirical chapters (Chapters 5, 6 and 7) and a chapter of analysis (Chapter 8).

[44] These are the conceptual building blocks theorised and explained in the previous sections: (i) gatekeeping power in automated media (Napoli, 2019); (ii) choice architecture (Yeung, 2016; Yeung and Lodge, 2019) and related processes of content prioritisation, prominence and discoverability; (iii) public interest services (Napoli, 2019) and related public value criteria (Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016).

Chapter 4

Methodology and Research Design

4.1. Introduction

To respond to my core research questions, I conducted a within case study comparative analysis, focusing on the UK and its online internet-distributed media industry as a primary case study (Chapter 1, Fig. 1.1), drawing attention to a selected sample of organisations (section 4.3.2.1). The empirical analysis takes place on the organisational and institutional levels, and it focuses on Ofcom's 2018 revision of EPG prominence rules. The analysis focuses on key stakeholders of the internet-distributed AVM industry involved in this policy process, namely PSM, commercial broadcasters, pay-TV operators, platform organisations, technology manufacturers and policymakers.

To investigate this governance system, I examine empirically *how* and *why* prominence and discoverability benefits are granted to certain AVM services. In particular, I investigate the organisational motivations and arguments of what content and/or services are prioritised to the final users on devices and services, and why; and how these are translated into the technical, commercial and advocacy strategies of the relevant stakeholders. These rationales and motivations are discussed across three interconnected dimensions:

- A technical dimension, investigating the socio-technical criteria used by different organisations in making certain content more or less prominent and discoverable on their UI and recommendation systems;
- A market dimension, discussing the business and commercial deals concerning prominence and discoverability made between different organisations, and the economic drivers behind them;
- A regulatory dimension, investigating the advocacy strategies and arguments of different organisations used to influence the ongoing revision of Ofcom's EPG prominence rules.

I see these three dimensions as complementary and necessary to understand the institutional arrangements behind content prioritisation processes. I structure my analysis into three main empirical chapters (Chapters 5, 6 and 7) that explain the *how* and reflect the three empirical dimensions; followed by an analytical chapter (Chapter 8) discussing the *why* and addressing the overarching theoretical question.

To collect my data, I used a multimethod qualitative framework, combining two main sources of data: semi-structured interviews with industry experts, and desk research. While the initial plan was to rely solely on

interviews, due to the challenges encountered during the data collection (section 4.3.1), I had to adapt my methodology and complement this first source of data with a sample of industry and policy documents.

I then subjected all the data collected, interview transcripts and documents, to a thematic analysis with the support of NVivo (section 4.5). In the context of qualitative case study research, collecting data from multiple sources not only allows the researcher to gather more comprehensive information, but also to contextualise them, cross-check their consistency and enhance the robustness of findings (Wahyuni, 2012: 73). By combing the different sources, I collected a much richer body of data, and I was able to triangulate the statements and arguments of the interviewees.

4.2. Multimethod Data Collection

4.2.1. Gathering Data in a Closed Industry and During a Global Pandemic

My research deals with an emerging area of policy research that concerns opaque practices in a closed industry. This constituted a core challenge that I had to cater for in my research design and data collection methods. In addition to this, my data collection was heavily impacted by the Covid-19 pandemic, which started as I was beginning my fieldwork. I therefore had to adapt and adjust my research design and use strategies to find a way to enter this closed industry without having access to any of the key industry and policy events that would have facilitated a 'snowball' interviewee-recruitment process.[45]

To face these challenges, I shifted my interviews from face-to-face to online and extended the duration of my fieldwork, which in the end lasted from December 2019 to December 2021. As argued by Deakin and Wakefield, despite the fact that there are drawbacks to using new modes of communication such as Skype – or Zoom, in my case – synchronous online interviewing is still a useful replacement for face-to-face interviews (Deakin and Wakefield, 2014). In my case, using Zoom was not only a useful replacement but a necessary one since I would have not been able to conduct my fieldwork otherwise.

While in the early 2010s, online interviews represented a new 'methodological frontier' of internet-mediated research (Madge, 2010), the pandemic rapidly normalised this data collection method, demonstrating its great potential and versatility. Nonetheless, since initial access to potential interviewees was so restricted by the lack of industry and policy events and given the overall professional and personal issues that both the interviewees and I had to face during the pandemic, relying on this method was not sufficient. I therefore introduced an additional data collection method to complement, integrate and triangulate my interviews: desk research and document analysis became more prominent in my research design than I had initially planned.

[45] The snowball sampling is a recruitment technique in which research participants are asked to assist researchers in identifying other potential subjects.

Furthermore, two key collaborations that took place during my fieldwork greatly increased my access to the industry, allowing me to conduct a substantial number of interviews with key stakeholders – respectively, with the Council of Europe and the European Commission. As my research progressed, online content curation, and especially content prioritisation processes, started to attract the attention of European and international policymakers, placing me in a particularly strong position as a researcher with unique insights and expertise in this novel policy area.

I had the opportunity to conduct two relevant research projects, one commissioned by the Council of Europe in 2020, and one commissioned by the European Commission's DG CNECT (Directorate General of Communication Networks, Content and Technology) in 2021-2022. For the Council of Europe, I conducted a study of content prioritisation processes and relevant policy developments at European and wider international levels, which led to the DGI(2020)19 report 'Prioritisation uncovered: The Discoverability of Public Interest Content Online' that I co-authored with my supervisor, Damian Tambini (Mazzoli and Tambini, 2020). For the European Commission, I was part of a research team studying media plurality and diversity online (Parcu et al., 2022), and I contributed to the part of the project focused on prominence and discoverability in relation to general interest content online.

Both projects included expert interviews as one of their data collection methods and I was able to use these institutional channels to gain access to research participants for my thesis. In particular, I was able to access two categories of actors that did not agree and/or did not respond to my initial requests in 2019, namely platform organisations and technology manufacturers. These two categories were particularly difficult for me to reach for several reasons. Firstly, they were not part of my professional network, unlike PSM or other broadcasting organisations; secondly, due to the public pressure from regulators, Governments and civil society, platform organisations tend to have much stricter non-disclosure policies than other organisations, and their representatives are often less willing to engage and talk with independent researchers.

Last but not least, at the beginning of my research, platform organisations were less involved in the topic itself as it was relevant only in a limited number of countries (UK, Germany and Canada) and it impacted only some products and services. However, as the research progressed, content prioritisation started to climb up the political agenda of international institutions, for example, the Council of Europe and the European Commission, and it drew the attention of platform organisations' legal and policy departments once the threat of regulation became more concrete. The industry stakeholders who agreed to contribute both to one of the European research projects and my PhD work were thus trying to influence the policy process through me and my work, and I had to consider this factor in the analysis of my data.

Finally, the two European projects also allowed me to talk with a wider range of external experts as well as industry representatives of EU-wide trade associations and European policymakers, all of whose insights and information I was able to use as sources of contextual data for my own research. Indeed, even though it

focuses on the UK, I am dealing with systems of platform governance that have implications reaching far beyond the UK. Thus, being exposed to the views and perspectives of non-UK associations representing the same stakeholders as those analysed in my research enabled me to contextualise their practices and issues within a broader institutional and policy framework.

To respect confidentiality, the European project data was not used as a primary source of interviews, but it nevertheless informed and complemented my work, allowing me to gain a deeper understanding of the issues and to directly contribute to ongoing policy developments. While I have listed the advantages gained from these external collaborations, my role as contributor to these broader EU and Council of Europe's policy processes inevitably altered the relations between me and those research participants. This raises a number of ethical and self-reflexivity questions which I address later in this chapter (section 4.6).

4.2.2. Primary Data Sources: Interviewing Experts

The core data collection method for this thesis is **semi-structured expert interviews** (Bogner et al., 2009; Bogner and Menz, 2009; Gaskell, 2011; Meuser and Nagel, 2009). Expert interviews are a widely used qualitative research method often aimed at gaining information about or exploring a specific field of action. Given the specific focus of my research, this method was particularly suitable as it is a more time-efficient and concentrated method of generating data than, for instance, participatory observation, but it also allowed me to gain richer insights and to cater more flexibly for unexpected outcomes than a systematic quantitative survey would have done.

As Robert Farr writes, 'interviewing is essentially a technique or method for establishing or discovering that there are perspectives or viewpoints on events other than those of the person initiating the interview' (Farr, 1982: 151). In my particular field, experts are also key to practical insider knowledge, and therefore I have interviewed them as surrogates for a wider circle of players (Bogner et al., 2018: 654). Thus, by means of this data collection method I was able to elicit in-depth insights and enrich my understanding of content prioritisation practices, to engage with contextualised information and perspectives from different experts, and to critically investigate the practices and strategies of prominence and discoverability of the different stakeholders.

Broadly, I accept the overall constructivist argument that interview data should be thought of as a context-specific, constructed performance that is discursive in nature (Holstein and Gubrium, 2003), rather than as objective knowledge derived from fact gathering techniques. In my research, I understand the experts I interviewed as people who possess specific knowledge and expertise in two key areas: online content policy and AVM platform services (section 4.2.2.1). They play a relevant role in setting the strategies and decision-making processes around content prioritisation, and have privileged access to information within their organisations (Meuser and Nagel, 2009). Thanks to their knowledge and position as experts, the interpretation

of this interview data provides insight into the institutional and organisation practices in a meaningful way (Bogner et al., 2018).

At the same time, I am aware that neither expert knowledge nor expert fields are neutral, characterised as they are by power relations and processes of knowledge production that play a vital role in defining certain problems and related solutions (Meuser and Nagel, 2009). The purpose of expert interviews in this research, therefore, was to investigate the interests, strategies and discursive justifications of industry actors, using experts as 'crystallisation points' for practical insider knowledge (Gaskell, 2011: 2), while applying a critical analytical lens in the analysis of their interpretation of issues and events.

4.2.2.1. Sampling Organisations and Interviewees

Concerning the sampling of the organisations for the within case study comparative analysis, I identified organisations that are based and/or operate in the UK internet-distributed AVM industry. To select them, I chose a case-oriented comparison analysis based on variation criteria (Della Porta, 2008), according to which case studies are identified because they are significantly different or remarkably similar on one or multiple dimensions, such as size, form or organisation, location, budget or funding (Gerring, 2017).

The world of AVM markets is rapidly changing. Not long ago, it was dominated by linear television, transmitted terrestrially, through cable networks or via satellite. Recently, platform organisations such as Netflix, Amazon, Google Alphabet and others have become key industry actors in the online AVM industry, emerging not only as producers and suppliers of AVM content and services, but also as aggregators and distributors, establishing themselves as gatekeeping intermediary services in the sector. As also highlighted by Catherine Johnson, this industry is inherently 'messy, occupied by organisations stemming from a range of sectors and operating under varied business models', and there is no consistent academic language to describe them (Johnson, 2019: 54).

As I navigated this messiness in my sampling, I chose five distinct categories of organisations, and within those categories I identified a sample of key market players to investigate their curation and prioritisation practices and the industry dynamics among national and international actors.[46] This sample comprises:

1. PSM organisations:[47] independent broadcasting and media organisations with a public service legal remit. The peculiarity of the UK PSM ecosystem is the co-presence of multiple public service broadcasting companies, which present different business models, funding revenues and structures, but are expected to serve a public interest mission that entail certain obligations and standards in terms of public value. The public service broadcasters are those providing Channel 3 services (such as

[46] This thesis does not intend to advance a new categorisation or new definitions of the different companies that constitute the internet-distributed segment of today's online AVM industry. The categorisation is mainly functional to the methodology since it describes which organisations have been sampled and clarifies to the readers where the interviewees are coming from.
[47] Throughout the thesis, I indicate interviews' quotes from this sample of PSM organisations with 'PSM' in brackets

ITV, STV, and UTV),[48] Channel 4, Channel 5, S4C and the BBC. While all BBC public service television channels are PSM channels, only the main channels of each of the other PSM have this status. Given my interest in the market relations between the main industry players, I selected and interviewed only the three national PSM organisations: the publicly funded BBC, and the commercially funded Independent Television (ITV) and Channel 4 Television Corporation (Channel 4). The PSM services described in this thesis include both their linear channels and their internet provided services, in the form of online TV apps and BVOD, like BBC iPlayer, All4 and ITV Hub, and their disaggregated content.

2. Platform organisations:[49] those digital platforms that offer key intermediary services in the online AVM market, including streaming and SVOD services but also hardware and software products that play a key role in curation and prioritising content. US-based tech giants (previously known as GAFAs – Google, Amazon, Facebook, Apple, or FAANGs – Facebook, Amazon, Apple, Netflix, Google) are among them, as it is these companies' services and products that increasingly dominate the UK media market. Based on market research and trends, I elected to focus on Netflix, and on those AVM ancillary services and products owned by Google Alphabet (YouTube and Google TV and only in a second instance interoperable products such as Google Assistant, Android TV and Chromecast),[50] Amazon (Amazon Prime Video and Fire TV)[51] and Apple (Apple TV and Apple TV+).[52]

[48] Channel 3 services include the main channels from Independent TV (ITV), Scottish Television (STV) and Ulster Television (UTV) in Norther Ireland. These companies also host and provide a number of regional services each, both on linear and on-demand (Ofcom, 2022b)

[49] Throughout the thesis, I indicate interviews' quotes from this sample of platform organisations with 'platform' in brackets

[50] Google Alphabet has significantly expanded its products and services in the internet-distributed AVM industry. The main products that are relevant for this thesis are Google TV, and YouTube. Google's TV ecosystem is also made of other interoperable products such as Android TV and Google Assistant.

YouTube is a global online video sharing and social media platform bought by Google in 2006. Google's ownership of YouTube expanded the site's business model, which now offers a free, advertising-driven service and a Premium, paid subscription option for watching content without ads.

Google TV is the new smart TVs offered by Google. It is powered by an underlying operating system called Android TV OS. Some smart TVs and streaming devices are powered by Android TV OS but do not have the Google TV interface. These devices are referred to as Android TV devices (Google TV, 2023).

Google Assistant is a virtual assistant software application developed by Google that is primarily available on mobile and home automation devices. It can be integrated with eligible TV devices from both Google and third-party manufacturers through the use of smart speakers (Google Assistant, 2023).

[51] Amazon has also been expanding its range of products and services in the internet-distributed AVM industry. The main products that are relevant for this thesis are Amazon Video Prime and Fire TV and Fire sticks.

Amazon Video Prime is a hybrid SVOD and TVOD service. A core selection of AVM content is included in the subscription, which is under Amazon Prime membership, and on top of that, Amazon offer a pay-per-view service with a selection of extra entertainment content that users can individually buy or rent individual (Amazon Prime Video, 2023).

Fire TV is a media streaming device accessible on a connected TV through a set-top box, while Fire TV stick is a smaller version Amazon's streaming media player, that does not require a cable to connect to the TV, as it can be plugged directly into the TV's HDMI port. Both come with remote control and the latest models are integrated with Alexa, Amazon's voice assistance service. Through the latest models of Alexa voice remote, customers can use voice to search and launch programmes from across different apps (Fire TV, 2023).

[52] The Apple's world has also extended to a range of AVM product and services. The relevant ones for this thesis are Apple TV+ and Apple TV.

Apple TV+ is a SVOD services that includes Apple-produced films and series, which are exclusively distributed on this service, as well as access to other sports and a selected sample of third-party content (Apple TV, 2023a).

Apple TV, recently rebranded Apple TV 4K is a set-top box that function as a streaming media device. It usually comes with a remote control and the most recent models are integrated with Siri, Apple's voice assistance service (Apple TV, 2023b).

3. Pay-TV operators:[53] the more traditional subscription-based television services provided by commercial multichannel television providers that initially provided TV via satellite and/or cable, but now also via digital terrestrial television and streaming TV. In the UK, the leading pay-TV operator is Sky, followed by Virgin Media and BT (Cable UK, 2022; Statista, 2018). Reaching the right representatives in this category was particularly difficult; I therefore focused primarily on the leading provider, Sky, and the Association of Commercial Television (ACT), the European-wide trade association of pay-TV operators and commercial providers. Sky is the most interesting case in this category for several reasons. Sky's representatives were extremely vocal in the EPG prominence debate and actively contributed to the public consultation processes as well as to the broader political and policy debate (McDonald, 2018; Sky UK, 2016, 2018a, 2018b), in an attempt to shift its discourses around public value and public interest services. Sky is the main commercial competitor to UK PSM; and it is a powerful gatekeeper within the industry because of the wide range of services it offers, from broadband and phone services to EPGs and TV packages on linear, digital and streaming (Now TV).

4. Technology manufacturers:[54] producers and providers of consumer electronics used to access and distribute AVM services online, with a particular focus on connected TVs, such as smart TVs. I refer to the infrastructure level of the UK AVM industry, a market segment that is dominated by international consumer electronics brands such Samsung, LG Electronics, Sony Panasonic, Philips, etc. (Statista, 2020). The organisations selected and interviewed are the top two technology manufacturers in the UK, namely Samsung and LG Electronics, which also engaged with the public consultation process; and the two trade associations, TechUK representing UK-based players, and the European-wide one, Digital Europe.

5. Media and communication regulator: in the UK, the Office of Communications or Ofcom is the independent regulatory and competition authority for all main communication networks, services and content, including linear and non-linear television and radio broadcasting, broadband and mobile services, and since 2022, also those internet services that have a significant role and impact in the communication sector, including platform organisations. Ofcom was initially established by the Office of Communications Act 2002 and received its full authority from the Communications Act 2003. Ofcom has wide-ranging powers across the television, radio, telecom and postal sectors. It has a statutory duty to represent the interests of citizens and consumers by promoting competition and protecting the public from harmful or offensive material. Some of the principal areas Ofcom presides over are

[53] Throughout the thesis, I indicate interviews' quotes from this sample of pay-TV operators with 'pay-TV operators' in brackets

[54] Throughout the thesis, I indicate interviews' quotes from this sample of technology manufacturers with 'tech manufacturers' in brackets

licensing, research, codes and policies, complaints, competition and protecting the radio spectrum from abuse.

I also draw insight from external industry experts as a source of contextual data. This category included UK-based consultancy firms specialised in the media sector, and European trade associations representing one of the above categories of organisations.

The aim of this sampling and interviewee selection was not to achieve a representative sample of the sector, but to engage with organisations that were involved with Ofcom's review of EPG prominence in order to reach a fuller understanding of the industry's dynamics by gathering insights from relevant stakeholders, and those representatives of the sector that play a key role in the distribution and curation of AVM content online. There is a bias inherent in this choice: I did not include civil society representatives and local, independent and community media organisations in the research since they were beyond the scope of this research.

Concerning the **sampling of interviewees** within organisations, I identified and chose respondents using a combination of theoretical and 'snowball' sampling (Warren, 2002). With purposive sampling respondents are sampled deliberatively, 'in a strategic way, so that those selected are relevant to the research questions that are being posed,' based on predefined criteria (Bryman, 2012: 408). This technique is particularly suitable for identifying and selecting experts who play a relevant role in the selected organisations.

While I understand that the notion of 'expert' and 'expert knowledge' is fluid and depends on a number of internal and external factors (Meuser and Nagel, 2009: 17–18), to practically identify experts to interview, I narrowed down the expertise that I believed was relevant for my thesis, and looked for the ideal profile on both professional networks like LinkedIn, and through 'snowballing' which became more efficient as I progressed with my research. The areas of expertise were: (a) policy and regulatory affairs, with a particular focus on media content regulation and policy strategies; and (b) online distribution strategies and platform services (see Tables 4.1–4.2).

Table 4.1. Sample of the types of organisation and the areas of expertise of their representatives

Type of organisation	Areas of expertise	
	Online AVM content and platform services	Policy and advocacy
PSM	Distribution strategies, platform, partnerships; online AVM services	Legal, policy strategy and public affairs

Pay-TV operators	Distribution strategies, platform, partnerships; online AV services	Legal, policy strategy and public affairs
Tech manufacturers	AVM product development; AVM content distribution strategies	Legal, policy strategy and public affairs
Platform organisations	Content distribution strategies; online content policy, online AVM services	Legal, policy strategy and public affairs

Table 4.2. Areas of expertise of the UK media and telecommunication regulator

	Areas of expertise
	Media and content regulation
Regulator (Ofcom)	Distribution strategies, platform, partnerships; online AV services

As the shown by Figures 4.1-4.2 below, there was a difference between my ideal sample and the interviewees who agreed to speak to me. Furthermore, interviews took place at separate times between the end of 2019 and the beginning of 2021. While PSM organisations were the most responsive participants – as they clearly had vested interests in sharing their views with me during Ofcom's revisions – initially I received no responses from the technology manufacturers and platform organisations.

This changed during my data collection, especially from the second half of 2020, when concerns around prominence and broader discoverability practices started to draw the attention of policymakers both at national (e.g. Die Medienanstalten, 2020; ERGA, 2020; Medienstaatsvertrag, 2019) and European and international levels (Council of Europe, 2021; European Commission, 2020b; *Official Journal of the European Union*, 2022d), as well as in other countries beyond Europe (e.g. Australia Communication and Media Authority – ACMA, 2020; Cyberspace Administration of China-CAC, 2019; ISED Canada, 2020) (Chapter 2).

Overall, I managed to reach a substantial number of interviewees, with a final interview dataset that comprised thirty-one interviews with a total of forty-one research participants (see Fig. 4.1) from twenty-three different organisations (see Fig. 4.2).[55] Within this dataset, twenty-five interviews with thirty participants were part of the main analysis, while the remaining six interviews, which were conducted later in the data collection process

[55] Some interviews included more than one representative per organisation.

as part of the collaboration with the European Commission, were used mainly as a source of contextual data (section 4.5).

I did not reach the representation of expertise and organisations that I had initially planned, since the majority of research participants come from the policy and regulatory affairs teams. This limitation had advantages and disadvantages. On the one hand, these industry experts are usually the public-facing representatives of the companies, who manage, but also control, the narratives of most of the external communications and public relations. Industry representatives working on the online distribution strategies and negotiation processes are more difficult to identify and they are also bound to higher levels of confidentiality.

On the other hand, these industry experts are the ones who shape the policy process and influence not only the messages and narrative, but also the broader organisational strategies that are then applied and translated into the day-to-day business of various departments. In alignment with my conceptual framework, I am interested in the institutional change that this sector is undergoing in a particular moment of media and communication regulation, so having access to this group of elite interviewees was key to answering my research questions.

4.2.2.1. Semi-Structured Interviews

A **semi-structured interview approach**, based on a topic guide, was suitable for my project since it allowed me to maintain a focus and organise the interview around my main themes of interest, while providing room for the interviewees to unfold their own outlooks and reflections and adapt to the flow of the conversation (Meuser and Nagel, 2009: 31). In the first phase of my work, I developed an interview topic guide, which was revised and fine-tuned after the first batch of interviews. I used the topic guide (Appendix I) to organise and structure the interview while adapting it to the profile and area of expertise of each interviewee. The flexibility of the semi-structured model also allowed me to adapt the interview topic guide and list of questions to the flow of the conversation, probing a deeper discussion on certain aspects as they emerged during the interview.

Fig. 4.1. Number of interviewees per category/type of organisation

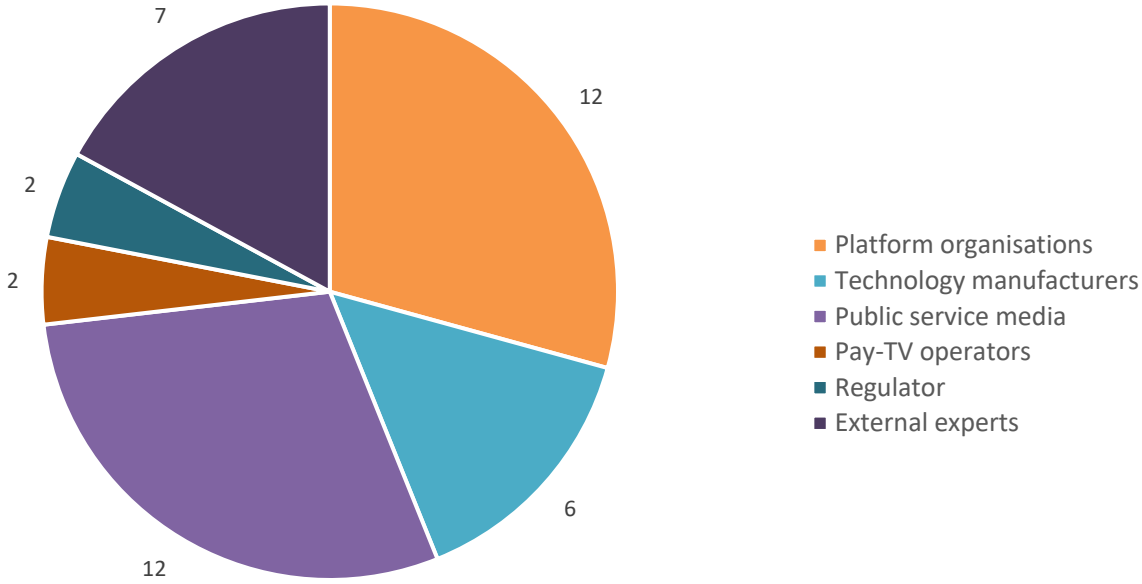
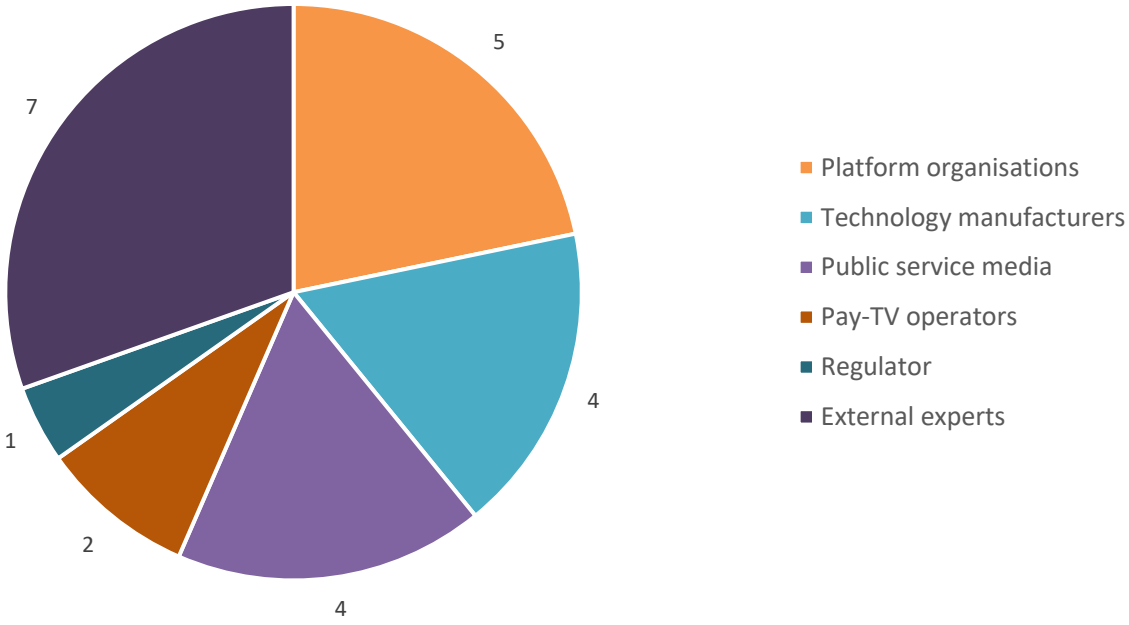


Fig. 4.2. Number of organisations interviewed



4.2.3. Complementary Data: Selected Industry and Policy Documents

The use of secondary industry and policy data gathered through desk research helped me in reaching a fuller understanding of the UK market dynamics and the policy debate around prominence of public service broadcasters. The material collected was used to prepare and complement the expert qualitative interviewing,

but also as part of the thematic analysis to triangulate the information gathered through the interviews and to complement the lack of balance between the interviewee coverage of different organisations.

To identify and select the documents, firstly, I focused on the 2018 public consultation process for Ofcom's EPG review, including both consultation responses from the industry actors, as well as relevant Ofcom market studies, reports and policy proposals. I use this set of documents mainly as part of the empirical analysis of Chapters 6 and 7 as they provided additional insights on the market and regulatory dimensions of content prioritisation processes.[56]

Secondly, I searched through and selected a sample of publicly available reports and guidelines from the organisations interviewed regarding their distribution strategies and content policies, with a particular focus on content curation and prioritisation policies and related help-pages and publicly available guidelines. I make use of this set of documents in the first and second empirical chapters. More specifically, any publicly available documentation published between 2018 and 2022 on technical means deployed to prioritise content, such as help-pages on editorial guidelines and recommendation systems, I use in the first empirical chapter (Chapter 5), while relying on publicly available documentation on distribution strategies in the second chapter (Chapter 6).[57]

This desk research also allowed me to understand the extent to which these processes and strategies are opaque and that there is a significant lack of transparency from organisations. There are of course differences among the organisations. At one extreme, we have the BBC, which has a responsibility to ensure a higher level of transparency and accountability around its services, including its editorial and distribution policies. At the other, we have organisations like Sky or Amazon that have no publicly available information on their content curation and prioritisation practices, nor information on their distribution strategies or deals. Often these are commercially sensitive topics, either covered by trade secrets in the case of specific technical means, or by non-disclosure agreements in the case of commercial deals between industry actors. In between these two extremes, we have organisations like Netflix and even Google Alphabet which, in response to the increase in political pressure of recent years, have been improving and increasing their transparency with high-level and user-friendly explanation and help-pages.

4.2.4. Contextual Material: Additional Insights from External Collaborations

As part of the DG CNECT study (section 4.2.1), I was exposed to other sources of information which did not directly feature in the analysis due to the confidentiality agreement with the interviewees and the European Commission. However, thanks to the external experts and the support of the institutional channels and

[56] A full list of the public consultation responses and Ofcom's report that were used as part of the thematic analysis are included in Appendix I.
[57] Ibid.

external projects that complemented this data collection (section 4.3.1), I was able to elicit insights from EU-wide trade associations that represent their interests. Because of confidentiality and data sharing limitations, such data is part of my contextual analysis and not of the main thematic analysis.

4.3. Data Management and Treatment

The final interview dataset comprises thirty-one interviews, but with a total of forty-one research participants, as some of the interviews included more than one interviewee per organisation. Each interview lasted for approximately 60 minutes, although some of them were shorter (45 minutes) and others slightly longer (85 minutes), depending on the flow of the conversation, the number of participants in each interview and the time they had available.

The face-to-face interviews that took place between November 2019 and March 2020 were recorded using an audio recording device and manually transcribed by me. The online interviews conducted between May 2020 and November 2021 took place on Zoom, which transcribed them automatically, and I then revised them manually. Recordings were downloaded, transcribed, anonymised and locally saved on my laptop and my LSE office account to comply with LSE ethics guidelines and data protection rules.

The audio recording of the interviews was for transcription purposes only and I was the only one who had access to the recordings. Participants received an information sheet and consent form to assure them that nobody would have access to the recordings other than the researcher (a full copy of the informed consent form can be found in Appendix I). This was the procedure I followed for all the interviews I personally conducted, including those conducted as part of the external collaborations.

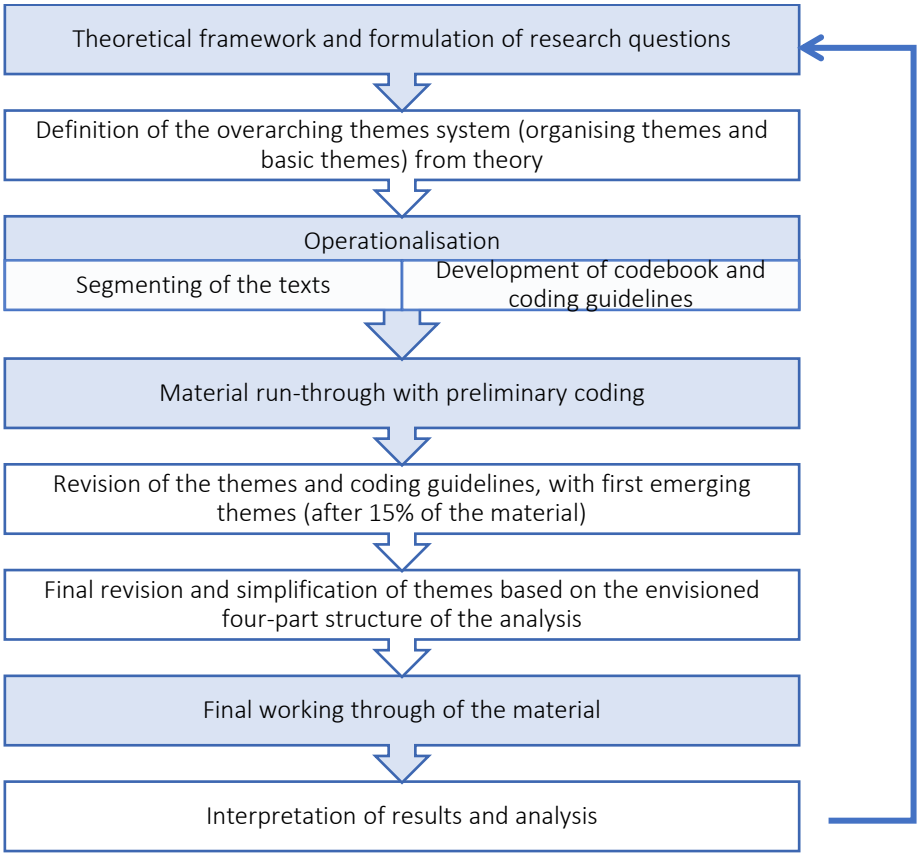
Finally, I imported all the anonymised interview transcripts and documents into an NVivo file, where I organised, stored, sorted and coded them according to patterns and themes that I identified and defined throughout the analysis process. Transcription, revisions and several readings of the transcripts helped me in familiarising myself with the data. As further discussed in the next section, coding was an iterative process, and distinct categories were assessed, revised and reformulated before the codebook was finalised.

4.4. Analysis and Coding: A Three-Pronged Analysis with a Mixed Deductive-Inductive Approach

To elicit insights and respond to my research questions, I carried out an **exploratory or conceptual thematic analysis** (Aronson, 1994) on my interview transcripts and documents, using the NVivo software and proceeding in a mixed deductive-inductive fashion. This method was suitable to synthesise and interpret my data in an open exploratory thematic analysis.

Thematic analysis implies a careful 'reading and re-reading' of the research material (Rice and Ezzy, 1999: 258), and it is 'a rigorous, yet inductive, set of procedures designed to identify and examine themes from textual data in a way that is transparent and credible' (Guest, MacQueen and E Namey, 2014a: 15). Within this type of qualitative research method, explanatory or conceptual thematic analysis uses a combination of deductive and inductive approaches (Guest, MacQueen and Namey, 2014b). This combination allowed me to focus on specific pre-determined topics – namely the technical, market, and regulatory dimensions of content prioritisation – while maintaining sufficient flexibility to elicit unexpected findings and insights from the data, and to adapt the analysis accordingly (see Fig.4.3).

Fig. 4.3. Step model of the mixed deductive-inductive approach to the thematic analysis



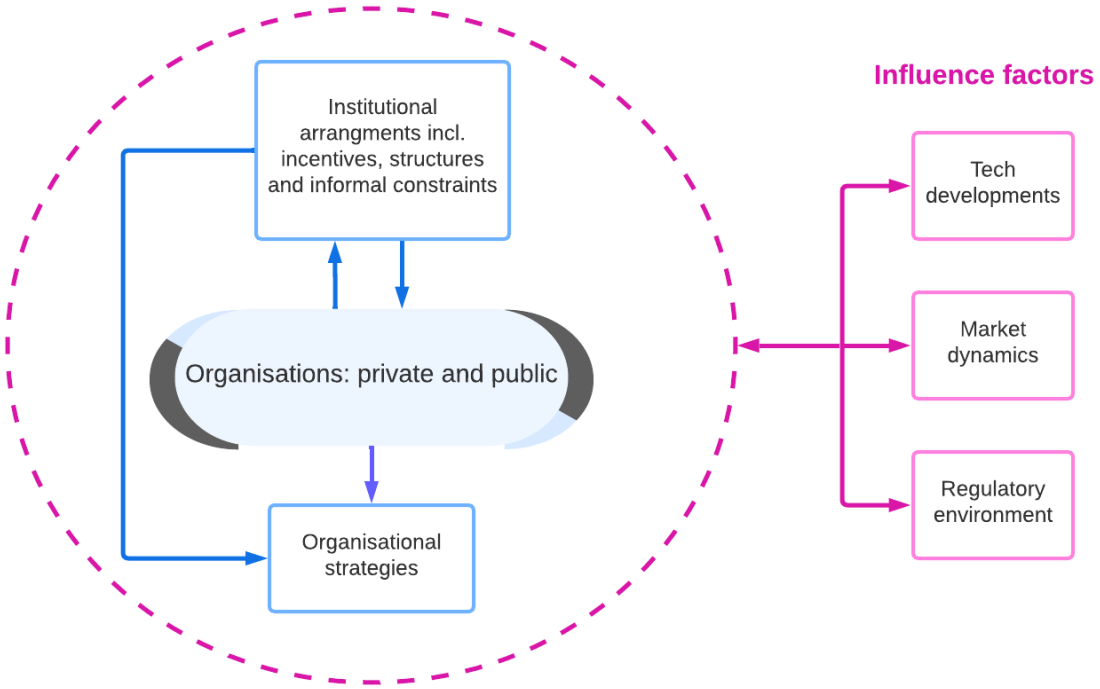
Source: Author, based on Guest, Macqueen and Namey, 2014.

The coding itself – that is, the identification of patterned clusters of topics which were then grouped into themes – was a lengthy process, which required many iterations and revisions. To organise and then analyse the materials, interview transcripts and documents, I first segmented and then thematically classified the data (Guest, Macqueen and Namey, 2014: 3–4) by identifying and describing implicit and explicit ideas within the data. This technique can be applied to the identification of patterns in relation to participants' views and practices, which aligns with the goals and scope of this project (Attride-Stirling 2001; Clarke and Braun 2017).

Rather than focusing on measuring the frequency of given themes, I privileged the complexity of meanings and patterns (Sundler et al., 2019).

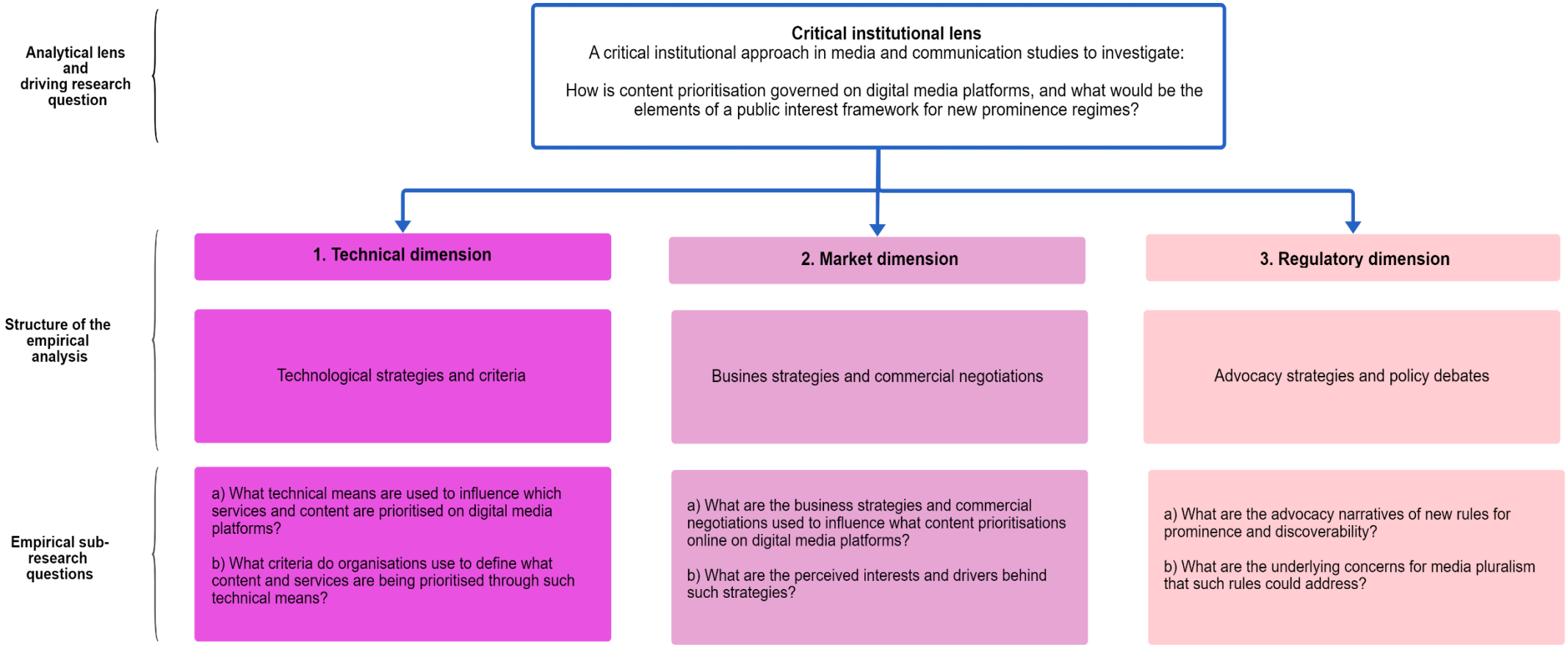
Being an iterative process, while the organising themes were deductively decided early on in the process, sub-themes and codes were inductively identified through several iterations of a long list of codes. As interviews progressed and my analysis was fine-tuned, some of those initial codes were discarded, while others were merged, so as to make the analysis more manageable. Through this process and informed by my conceptual framework (sections 2.3. and 2.4), I was able to structure my analysis – and chapters – into the three dimensions mentioned in the introduction, namely the technical, market, and regulatory dimensions of content prioritisation processes (see Fig. 4.4).

Fig 4.4. Visualisation of the analytical focus and the key influence factors



Source: Author

Fig.4.5. Three dimensions of the empirical analysis and related empirical research questions



Source: Author

Within each part of the analysis, I identified 'organising themes', and more granular 'sub-themes' (Attride-Stirling, 2001; Guest, Macqueen and Namey, 2014). By themes I refer to a unit of meaning observed and noticed in the data, which is then coded (Guest, Macqueen and Namey, 2014: 5). On this basis, codes and coding guidelines were developed and processed supported by the NVivo software in order to identify within each meaningful segment of text, notes, queries and tags that would allow further interpretation (Guest, Macqueen and Namey, 2014).

I thus derived the organising themes and sub-themes informed by my conceptual framework and they followed the core interest of the empirical analysis investigating and discussing how content prioritisation processes work and what are the driving interests, incentives and norms in each organisation. The two driving organising themes are: (1) organisational content prioritisation's strategies and their influencing factors; (2) definition and criteria of AVM services that are and should be prioritised. Within these themes, I then investigated the three analytical dimensions, which were broken down into sub-themes, and then into individual codes. The final coding structure with the overarching themes and sub-themes is summarised in Tables 4.3–4.4 below.[58]

Through this process, I was able to answer the empirical sub-research questions driving each dimension of the analysis and to generate insights to answer the overarching research questions (see Fig 4.5).

Table 4.3. Organising theme 1 and related sub-themes.

Organising theme 1	Strategies and their influencing factors		
Dimensions of empirical analysis	Technical	Market	Regulatory
Sub-themes	Technical means used to prioritise at hardware and software level	Business strategies used to influence prioritisation processes	Advocacy position in the policy debate on new prominence rules

Table 4.4. Organising theme 2 and related sub-themes.

Organising theme 2	Definitions and criteria of AVM services that are and should be prioritised		
Dimensions of empirical analysis	Technical	Market	Regulatory
Sub-themes	Socio-technical criteria	Economic and commercial criteria	Public value criteria and other normative criteria

[58] The complete codebook is included in Appendix I.

4.5. Ethics and Reflexivity: the Role of an Engaged Policy Researcher

I conclude this chapter by addressing the ethics of methodological decisions concerning informed consent, anonymity and confidentiality, the limitations of interviewing and desk research as methods of data collection, and the implications for my research and relationships with the interviewees of the external collaborations that I was involved in. I reflect on my own positionality as a former PSM advocate and current policy researcher and advisor who is actively engaged in a new policy area, which has been developing at the UK, European and wider international levels throughout my PhD research.

My project does not involve interaction with people in a situation of vulnerability, but it does require human participants, and I followed a set of ethical considerations. The main responsibilities that I had as researcher towards my participants were with regard to informed consent, data privacy, anonymity and confidentiality, security of data storage, and avoidance of harm. Alongside usual data protection routines, I was aware that if elite and expert interviewees request anonymity, extra care must be taken. I used numbers in place of names in my interview records and transcripts, and in any written material it has been important to ensure that contextual information does not reveal who said what (Central University Research Ethics Committee, 2017: 5).

Dealing with industry experts who are to some extent elite interviewees is delicate and complicated. In particular, ensuring their full anonymity and confidentiality was particularly challenging and I had to make certain decisions that impacted the ways in which I used the interviewees' material in the analysis and drafting process. On the one hand, I wanted to name the organisations in my analysis, as discussing differences and similarities was part of the analysis itself. However, in naming them, I would risk exposing the interviewees' identities, since readers could have inferred this by tracing the names of the participants from her/his role within an organisation.

Therefore, I do not mention any specific roles in my analysis nor in this chapter, but only describe the interviewees' expertise and areas of work. Furthermore, not everyone gave me permission to quote them and use their interview transcript, especially those who took part in the study for the European Commission. Therefore, while I owned the data, and I conducted those interviews with the necessary care, I used the interesting insights as contextual data sources only, rather than interview quotes.

Secondly, the difficulty of finding interviewees through 'snowballing' in the absence of industry events due to Covid-19 impacted my overall interview strategy. I had to re-adjust it and integrate it with desk research, but it was also skewed towards a certain type of research participant, i.e. those working in policy and advocacy, who are more used to public relations and who have responsibility for the public narrative of their organisations, rather than the technical experts working on the technological and innovation strategies themselves.

Thus, in certain cases, the interviewee responses were scripted, and it was difficult to move beyond corporate lines and positions. To overcome this, I left space for open questions at the beginning of each meeting so that interviewees could feel at ease in sharing their views and priorities on the topic, but I then moved to a more structured style of interviewing to elicit specific insights, attempting to go beyond the scripted narratives of their general advocacy positions.

Thirdly, I am aware that my previous professional experience in the legal and policy department of the European Broadcasting Union, working as European affairs assistant and advisor, as well as my external collaborations with the Council of Europe and the Commission, had an impact on my research..

My previous experience in PSM and the media policy field has necessarily informed my choice of research area and questions, since it was what drove my interest and eagerness to investigate the development of the internet-distributed video industry and its regulatory challenges. On the one hand, I have been able to leverage that experience to assert myself as a competent researcher in the field and gain access to an expert PSM network that would otherwise have been more difficult to penetrate. On the other hand, I am aware of the polarised nature of policy debates, and the revision of EPG rules which was the focus in my study was significantly influenced by PSM interests and lobbying activities in the UK as well as in the EU.

In my analysis and interviews, I had to question my positionality as a Brussels lobbyist and be open to a different interpretation of this particular regulatory debate that could adequately take into account the full variety of views and interests of the stakeholders. This required constant self-reflexivity, which allowed me to successfully distance myself from my previous advocacy role and to take a dispassionate stance on issues, thus discarding any assumptions that could influence my empirical analysis.

Finally, as my research progressed, questions around content prioritisation and curation processes in today's online and information systems started to raise concerns among national, European and wider international policymakers. My work dealt with an evolving area of policy, which allowed me to gain a unique position as an expert in this field even early on in the research process. In this context, as I set out above in section 4.2, I had the opportunity to be involved in projects commissioned by the Council of Europe and the EU (Mazzoli and Tambini, 2020; Parcu et al., 2022).

Through these projects, I gained a privileged position as I could actively contribute to the development of this policy area. This allowed me access to interviewees and complementary data sources that I would have not been able to secure otherwise. It also strengthened my positionality as a young female PhD researcher in a largely closed and male-dominated industry. In fact, those organisations that had not replied to my initial request for an interview rapidly acceded when the next one came from a researcher who had some influence over European and international policy making in the same area. At the same time, my relationship with interviewees whom I contacted through such institutional channels was inevitably different. Indeed, contributing to the research was perceived by them as a way to influence the policy recommendations that I

would then advance in the European studies. On several occasions, I had to refuse the request of interviewees to see the findings prior to the publication of those studies and also my own research, as they attempted to influence my drafting and constrain my freedom as researcher and expert.

In summary, my positionality as a policy researcher dealing with an emerging set of issues that became increasingly topical as I was conducting my research led me to become an active actor in the same politics and negotiation processes that I was investigating. Balancing this delicate position, separating the consultancy and policy work from the analytical work of this thesis, and shifting from one discourse to the other, was a challenging and yet enriching process for me.

4.6. Concluding Remarks

This chapter presents my methodology, explaining the rationale, research design, instruments and methods chosen for the empirical portion of the project. Informed by the discussion in the preceding chapters, it starts by explaining the reasons that led me to adopt a qualitative methodological framework to investigate how content prioritisation processes are governed online, and why prominence and discoverability benefits are granted to certain AVM services.

I described how the combination of semi-structured expert interviews and document analysis allowed me to investigate the organisational strategies and interests that influence content prioritisation processes, and how prominence and discoverability are negotiated in three related dimensions: technical, market, and regulatory dimensions. The chapter then introduced the overarching structure of my analysis and coding framework, which led to the formulation of the subsequent empirical chapters.

Informed by my conceptual framework and my methodological strategy, I structured my empirical analysis in four parts, corresponding to three main empirical chapters, which present a first level of analysis of the corpus of data and responses to the empirical sub-research questions outlined in this chapter (Fig. 4.5). Chapters 5, 6 and 7 collect my empirical findings and each addresses one of the key dimensions through which prominence and discoverability measures are contested and negotiated. The research findings thus provide insight into the black box of content prioritisation investigating what and how determine what AVM services and content are made more prominent and visible to the final users. Chapter 8 brings these empirical findings into conversation with my conceptual framework, thus responding to my overarching research questions: how is content prioritisation governed on digital media platforms, and what would be the elements of a public interest framework for new prominence regimes?

In conclusion, while this methodological approach was particularly suitable for my research topic and enabled me to answer my research questions, it also presents certain limitations (Chapter 9). Due to the Covid-19 pandemic, I had to revise and extend my data collection, using different strategies. I therefore ended up having

experts interviews at various points in time. This has not impeded me to understand how prioritisation works at technical and market level, as the data gathered are still reliable guides to these two dimensions. However, it had an impact on the regulatory dimension of this study because the policy debate on prominence regimes online became more important for UK, European and international policymakers while I was conducting my research. Thus, as I analysed my interviews' data, it was important for me to frame the interviewees' claims in the evolving politics of prioritisation, and to reflect on my positionality as a policy researcher embedded and actively participating to this ongoing policy debate.

Chapter 5

Designing Choice Architecture: Technical Means and Criteria Behind Content Prioritisation

5.1. Introduction

The current mix of online intermediary services and internet-connected devices leads to viewing experiences governed by a range of devices, on-demand services and apps with underlying software and hardware specificities (see also Johnson, 2019, 2020b). In this study, the technological architecture of the online distribution of AVM services emerged as a key factor in content prioritisation measures since it has a great impact on how AVM services and content are distributed, curated, and ultimately accessed by viewers.

As this chapter reveals, choice architecture is not only influenced by the technical specificities of hardware and software systems, but also by the technological strategies and socio-technical criteria that organisations use to shape them. Each industry actor has a role to play depending on the device and service used to access content (see Fig. 1.1), since each combination of devices introduces specific questions regarding who exercises control over access, curation and prioritisation of content and services.

This first part of my analysis examines the role of organisations' technological innovation strategies and the socio-technical criteria that are used to shape UI design and influence the prioritisation of content and services. Specifically, the empirical sub-research questions this chapter investigates are:

a) *What technical means are used to influence which services and content are prioritised on digital media platforms?*

b) *What criteria do organisations use to define what content and services are being prioritised through such technical means?*

The technical means discussed in the next sections refer to software and hardware strategies and technical solutions used by organisations to nudge users' choices and their journeys. This is done, for instance, by designing device and app UIs, curating and ranking content in their services, both editorially and algorithmically; personalising them through recommender systems and other forms of algorithm-driven discovery means.

Furthermore, as a mix of commercial and vaguely defined public interest considerations emerge from the argumentation of the interviewees, each section will describe the criteria, their definitions, and where available, the metrics used to measure them. The sample of organisations (Chapter 4) includes both

technology manufacturers and AVM service providers with different kinds of VOD models, such as BVOD like BBC iPlayer, SVOD like Netflix, and hybrid SVOD and transactional VOD or TVOD (i.e. pay-per-view) like Amazon Video Prime (see Fig. 5.1). Examples taken from a range of industry stakeholders, and to illustrate the functionalities and differences of each model, visualisations of the UI and app functionalities are provided in Appendix II.

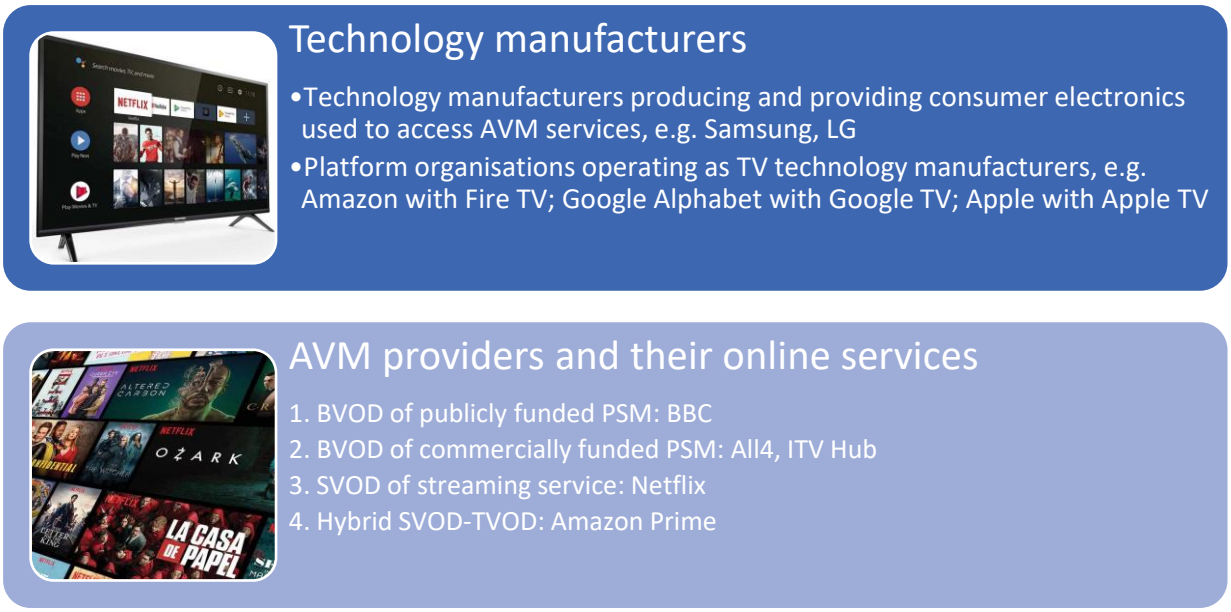
Overall, three core insights emerge from this chapter. Firstly, despite the technological complexities of these systems, we are not simply dealing with algorithmic black boxes, but there is a set of criteria that feeds into each organisation's content policies and these criteria are then translated into technical means that are used to prioritise content on devices and UIs. These criteria and related prioritisation measures are key factors influencing online prominence and discoverability.

Secondly, these technical means vary widely depending on organisational strategies and interests, the limitations of hardware and software architecture, and the levels of access to users' data and content metadata. Data harvesting and related profiling techniques are fundamental for content prioritisation measures, but access to such data differs widely among the organisations discussed. Thirdly, the normative distinction between public service and commercial media organisations is not clear-cut, despite the fact that policymakers and the policy debate around EPG prominence often rests on this assumption (Chapter 7). The situation is therefore nuanced, as public interest objectives and related public value criteria (Chapter 3, section 3.3.3) become deeply entangled with the private (or public) interests of each organisation and the ways in which industry representatives depict their customers' and audiences' interests.

Finally, it should be noted that investigating what these criteria are and how they feed into broader content curation practices is not an easy task. Firstly, interviewees were more eager to criticise others or to argue why they should be granted prominence on a theoretical level than they were to disclose how they themselves prioritise content on their services and UIs. Secondly, there is a lack of transparency about these processes. As I tried to triangulate interviewees' data with publicly available grey literature – such as help-pages, content policies, transparency notices and distribution guidelines – it was evident that information is generally limited, even though there are some variations between organisations.[59]

[59] For instance, when it comes to technology manufacturers, transparency notices around content prioritisation and UI design are absent from their devices as well as online. As argued by one of the interviewees, some companies are thinking about implementing a higher level of transparency, but only on devices and interfaces located in those countries that have introduced specific transparency obligations, such as Germany (Manufacturer representative 3, 2021). Among AVM providers, the most transparent of the organisations in the sample are the BBC and Netflix. The BBC has shared information about their content curation strategies on different platforms and in different forms, from longer reports about their distribution guidelines and general content policies ('BBC, 2018a, 2019), to more targeted webpages that include help-pages for its services, such as short explanations of how personalisation works on the BBC iPlayer (e.g. BBC iPlayer, 2021), blogs explaining how specific aspects of content curation work and how they feed into their homepage design and recommendation systems (e.g. Eggink, 2019; Hudson, 2015; Mowbray, 2015; Rosenbaum, 2012), and articles on their R&D projects and initiatives in this area (BBC, 2017). However, the latter information, which would be arguably more useful for users, is often outdated and can be found only via targeted online searches, and it is not provided on the BBC iPlayer interface. Netflix has been improving its transparency on two fronts: (a) through clearer, self-explanatory categorisation of their catalogues and UI design, which

Fig. 5.1. Types of organisation and examples [60]



Source: Author

5.2. A Spectrum of Prominence for AVM Gatekeepers

Prominence online is not just about being first, second or third on a channel listing, as it used to be for linear EPGs and LCN. As one interviewee describes it, **prominence is a spectrum**: it ranges from an app's placement on the homepage's UI, to subtler, more complex forms of prioritisation in more disaggregated and personalised choice architecture. Within this spectrum, there are two key gateways to AVM content and services that have an impact on what is made more or less prominent to users, namely, the devices' UI and hardware shortcuts where available (e.g. a button on the remote control dedicated to a particular AVM service), and the apps' UI. Within these two main categories, organisations have their own content prioritisation practices.

As confirmed by all the interviewees involved in these practices, this heterogeneity relates to the fact that there are no shared guidelines or industry self-regulatory standards when it comes to the design and implementation of online content prioritisation measures. In the case of AVM services for instance, prioritisation measures also widely vary, depending on their business models and content policies, and how their strategies and interests were transposed into their product developments and app functionalities.

provides users succinct information on why certain content is shown in a specific row; (b) through dedicated help-pages available online, targeted in particular to the functioning of their ranking and recommendation systems (Netflix, 2021). Other AVM providers either provide only high level content policy guidelines that do not discuss prioritisation measures, such as in the case of Amazon Video Prime and Fire TV, or they do not provide any publicly available information, such as in the case of commercial broadcasters and pay-TV operators like Sky.

[60] For a full description and definition of these industry actors see Chapter 4, section 4.3.2.1.

When it comes to technology manufacturers, while for linear broadcasting the UK has an established an Electronic Programme Guide (EPG) Code that has standardised the ranking system for broadcast channels (Ofcom, 2010), this is not the case for internet-connected devices, such as smart TV. However, as representatives from the industry-led consortium Digital Video Broadcasting project (DVB) pointed out during their interviews with me, the DVB's AVM service working group is discussing the development of technical standards that could be used to identify and signal specific services and content on devices like smart TVs in order to grant them prominence more easily (Tech manufacturers 2 and 3, 2021). It is not about developing criteria in this case, but rather finding a technical solution to standardise prioritisation processes and make them more efficient.

Despite the lack of uniformity in approaches in both manufacturers and AVM services, there are some commonly used technical means and criteria that organisations use to prioritise content.

5.2.1. Technology Manufacturers and Platforms: Designing Television User Interfaces

To demonstrate the technical means used to prioritise content and nudge users, I examined two main categories: established TV manufacturers like Samsung or LG, and platform organisations that have vertically integrated along the distribution segment of the value chain (Fig. 1.1), namely Amazon with its Fire TV, Apple with its Apple TV, and Google Alphabet with its Google TV and relative Android products (Chapter 4, section 4.2.2.1) .

The focus is primarily on connected TVs, which are television sets used to stream OTT AVM content and services, with no cable or satellite subscription required. Devices that are classified as connected TVs include: smart TVs, which are TVs with a built-in internet connection and media platform, so no additional equipment is needed to download apps and stream content; and other OTT connected devices, which are devices that plug directly into the TV screen and connect users to the internet, such as Amazon Fire Stick, Roku and Chromecast.

On these devices, both hardware- and software-based solutions are technical means that influence prioritisation processes (Fig. 5.2). It should be noted however that software and hardware providers for a connected TV do not always coincide. Indeed, there can be different combinations depending on whether the hardware provider has vertically integrated along the value chain and also whether it offers operating software solutions (Mediatique, 2020; MTM and Ofcom, 2019) (see Fig. 1.1).[61] Within the OS segment, manufacturers

[61] A number of industry actors have also entered this market, from established technology manufacturers like LG, Samsung, Sony and Phillips, to digital platform organisations, such as Amazon, Apple and Google Alphabet, which have extended their product offer from software to hardware technologies. Consumers can therefore buy a TV set which runs on different types of OS and can be accessed through a wide variety of devices. Overall, as highlighted in a study conducted by Mediatique for Ofcom (Mediatique, 2020), there are at least three main types of OS, respectively: (1) proprietary systems, such as LG's webOS, Samsung's Tizen; (2) third-party systems, such as Android OS, Roku OS; and (3) hybrid systems such as Android TV Operator Tier. The hybrid ones allow manufacturers greater

can develop their own proprietary systems, use open source options or partner to use third-party OSs, the most popular of which is Android TV (Mediatique, 2020: 14). As I will discuss in this chapter, how the control over prioritisation is divided among market actors depends also on the type of OS used.

Fig. 5.2. Technical means used by technology manufacturers to prioritise AVM services and content[62]

Source: interview data and grey literature

5.2.1.1. Hardware-based Gateways

Hardware solutions are the first gateway to content, and they are controlled by technology manufacturers. Examples of content prioritisation measures include **hardware shortcuts such as dedicated buttons on the remote control, and search functions both on remote controls and internet-connected devices, such as smart speakers and voice assistants**.[63] As described by an interviewee, the remote controls of LG and Samsung smart TVs often have a 'red button' (Tech manufacturer 3, 2022): a dedicated button that gives consumers direct access to a specific AVM service's app, bypassing traditional EPG and LCN systems, as well as newer search, browser or recommendation systems on the UI. In most cases red buttons feature international SVOD providers such as Netflix and Amazon Video Prime, as they are negotiated as part of global distribution deals

control over UI customisation, but the OS provider still exercises significant control over search, navigation, data capture and access (Mediatique, 2020, p. 14).

[62] The image presents examples of hardware-based gateways that can grant prioritised placement to services and content on connected TVs, followed by software-based gateways, which can also influence in a second instance the content prioritisation processes. Both will be further expanded the following sections of this chapter.

[63] Here referring to smart speakers such as Alexa from Amazon, Google Assistant from Google Alphabet and Siri from Apple.

between these services and the manufacturers (Chapter 6, section 6.2.1.), or they provide direct access to the manufacturers' own services, such as Samsung TV plus (see Fig. 5.3). In addition, most of the remote controls still offer direct access to linear channels, whose numbering is determined by regulation.

Fig. 5.3. Examples of dedicated buttons as hardware shortcuts on Roku's and Samsung's remote controls.[64]

Source: Author

Technology is rapidly developing, and manufacturers continue to work on more advanced versions of remote controls that are integrated with voice assistance and ideally present an ever-simpler design. The idea is to simplify customer interaction with hardware technologies. A recent product on which manufacturers are working is, for instance, a 'very simple design, with one big button that you just press up and down, in a single touch, and with voice control, to make things accessible, even for people that maybe have limited motor control, since when you've only got one button [it] is easier than when you have thirty' (Tech manufacturer 3, 2021).

When it comes to smart speakers and voice assistant devices, the situation is still rather opaque but potentially more problematic. Interviewees questioned the competitive advantage that companies like Google Alphabet and Apple have gained by offering smart speakers and voice assistants that are already integrated with their own smart TV systems, or that are interoperable and can function with third-party TVs (PSM 5, 2019 and External expert 2, 2020). In the latter case, the content prioritisation measures of traditional manufacturers

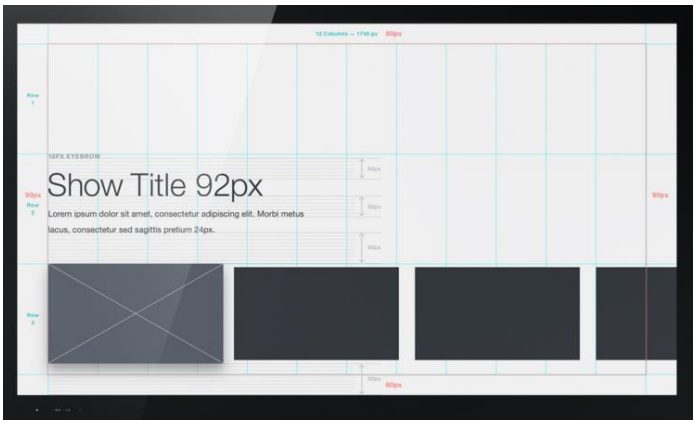
[64] The buttons highlighted give users direct access to those VOD services. For examples. both remote controls have dedicated buttons for Netflix (circled in red), and for their own services (respectively Samsung TV plus and Roky TV, circled in yellow). While Samsung has a button for Amazon Video Prime (circled in green), Roku has one for Apple TV+ (circled in blue).

such as Samsung or LG TV may be affected by the presence of a smart speaker that does not operate on a proprietary OS, thus decreasing their control over what is prioritised to the final users (Tech manufacturers 2 and 3, 2021).

5.2.1.2. Software-based Gateways

Once users have turned on their smart TV, software solutions start to play a role in prioritising content and nudging users' choices. **The main technical means in this case comprise homepage UI design** (Fig. 5.4.) **and the relative placement of apps and programmes, channel listings and EPGs, search and browsing functions**. Control over these means is shared between manufacturers and OS providers, which may be one and the same, in cases like Google Alphabet.

Fig. 5.4. Schematic visualisation of a TV UI



Source: Lafferty, 2016

App placement mainly refers to the 'banner across the bottom' of the homepage where users can select the services and apps to access (Tech manufacturer 2, 2021). The number of slots changes depending on the model and brand of the smart TV. In the case of Samsung, for instance, in 2021 this was ten slots, but it can increase or decrease depending on the model. The ways in which apps are listed on a bottom banner depend on the level of metadata integration between the TV manufacturer and app providers, access to offline and online data sources, and the use of automatic content recognition by manufacturers (Tech manufacturer 2 and 3, 2021).

Furthermore, while providers have dedicated apps that are available for most internet-connected devices, the availability of a particular app varies depending on the interoperability of device/provider services; distribution agreements (Chapter 6); and users' geolocation. Even for services like Netflix, Amazon Prime Video or Disney+, which are usually available in most countries, there are variations depending on the geolocation of the devices

and users according to what distribution deals and copyright agreements are in place (see also Evens and Donders, 2018; Johnson, 2019; Raats et al., 2018).[65]

As argued by the interviewees (e.g. Tech manufacturer 2, 2021) and highlighted in the public consultation responses from Samsung and TechUK (Samsung Electronics UK, 2018: 3–4; TechUK, 2018: 6), those AVM services that provide a higher level of metadata can be more easily surfaced on the homepage and through search and browsing functions, thus becoming more prominent and easier to discover (Tech manufacturers 2 and 3, 2021).

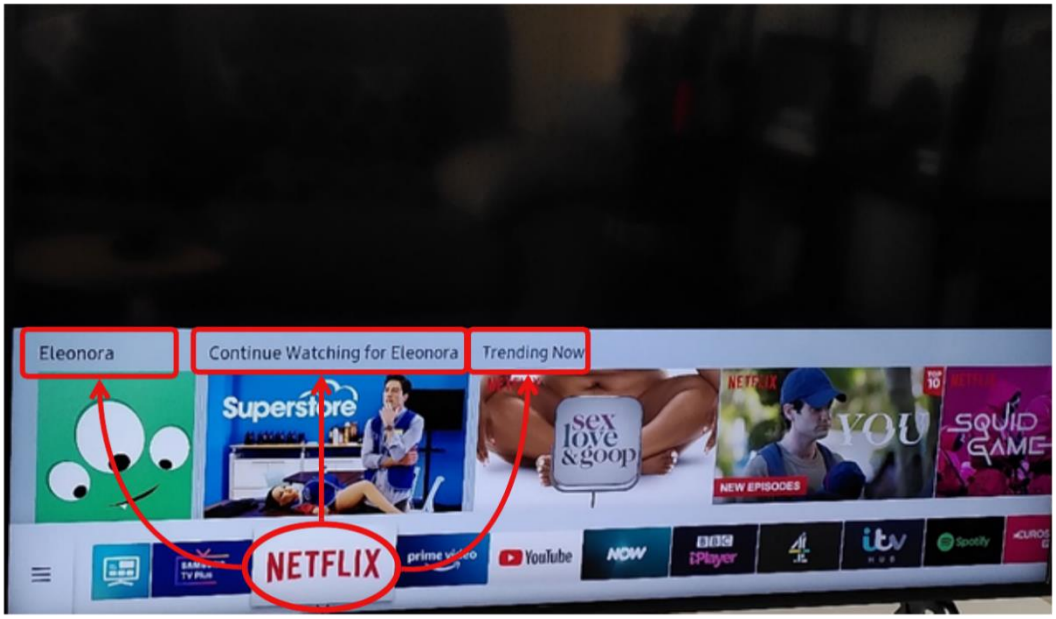
> Due to the TV's constrained environment if we don't have the metadata we can't display it. … So we've got this bar along the bottom of the TV that contains all of the apps, you can see Netflix, Amazon, BBC, etc. … and when you move along some of these you can see that they highlight certain content automatically as you move along, as they bring up what prominent content that application provider wants to surface to the consumer, which may be what they've watched last or something else. (Tech manufacturer 2, 2021).

With better quality metadata, manufacturers are able to improve their search function, recommendation results and UI design choices, and further customise the ways in which their apps are shown to the user on the home screen listing (Tech manufacturers 2 and 3, 2021). This is why, when a user is scrolling on the listing, most of the apps show a curated selection of their own content or can direct the user to the last programme viewed (Tech manufacturers 2 and 3, 2021), as in Netflix's case (see Fig. 5.5).

In most cases, the relative placement of apps can also be changed by users, as in theory they can uninstall default apps that are not relevant to them, download and install new ones via the app store, and position them in a preferred order (Tech manufacturer 2, 2021). However, there is no data available on the percentage of users who actively change their interfaces and those who simply rely on the pre-installed apps and order, nor did interviewees provide any additional information on this. Furthermore, these technical measures are simpler and less personalised on connected TVs' UIs than on the within-app UI, since TV manufacturers do not have access to users behavioural data inside each AVM services' app (Tech manufacturer 2, 2021).

[65] The geolocation of the users changes what is available because not all services can be offered cross-border. It is therefore related to the distribution agreements, copyright deals, and the relevant regulatory framework in different countries (this is the case especially for local and national providers, such as PSM organisations which have national legal remits and are not always allowed to broadcast and distribute all their services cross-border).

Fig. 5.5. Example of a curated selection of Samsung's app menu.[66]



Source: Author

5.2.2. AVM Service Providers: Curating Content Within Apps

Connected TVs deliver on-demand and online AVM services via apps, making apps a pivotal component of the contemporary AVM ecosystem (Johnson, 2019, 2020b). The world of apps is extremely diverse and continually changing. Once users access an app, control over content prioritisation shifts from the TV manufacturer to the AVM service provider, i.e. a PSM organisation, a pay-TV operator or a commercial broadcaster. The app owner has subtler techniques to nudge users within these closed environments, also described as 'walled gardens' (Platform 1, 2020), and prioritisation measures differ from those described above.

Within-app, **the prominence and discoverability of content are heavily impacted by software solutions, including homepage design, recommender systems (editorial- and/or algorithm-driven), catalogue collections, search functions, channel listing** (for those services that have multiple channels such as PSM and commercial broadcasters)**, user lists, and discovery areas,** where available. Data, user profiling, and personalisation are central to each of these technical means, as they influence what services and content are prioritised to different users (Table 5.1).

[66] The image show what kinds of content is automatically prioritised to the user when clicking on Netflix's app. Other examples for other apps can be found in Appendix II.

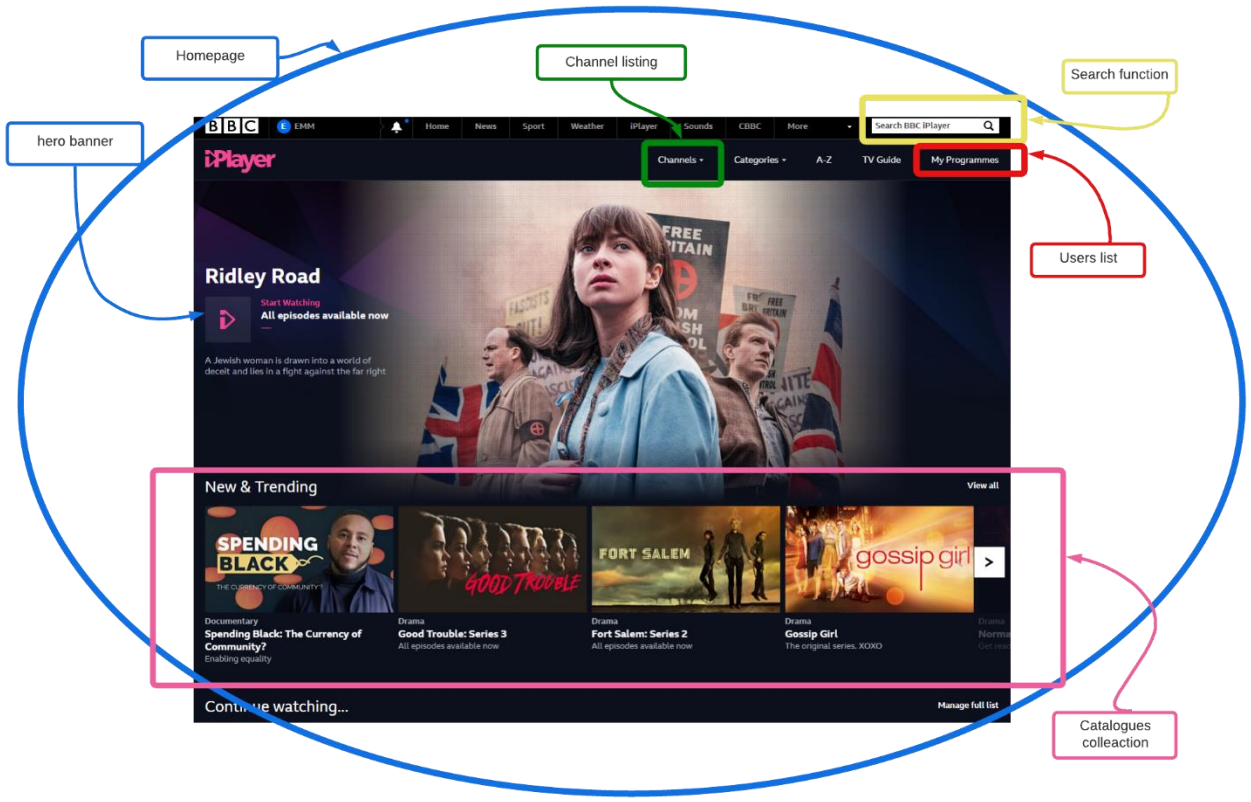
Table. 5.1. Technical means available to an AVM services provider to prioritise content within their app[67]

Prioritisation means	Brief description
Homepage design	The homepage's UI is the first gateway to content within each app, it is intended as the landing page for users when they switch on the connected TV device. It usually presents a mix of customised and standard features that can guide users towards specific channels, content, or apps. The homepage also contains the hero banner, which is the area of the page between the navigation and the start of the main content. The hero banner is often an image or a video, such as a trailer of the featured programme.
Recommender systems	Recommender systems are at the base of each personalised and customised UI. They are defined as systems that algorithmically suggest items to a user, based on user profiling, content data and metadata, and the provider's interests. In certain cases, recommender systems can be both algorithmically and editorially driven.
Catalogue collections	Catalogues are organised by means of collections that group programmes and content according to certain characteristics. Collections may be theme-based (e.g. a temporary collection of climate change-related programmes), genre-based (e.g. comedies, action, dramas, etc.), geolocation-based (e.g. British movies, Top-10 in the UK, etc.), or they may result from the combination of user profiles and preferences (e.g. 'Because you watch X..', 'Continue watching').
Search functions	Search tabs allow users to search for specific programmes or content. Search optimisation techniques then sort and rank the service's content to find and show the most relevant and useful results in answer to a user's search query.
Channel listing	Those AVM providers that also have a linear offer (e.g. PSM) include in their apps a list of their channels, which are ranked according to the linear EPG listing (e.g. BBC One, Two, Three are then followed by thematic channels, e.g. BBC News).
Users' lists	Users can also create their own customised content lists, set preferences and express their views on content. These preferences also feed back into recommender systems.
Discovery areas	Some AVM providers are experimenting with more serendipitous discovery areas (e.g. 'Shuffle today' or 'Play something' on Netflix) that are driven by their algorithmic recommender systems.

Source: interview data and grey literature

[67] The table provides a descriptive summary of the technical means used to influence content prioritisations within apps as they emerged from my interviews and document analysis.

Fig. 5.6. Visual overview of the prioritisation means on BBC iPlayer's UI.



Source: Author

5.2.2.1. Homepage Design

Homepage design varies depending on the app, but there are some commonly shared features that influence prominence and discoverability. For instance, when it comes to SVOD services such as Netflix, Amazon Prime Video or Now TV, the homepage directs the user onto a personalised screen that organises content into thematic collections presented in catalogue rows. Often at the top of the page there is a banner that prioritises one programme or title. The banner changes on a regular basis depending on the service's marketing and sponsorship agreement (Chapter 6, section 6.2.3). In the case of Netflix, the banner has an auto-play function: as soon as a user lands on the homepage, the trailer and/or snippets of a programme start to play.

Homepages often present menus rather than the traditional channels listing. On Netflix's UI, users can easily access the main menu, choosing options that customise the homepage displaying, for instance, only TV programmes, or only movies, or both. Amazon Prime's UI design instead is visually closer to a shopping catalogue or a marketplace UI, since it presents both content included within the Amazon Prime subscription and pay-per-view content that users can purchase. This is related to the underlying business model of this service, which is a hybrid subscription- and transactional-based service (Platform 4, 2020).

During my data collection, the BBC significantly changed the UI of its BVOD service, iPlayer. The previous version of the BBC iPlayer's UI was clunky, with a simple homepage with a small selection of curated content alongside tabs on the top banner dedicated to channels (e.g. BBC One, Two, Three, News, World, etc.) and a few genre-based categories. In November 2022, the UI was given a 'new look' that resembles Netflix's (Sherwin, 2021). The homepage does not direct users to specific channels, but to a personalised page with a mix of content, including a banner that prioritises and shows the latest popular programmes. The objective was 'to give much more space on the screen for BBC content, so viewers are more likely to spot something new to watch' (Hall, 2021) (see Fig. 5.6).[68]

5.2.2.2. Recommender Systems

The main and most investigated prioritisation tool is a service's recommender system. While all AVM service providers nowadays personalise their recommendations, their recommender systems differ widely depending on the technological innovation strategies, their R&D resources, technical capabilities, and user data analytics.

In this sector, Netflix's recommender system is one of the most sophisticated. As explained by the interviewees (2021), and outlined in the transparency notice on Netflix's help-page (Netflix, 2021), the likelihood that a user will watch a particular title in the catalogue is calculated based on a number of factors including: (a) the user's interactions with the service (such as viewing history and how users rated other titles); (b) the choices of other members with similar tastes and preferences on the service, and (c) information about the titles, such as their genre, actors, release year, etc. Other data on users' behaviour that can feed into the algorithms of the recommender system to optimise the service include the time of day the user watches content, the devices used, and how long they watch the content and stay on the platform (Netflix, 2021).

According to Netflix's representatives, the recommender system does not include demographic information (such as age or gender) as part of the decision-making process. Such data, however, can be inferred based on other information and consumption habits. Netflix personalises almost every feature of its catalogue and its services' UI with the objective to refine its recommendations and predict what could be more relevant for the users among all its titles. Thus, the recommendation system not only identifies the content that could be of interest to a particular user, but it also aims to optimise the UI design and the homepage layout in order to make such content more visible and easily discoverable/findable (taking into account the probable impact of cognitive biases and behavioural nudges on the user's final choice). [69]

[68] BBC iPlayer also presents a BETA version accessible by users so that new and innovative functions can be tested and improved in view of the next possible change.

[69] From a technical perspective, it is worth discussing how Netflix's recommendation system works. Since the unsuccessful and rather problematic initiative of the 'Netflix Prize Competition', the company has been at the leading edge of AI and recommendation systems for many years. At the time of writing, Netflix uses a combination of predictive techniques, from the simplest and most traditional ones (e.g. linear regression, logical regression, k-means clustering techniques), to more advanced solutions (e.g. Markov Chains, gradient

PSM organisations also provide personalised UIs enhanced by their recommender systems, which present certain distinctive traits. In the case of the BBC iPlayer, for instance, personalisation allows the BBC to 'recommend programmes they think users will like' (BBC iPlayer, 2021), thus prioritising and recommending content based on users' profiles and preferences, which is what commercial players are also doing. However, in addition, the BBC gives users the possibility to turn off their personalisation settings by opting out and by deleting the data that is used for the recommendation systems, therefore limiting the targeting and profiling techniques and ceding control over their experience to the users (BBC iPlayer, 2021).

Furthermore, BBC R&D has been testing and experimenting with different approaches to recommendation systems which are based on various criteria and optimisation metrics, in an attempt to develop a principles-based approach (PSM 14, 2020), which could be combined with more traditional metrics based on relevance with diversity and recency metrics (BBC, 2018b).[70] One of the interviewees summarised this as the development of 'public service algorithms, which is the idea that the algorithm we would use and the content we recommend would be different to [a] similar algorithm used by commercial organisations because our incentives are different' (PSM 2, 2019). These efforts are broadly framed within the BBC's approach to AI and machine learning technologies, for which they have developed ethical guidelines and public interest principles (BBC, 2021; Marcus, 2021).

5.2.2.3. Catalogue Collections

Most AVM apps nowadays present dedicated collections, whose curation and themes change depending on the country as well as on the organisation, ranging from theme- and genre-based collections to geolocation- and user-based ones.

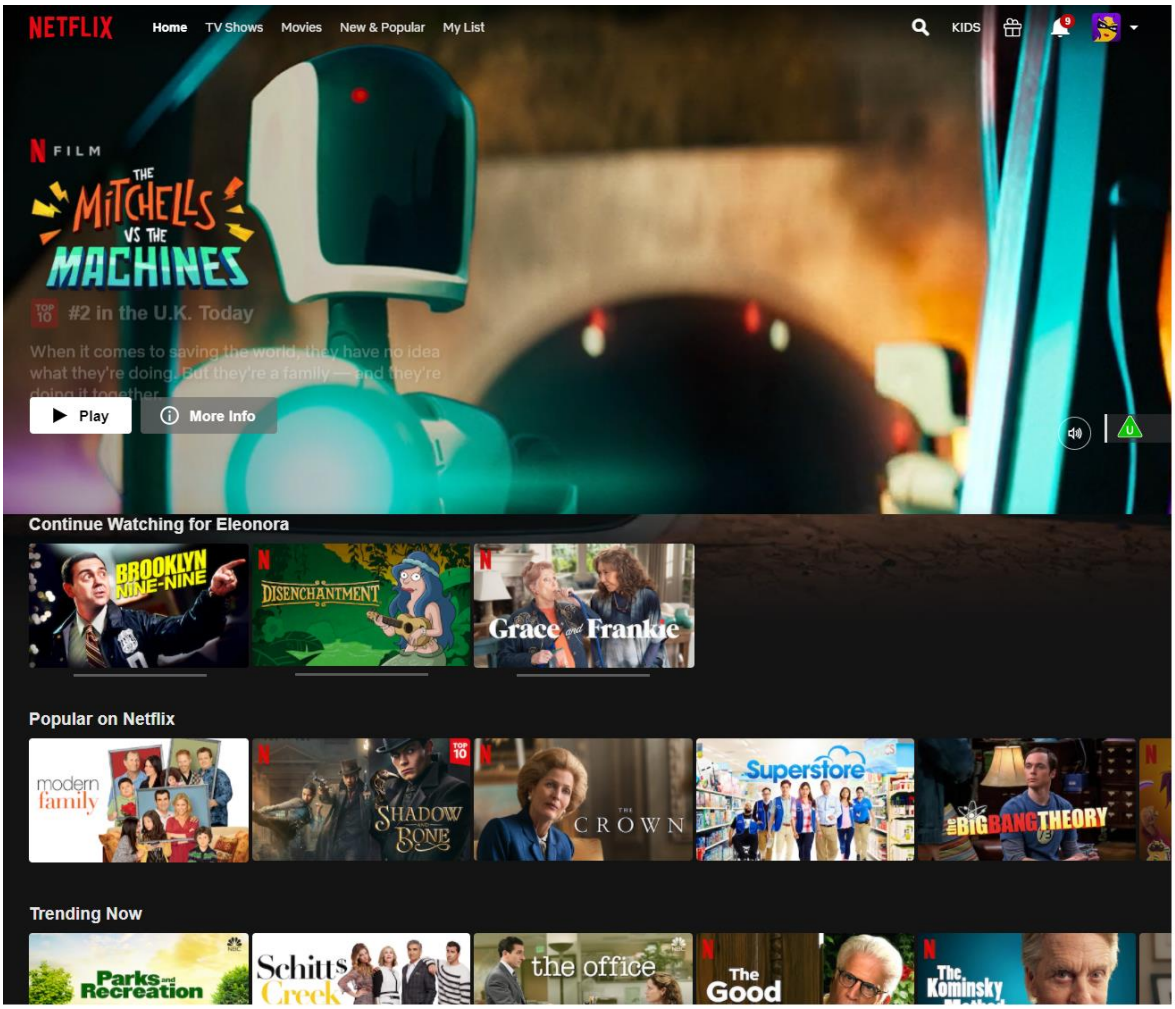
Netflix was a pioneer in this area. Its catalogue UI organises content into detailed and clearly labelled collections. These are based on theme (e.g. the temporary collection of climate change-related programmes), genre (e.g. comedies, action, dramas, etc.), geolocation (e.g. British movies, Top-10 in the UK, etc.), or they

boosted decision trees, multi-armed bandits). Furthermore, it should be noted that the software architecture that Netflix uses to evaluate and refine its recommendations is sophisticated and innovative since it enables the system to handle large volumes of existing data, be responsive to user interactions, and make it easy to experiment with new recommendation approaches (Amatriain and Basilico, 2013). As outlined in Netflix's TechBlog, the architecture can be divided into three levels based on different computational processes, respectively, offline, nearline and online. Firstly, the offline computation refers to procedures that are performed periodically (e.g. weekly) and require a higher level of computational complexity, such as updating a ranking mode. Secondly, online computation concerns calculations that are performed in direct response to a user request, for example, what to display after observing the user's clicks in a current session. Finally, nearline refers to calculations carried out in response to a user, but not in real time; for example, the re-ordering of a row of videos can be performed during the user session, but only when the necessary calculation has been completed (Amatriain and Basilico, 2013). In the Netflix system, each event generated by user interaction with the system enters specific process queues and is used at the appropriate time by specific algorithms; a modern assembly line where, unlike in the physical world, any data can be used and transformed in parallel by various production lines.

[70] From a technical perspective this means that alongside metrics that evaluate the precision and relevance of the recommendation based on users' data and consumptions habits through, for instance, normalised discounted cumulative gain (NDCG), they also use metrics that evaluate the diversity of the recommendation and the recency of the information (Boididou et al., 2021; Panteli, 2019), similar to the diversified algorithm developed by the EBU PEACH-personalisation for each project (European Broadcasting Union, 2020a, 2020b).

may result from the combination of the user's profile, preferences and consumption data (Chapter 5, section 5.3). Similarly, other SVOD and PSM UIs provide dedicated collections to curate their content catalogue, which are based on genre, previously watched content, specific themes, etc. Titles in each row briefly explain the different types of collection (See Fig. 5.7).

Fig. 5.7. Example of Netflix's homepage and catalogue collections.



Source: Author

Programmes can appear within multiple collections depending on their metadata tagging. The ranking of each collection (i.e. which row on the UI it appears in, near the top, or further down) and the order of each title within the collection depends on what titles are available in a particular country, on the recency of the available titles and on user data and preferences (Platform 9, 2021). Overall, national collections are always geolocated; thus, if the same SVOD service is accessed in France, the user will see collections such as 'French Movies & TV' or 'Cannes Film Festival Award-winning French Movies', while if the same user accesses his/her account from

the UK, he/she will see different collections, such as 'British Movies & TV' or 'Witty British TV Shows' (See Fig. 5.7).

Beyond the specificity of each AVM service, in most cases, rows and collections are also personalised and influenced by the service's recommender systems (Platform 9, 2021). For instance, as explained in Netflix's help-page, 'in addition to choosing which titles to include in the rows on the Netflix homepage, Netflix's system also ranks each title within the row, and then ranks the rows themselves, using algorithms and complex systems to provide a personalized experience' (Netflix, 2021). Thus, how the content appears on the catalogue UI is customised and there are at least three layers of personalisation: (a) the choice of row (e.g. 'Continue Watching,' 'Trending Now,' 'Award-Winning Comedies,' etc.); (b) the titles in the row (top to bottom), and (c) the ranking of those titles (left to right) (Netflix, 2021).

5.2.2.4. Search Functions

Search functions are also a key means of prioritisation as they sort and rank AVM content to find the most relevant and useful results in answer to a user's search query. Most of these functions can be accessed through the remote control and are found on the banner at the top of the homepage. The most sophisticated search functions can enable users to browse the catalogue with pre-selected filters, such as language, release year, 'suggested for you' and alphabetical ordering. Simpler functions allow users to type in their search terms and then receive a selected list of content, which matches as closely as possible the search based on user data – both individual user's data and at aggregate level - and content metadata.

Depending on the app, several factors are used to shape search optimisation techniques. For instance, on YouTube, content is ranked based on a variety of factors including how well the title, description, and video content match the viewer's query. Beyond that, YouTube looks at which videos have received the most watch time and engagement following the same or similar queries, and what each individual user has previously watched. The combination of criteria is therefore complex, and it is usually personalised. Thus, even if users input the same words, the presentation and rankings of the results might differ.

While search is mostly text-based and uptake of voice assistance is relatively limited at present, this is a growing area with great importance for prominence (MTM and Ofcom, 2019). Currently, voice's primary use is for simple navigation, but more advanced uses are being developed as investment in smart speakers and voice assistants increases (e.g. PSM 3, 2019). For instance, for connected TVs offered by vertically integrated platform organisations such as Google TV, Apple TV or Amazon Fire TV, voice search is already available through their interoperable smart speakers or integrated directly in their remote controls (Chapter 4, section 4.2.2.1).

All three tech companies have indeed developed voice assistance services, respectively Google Assistant, Siri and Alexa, which are becoming key navigational tools. However, prioritisation through voice assistance is an

even less well investigated area and the processes are particularly opaque for both users and content providers. At the same time though, it is a particularly powerful means of prioritisation as it often grants prominence to just one main search result rather than a list of results after a text-based search on a TV screen (e.g. PSM 3, 2019).

> Voice is a navigational tool. It is of course a very superior navigational tool, sometimes not so good, but in some ways also brilliant. For instance, if you're blind, you are able to talk to a device that will respond to you, which is fantastic, so we want to embrace it. … The problem with voice and prominence is that you do not get a list of options if you ask for something, you do not get 'choose one' as a response, but you just go with the top one. (PSM 3, 2019)

5.2.2.5. Channels Listing

The main difference between PSM's and commercial broadcasters' UIs and SVOD apps is the possibility to access broadcast channels and live content. To do so, the UI presents a dedicated section through which users can browse through the entire channel offer of the AVM provider. Both live and catch-up programmes can be accessed through each channel. The ranking of the channels reflects the ranking of linear television channels on the EPG and the LCN, thus, granting a higher position and priority to the generalist channels, also described as general interest channels, such as BBC One, Two and Three, followed by more niche, thematic channels, such as BBC News and CBeebies.

5.2.2.6. User-driven Customisations

Last, but not least, most UIs allow users to create their own preferred lists within their Netflix, Amazon Prime Video or BBC iPlayer catalogue, adding titles they have liked or that they might want to watch. Such user-selected content features on the top banner of the homepage of these services, and/or on a dedicated row in the catalogue. This, together with other users' ratings, appears to be the most proactive way of curating and prioritising content, where users' input rather than automated or editorially curated choice drives prioritisation.

5.2.2.7. Serendipitous Discovery

A new technical means to nudge users' choices and prioritise content is the discovery function introduced by Netflix on its UI. By clicking on the 'discover now' button on the interface, a programme selected by Netflix will start playing, thus directing users to a new piece of content without having to spend time browsing or searching.

5.3. Socio-technical Criteria in Prioritisation Measures

The technical means described above are not neutral processes as the choice architecture is not neutral. On the contrary, these means are based on socio-technical criteria that are tightly related to the organisations' interests, their incentives and their institutional arrangements. I therefore investigated those criteria for both technology manufacturers and AVM service providers, to fully understand how prominence and discoverability work at technical level. Interestingly, the criteria used by each organisation reflect a mix of commercial and private interests with vaguely defined customer and public value criteria. However, how the criteria are defined, prioritised and transposed into different choice architecture systems varies significantly.

5.3.1. Technology Manufacturers and Platforms

Based on the sampled organisations, I have grouped the **main criteria** from both technology manufacturers and vertically integrated platform organisations into four main categories: **popularity; relevance; recency** and **public value** (Table 5.2). Even though different organisations used similar terms to describe these criteria, the definitions and understanding of these notions differed slightly depending on each organisation's conceptualisation of consumer value and interests. Indeed, emphasis on 'customer-centric approaches' and assumptions about 'what the customers want' (Platform 6, 2021) are often driving the definitions of these criteria and the metrics used to translate them into their choice architectures.

Table 5.2. Criteria, definitions and indicators used by tech manufacturers[71]

Criterion	Definition	Indicators
Popularity	Content and services with the highest market and viewing shares across multiple national markets	Viewing shares, market shares, subscription numbers
Public value	PSM's content and services and/or commercial AVM providers that are granted a similar status by the government or the national regulatory	N/A

[71] The table provides a summary overview of the primary criteria used by manufacturers and platforms as emerged from my analysis.
The first column lists the criteria in alphabetical order.
The second column ('Definition') provides a brief definition of each criteria based on my interview data and document analysis.
The third column ('Indicators') presents examples of indicators used to assess and measure the listed criteria, based on my interview data and document analysis.
'N/A' stands for no answer, which means that no answer was provided, nor could examples of indicators be inferred from the data since technology manufacturers would rather not engage with this normative notion of 'public value' and the related editorial responsibilities that might come with it and they therefore leave it up to the regulator to define it and provide guidelines on how to operationalise it, while they focus on implementing it with the most appropriate technical means.

	authority (it varies depending on the regulatory context)	
Recency	Content and services the customer has most recently accessed and/or engaged with	Customers' engagement, consumption and viewing habits
Relevance	Content and services that meet the perceived consumer interests, demands and needs	Consumers' preferences, engagement, and consumption habits

Source: interview data and grey literature

5.3.1.1. Technology Manufacturers

The **main criteria** that representatives from technology manufacturers, such as Samsung and LG, presented as drivers of their prioritisation measures on their UI, comprise:

a) **Popularity** of AVM content and services;

b) **Relevance** of AVM content and services;

c) **Public value** of AVM content and service.

Popularity

The popularity criterion is measured at aggregate level since interviewees described it as being based on the market data and aggregate viewing data collected, which include, but are not limited to, viewing figures of different providers, subscription numbers, and market shares (Tech manufacturers 2 and 3, 2021). If they receive a high popularity ranking, these services are granted a more prominent position on the homepage of a connected TV, for instance, by being pre-installed, appearing as first, second, or third in the list of apps, and – in ad hoc cases and depending on the types of distribution and commercial agreements – by being allocated a dedicated button on the remote control.

According to the representatives of PSM organisations, this leads to a higher ranking and a more prominent position for international services such as Amazon Prime, Netflix or Rakuten, since they are present and popular across multiple markets (PSM 1, 2020). In addition to these services, manufacturers also allocate slots in their homepages and banners to the national PSM organisations that are considered popular among their national customer base (Tech manufacturers 1, 2020; 2 and 3, 2021). As shown by market studies funded by Ofcom, the three national UK PSM – BBC, ITV and Channel 4 – as of 2018 appeared to be prominent on most connected TVs (Mediatique, 2020; MTM and Ofcom, 2019).

> I think we would intend it as popularity because it is easy for us to prove that. It needs to be a commonly agreed way of doing it, but essentially, we can say that it refers to services that have been watched or not used by consumers in previous years, or last couple of years, or whatever. We can do that, but obviously it is difficult sometimes to change things on a platform that often. (Tech manufacturer 3, 2021)

By using the criterion of popularity, technology manufacturers therefore aim to grant prominence and discoverability to those services that are likely to reach the highest possible number of consumers both across the widest number of markets, and within specific national markets. As some of the research participants explained, this ultimately helps technology manufacturers to maximise their profits (Tech manufacturers 2 and 3, 2021), since organisations like Samsung, LG or Panasonic have a global presence and would prefer to seal global distribution deals and sell the same products across multiple markets rather than customising their products in each country (Parcu et al., 2022; Samsung Electronics UK, 2018; TechUK, 2018).

Ensuring that their devices have as pre-installed apps those services that are most popular in the highest number of markets allows the manufacturers to maximise one of their revenue streams and make their devices and services more appealing to the customers who find their favourite apps already present on their newly bought smart TV (Tech manufacturers 2, 3 and 5, 2021) (Chapter 6). Furthermore, it helps the manufacturers to contain their production costs as they can produce one device – i.e. a connected TV – with related additional hardware – i.e. remote control – that can be sold in different countries, rather than customising it on a national basis, which would multiply the administrative burden of negotiating deals, and potentially increase their production costs (Tech manufacturers 2, 3 and 5, 2022).

Relevance

What I designate as the 'relevance' criterion is closely connected to the manufacturers' ideas of consumer demand and interests: it refers to what content and services are perceived to be relevant to consumers. As described by one of the interviewees, prioritising what is relevant for consumers is 'a way of meeting consumer demands or consumer needs and doing whatever is important in that country' (Tech manufacturer 2, 2021). The importance of this criterion is, in turn, linked to the necessity for the manufacturers to use content prioritisation measures as a way of delivering consumer benefits, which can then secure the manufacturers' private benefit and sales. As explained by a research participant:

> The smart TV is a horizontal market product that aims to display content from many sources, not just from one, and the purpose is basically to present or surface content that people like to watch in a way that consumers want and like. From our perspective, failure to do so will ultimately lead to loss of sales and lack of profit for us, which we wish to avoid. So any smart TV needs to keep up with current trends

> and technical capabilities to deliver consumer benefit and choice to them, and if we restrict what they can get done, it hurts them and us. (Tech manufacturer 3, 2022).

From this perspective, user data and profiling are regarded as key in determining how the relevance criterion is defined and operationalised in connected TV UIs. Technology manufacturers rely on data from users' interactions with their devices, defined primarily as aggregate user data based on how much consumers access and use certain apps rather than others. In practice, this approach results in featuring the most used app first in the homepage listing. Such data is then combined with the input preferences of each user when they themselves change the location of apps on the homepage of their TVs or download new apps that were not pre-installed and place them prominently (Tech manufacturers 1, 2020, 2 and 3 2021).

The profiling techniques of technology manufacturers are therefore more basic and less targeted than those of AVM service providers (section 5.2.2) as the data available to the manufacturers is limited: they do not have access to the information on users' behaviour and viewing habits contained within the 'walled garden' of a content provider app (Platform 1, 2020). AVM services providers, on the other hand, whether they are offering VOD from PSM organisations or SVOD offered by commercial broadcasters, pay-TV operators or internet platform organisations, have richer datasets available and can use a greater number of metrics to define 'relevance' for users.

Public value

The third criterion is what one of the research participants described as 'public value' (Tech manufacturer 3, 2022). The definition and operationalisation of this criterion seemed to differ depending on the national and regulatory contexts in which companies that operate in multiple markets sell their products. When referring to countries with a new statutory prominence regime, such as in Germany (Chapter 2), technology manufacturers indicated that they aim to create one dedicated 'public value tile' (Tech manufacturer 3, 2022), which will be prominently displayed on their UI and contain all the apps from providers that have been awarded 'public value status' by the regulator. Thus, the technology manufacturers' operationalisation of the public value criterion will simply be informed by the decision of the regulator. As explained by one of the research participants:

> Something else that we're investigating – and this is an example, not a final solution – is in Germany, which has been putting some very tough requirements from a TV manufacturer's perspective, at least in terms of prominence, so we have developed what we call 'my public value,' which is a dedicated title that we will put somewhere in the first homepage of the TV user interface and when you press it, it will include all of the identified public value services and content in a prominent position. (Tech manufacturer 3, 2022).

When speaking about the UK where the prominence policy debate is centred on PSM, research participants did not explicitly refer to a broader public value criterion, but PSM were taken as a proxy for all public value services. The 'equal division' between PSM and commercial offers as described by a research participant (Tech manufacturer 2, 2021), does not seem to be driven by a normative understanding of public value or by a definition established by the regulator like in Germany.

In an effort to argue against new regulatory obligations, the manufacturer representatives were keen to show that PSM's prominence was already achieved in the UK as they already cooperate with UK PSM by helping 'to display their content in innovative ways.' However, such prominence was given, not because of any public interest considerations, but because national PSM services such as those of the BBC, Channel 4 and ITV still have an appealing offer for UK consumers, thus, 'giving them a little bit of prominence' on their TV is 'mutually beneficial' (Tech manufacturer 3, 2022). At the same time though, this 'equal' division between PSM and commercial offers on the homepage is questionable as it often excludes regional or local PSM services, since only the main three national UK PSM's BVOD – BBC iPlayer, All4 and ITV Hub – make to the TV screen.

> In our latest model the number of apps on the home screen … is equally divided up between a portion that will be for PSB-type services, and a portion for the commercial services that consumers want. In reality the maximum number of PSB services we get in one country is four, so there's little point allocating more than four slots, so by doing so we are effectively maximising their prominence on our own pages. (Tech manufacturer 2, 2021)

5.3.1.2. Platform Organisations Vertically Integrated As Tech Manufacturers

Alongside the more established technology manufacturers, in recent years platform organisations like Amazon, Apple and Google Alphabet have vertically integrated along the AVM value chain with different products and services, from connected TVs to set-top boxes, streaming sticks and integrated smart speakers (Chapter 4, section 4.2.2.1, and Chapter 6, section 6.2.2).

In the case of Amazon,[72] for instance, as explained by one of the interviewees, the range of products they offer includes a first tier of devices manufactured and sold by Amazon, and 'a second tier of products that result from partnerships with other organisations to have the Fire TV experience on TVs that are manufactured by third parties,' such as Amazon Fire TV stick (Platform 6, 2021). Similarly, Google Alphabet has stepped up its game in this market, making 'connected TVs one of its top priorities' (Moreno, 2021), offering Google TV,[73] which, since 2020, has started to replace all other Android TV devices to provide an integrated package of smart TV, Chromecast devices and Android OS. Finally, Apple sells several Apple TV models[74] as part of its

[72] See Amazon's TV and accessories: https://www.amazon.co.uk/Fire-TV/b?ie=UTF8&node=5157838031
[73] See Google's TV and home devices: https://tv.google/
[74] See Apple's TV and home devices: https://www.apple.com/tv-home/

integrated offer of IoT products. While this section focuses on the device side, it should be noted that alongside manufacturing TV devices, these organisations also offer their own AVM services, which will be discussed in the second part of the chapter.[75]

The criteria used to curate and prioritise content on this kind of connected TVs seem to be centred on **a vague conceptualisation of 'customer interest'**. As explained by one interviewee, 'in terms of how we decide what to offer to customers, we basically have a customer-centric approach: we think about what the customer wants, and then we work backwards from there' (Platform 6, 2021). Thus, from this customer-centric perspective and assumptions about 'what the customer wants,' organisations derive the main criteria for their content curation and prioritisation measures.

Based on the views expressed by various interviewees, I have grouped these criteria into three main categories, namely:

a) **Relevance of** AVM content and services;

b) **Recency** of the interaction between users and AVM content and services;

c) **Popularity** of AVM content and services.

Relevance

From my analysis, relevance appears as a driving criterion for companies like Amazon, to which other more normative criteria such as quality or diversity are subordinated. Similar to the technology manufacturers previously discussed, this criterion is centred around a perception of customer demands and interests and the content that most closely matches them**. As explained by one of the interviewees, the customisation and personalisation of the UI is discursively linked to what the customer wants, featuring on the home screen dedicated sections that show prominently those apps that are more frequently used by the customer** (Platform 6, 2021).

As explained by one of the interviewees, the UI design is focused on customisation where **metrics such as usage, engagement and frequency of access are used to define what 'relevance' is for each individual,** as 'the more the customer engages with certain content and apps, the more these prominent spaces get populated' (Platform 6, 2021). So, while there is a vague conceptualisation of diversity and quality, prioritisation is firstly about relevance and personalisation, as summarised by a research participant: 'it is about providing quality content that is also relevant for the customers' (Platform 6, 2021). Similarly, PSM services can be made

[75] It should be noted that while experts from Google Alphabet and Apple were contacted, they did not agree to participate. The information gathered relies mainly on interviews with research participants from Amazon and the Internet UK Association integrated with insights from publicly available grey literature and a parallel research project (see Chapter 4).

prominent, but not because of normative criteria, but as long as they 'continue to make great content' and therefore continue to stay 'relevant' to their audiences (Platform 5, 2020).

> It will always come back down to what the customer[s] want, the customer attitudes and customer content. And we always say that rather than having a new regulation, it should be about the content that is the most important, and what customers want to see. So, if the PSB is continuing to make great content, then of course they are going to remain prominent and relevant with our audiences. But we think that the content and the customer should come first, rather than the regulatory environment. (Platform 5, 2020)

Relevance is conflated with a vague and yet crucial idea that the UI's design on the platform organisations' devices is there to serve their customers' interests – interests that are inferred from data profiling techniques. Thus, similarly to other technology manufacturers, users' data is key to the definition of relevance and to any related content prioritisation measures. The types of data used to profile users are not disclosed and my interviewees had contrasting views about how such data is used within companies such as Amazon, Google Alphabet and Apple.

On the one hand, PSM providers argue that platform organisations have access to much more granular and detailed data, potentially enriched by the fact that they offer integrated services and products to their customers and therefore have a fuller overview of their journey to content, as well as their viewing and consumption habits (Chapter 6). On the other hand, representatives from these organisations suggested that this is just 'a myth' and that they do not use customer data from their devices to feed into their personalisation and prioritisation measures – for example, in the case of Amazon, data from Alexa or Fire TV's various appliances does not inform Amazon Prime Video's personalisation and prioritisation measures (Platform 4, 2020). On the contrary, the platform organisations' representatives tended to clearly (and defensively) argue that there is a 'Chinese wall' between their different services and products (Platform 4, 2020). This claim is however questionable since users have one main Amazon Prime account through which they access all Amazon's products, and we cannot be certain that data from one service is not used to refine the profiling techniques of another one.

Recency

A second category is recency, **intended as recency of the interaction between users and the AVM content or services, which is defined also on the basis of usage, consumption and access data, i.e. the apps most recently used by the customer.** As one of the interviewees described it: 'recency refers to what type of content the customer typically engages with, so there are also rows in the interface that have content recommendations based on what the customer has typically been watching' (Platform 6, 2021). The most recently accessed apps

and the most recently viewed content within those apps will influence what is surfaced and prioritised on the home screen.

Recency and engagement are criteria that interviewees often depicted as feeding into the content prioritisation and curation measures of other intermediary services, such as search engines and social media. Recency is, for instance, one of the key factors influencing Google Search's ranking system (Google Search, 2021). However, while in those services recency refers to the most recent interaction of a particular user with a certain app or content provider and to the recency of the content itself (i.e. the newest posts, articles or programmes), in the case of connected TVs such as smart TVs, the emphasis appears to be on the individual user's engagement and its frequency.

Both relevance and recency criteria are updated automatically, depending on a user's interactions with the services. It should be noted that individuals can also play a role in guiding these criteria by inputting their own preferences to the device's settings. As highlighted by one of the research participants: 'We do have, for example, on the home screen 'your apps and channels' which allow the customer to pin the most-watched ones, I mean the apps that they use the most frequently' (Platform 6, 2021).

Popularity

Thirdly, similar to other technology manufacturers, platform organisations emphasise the key role of popularity in content prioritisation measures. As argued by an interviewee: 'Overall, there's also popular apps that surface based on the current ongoing trends and customer interactions with the UI' (Platform 6, 2021)

Popular apps are understood as the AVM providers' apps that are most downloaded and used based on current market trends, but also as those which are popular with the particular users themselves. In this sense, popularity partially overlaps with the category of recency since both highlight the role of individual customer interactions and engagement with the UI in determining what is 'surfaced' on the home screen and made more or less popular. Thus, even in vertically integrated systems such as Google TV and Amazon Fire TV, customers will be able to find the most popular apps of the moment, which include the platform organisations' own services, respectively YouTube and Amazon Prime, but also others such as Netflix and Disney+.

Local and national service providers such as PSM may also feature prominently in certain cases, but they are not always pre-installed in the devices. They may be added to the UI by the customers, or in those countries where, as highlighted in the previous quotes, 'customers engage with them' (Platform 6, 2021), by the manufacturers themselves.

Finally, the criterion of popularity is used to prioritise certain services by means of hardware shortcuts, for example the design of remote controls, which are becoming leaner, with fewer buttons and the addition of voice control (Tech manufacturer 3, 2022), often integrated with the device's OS (respectively Alexa for Fire

TV, Google Assistance for Google TV, and Siri for Apple TV). Deciding which services will feature more prominently through dedicated buttons is also a form of prominence. An example is the remote control that comes with Fire TV streaming sticks, which features direct buttons to Netflix and Disney+, alongside buttons to their own audiovisual and radio services, such as Amazon Prime Video and Amazon Music. Similarly, a new Google TV can come with a remote control that features YouTube and Netflix buttons, together with Google Assistant's voice control functions.

As further discussed in Chapter 6, whether a service gets prominence on a remote control through what an interviewee described as a 'red button' (Tech manufacturer 3, 2022) depends on how much the service is used and how popular it is globally among consumers. Remote controls are not customised at national or local level. In this sense, popularity based on market and audience trends is used as a way to stipulate deals that have a higher return on investment for manufacturers (Chapter 6, section 6.2.1.). In the case of integrated voice control functions in the remote control, however, my interviewees were unclear what the main criteria used to prioritise content are.

5.3.2. AVM Service Providers

Most content providers, from PSM organisations to pay-TV operators and commercial broadcasters, have dedicated apps that are available for almost every internet-connected device, including connected TVs, smartphones, tablets, set-top boxes, games consoles and any other digital media players. Overall, the availability of apps varies depending on the interoperability of such services; the distribution and digital strategies of organisations; and the geolocation of the users. Even for platform organisations like Netflix, Amazon Prime Video, or Disney+, which are usually available in most countries, there are variations in their catalogues depending on the geolocation of the devices and users since distribution deals and copyright varies across territories (see also Evens and Donders, 2018; Johnson, 2019; Raats et al., 2018). [76]

Overall, apps enable the app owner to control the environment within which their content is distributed, organised and curated. **Within these closed environments, prominence can be influenced by various content prioritisation measures including the homepage design, dedicated collections, search and browse functionalities, editorial- and/or algorithm-driven recommendations, and discovery areas**. The following sections discuss how these measures are used by different organisations and what socio-technical criteria are driving them (Table 5.3).

[76] The geolocation of the users changes what is available because not all services can be offered cross-border. The availability of content is therefore related to the distribution agreements, copyright deals, and the relevant regulatory framework in different countries (this is the case especially for local and national providers, such as PSM organisations which have national legal remits and are not always allowed to broadcast and distribute all their services cross-border).

Table 5.3. Criteria, definitions and indicators used by AVM service providers.[77]

Criterion	Definition	Indicators
Diversity	Diverse and balanced mix of content, different genres, formats, types and origins	N/A
Popularity	Most-watched content, either by the single user, or by country, or at global level, the latter with reference to all the markets covered by the service provider	Users' aggregated viewing data, viewing figures of content and programmes at global, regional and national level, and individual user's preferences and viewing habits
Public value	Public service value content defined as content that is traditionally associated with either PSM services; and/or niche-market failure genres such as news, current affairs, educational programmes; and/or content that contributes to public value creation (definition varies according to the organisation)	Mix of sub-indicators used to define the different components of public value[78]
Quality	Content that is widely and publicly recognised as high quality, either because it is produced by established AVM service providers that respect ambitious standards of production and distribution processes, and/or because it is highly rated by external rating systems and in awards ceremonies	Ambitious standards of content production, expert reviews, awards or other official recognition, user ratings,
Recency	Newest content (e.g. most recently produced or acquired programme); or freshest content, defined as the latest episode of a series or the latest piece of content accessed/engaged with by the user	Content data and tags (e.g. release/acquisition date), and/or users' engagement, consumption and viewing habits
Relevance	Content that meets the perceived user interests, demand and need	User profiles, consumption habits, viewing history and preferences

Source: interview data and grey literature

[77] The table provides a summary overview of the primary criteria used by AVM services providers as emerged from my analysis.
The first column lists the criteria in alphabetical order.
The second column ('Definition') provides a brief definition of each criteria based on my interview data and document analysis.
The third column ('Indicators') presents examples of indicators used to assess and measure the listed criteria, based on my interview data and document analysis.
'N/A' stands for no answer, which means that No answer was provided, nor could examples of indicators be inferred from the data since no information was derived from the interviews.

[78] These components and related criteria are discussed in more depth in Chapter 7, section 7.3

5.3.2.1. PSM Organisations

Before considering the examples of the BBC, All4 and ITV Hub, it should be highlighted that all research participants from the three UK PSM organisations tended to focus more on why they should be granted a prominence placement on third-party devices and UIs, rather than on what criteria they use internally to curate and prioritise content on their own BVOD services. So, to reach a fuller picture, the following section was complemented by insights from relevant grey literature from the same organisations.

5.3.2.1.1. Publicly Funded PSM: BBC iPlayer

As also highlighted in the BBC Distribution Strategy, content curation, including prioritisation measures and related prominence and discoverability decisions are considered to be 'critically important to delivering its mission and public purposes', since 'curation benefits audiences, increases value for money for the licence fee payer and the broadcasting industry, and increases consumption across a wider range of programmes and features' (BBC, 2018c: 5). The BBC also emphasises that 'its curation objectives, which reflect its public service objectives as set out in its Charter, are notably different to those of commercial platforms, who are typically incentivised to promote the most popular programming, such as entertainment and drama, but not, for example, educational or factual content'(BBC, 2018c: 11).

To maintain this claimed distinctiveness of being a publicly funded PSM organisation, the BBC's prioritisation measures and their criteria stem from the its public purposes (PSM 2 and 3, 2019; 'BBC, 2018a, p. 11) as set out in the Royal Charter (BBC, 2016b). From my data, it emerged that the main criteria for content prioritisation measures are:

a) **Diversity** of AVM content;

b) **Public value** of AVM content;

c) **Relevance** of AVM content;

d) **Recency** of AVM content.

In addition to these criteria that were linked discursively by the interviewees to the BBC's public purposes and its public interest missions, the notion of 'quality' often emerged. Quality was described as an intrinsic connotation of all content produced by the BBC, rather than as one criterion used to positively discriminate between one programme and another on the UI or within the recommendation system (PSM 1 and 2, 2019; PSM 4, 6 and 8, 2020)

Finally, while research participants stressed the distinctiveness of their services and the socio-technical criteria of organisations that have commercial incentives (PSM 2, 2019), the prioritisation measures and UI features of BBC iPlayer do not appear to be distinctive when compared to others such as Netflix, especially since the UI

design change made in 2022. We can find, for instance, catalogue rows that prioritise popular content ('Most Popular' or 'New and Trending'), or personalised content ('Recommended for you,' 'If you liked X...'). Thus, while the key criteria presented by the interviewees referred to public interest missions and public purposes as inscribed in the BBC's Royal Charter, in practice, these may not be the only criteria used to prioritise content on the BBC iPlayer's UI and at the moment of writing the BBC does not seem to have a distinctive 'public service' approach to prioritisation on its own UI. However, recent R&D projects have begun to explore a new way to recommend content that aims to be closer to the BBC's public interest mission.

Diversity of AVM content

A core criterion reported by interviewees is diversity, defined as a diverse and balanced mix of popular content and 'public service value content,' which is often described by the interviewees as comprising niche-market failure genres, such as news, documentaries, and educational and public affairs programmes, etc. As explained by one of the interviewees, this criterion builds on the 'hammocking' strategy of broadcast programming (PSM 2, 2019). Hammocking occurs when a news and/or educational programme is scheduled between two more popular ones, like a hammock supported by two strong and established trees, in the hope that viewers will watch it. By prioritising and making more easily discoverable 'public service value content' (PSM 2, 2019), the BBC strives to provide a more balanced content diet for its users and therefore to fulfil its public service mission to 'inform, educate and entertain.'.

> Going back to those old days of TV … we have the notion of 'hammocking.' The way scheduling used to work is based on the idea that you have a big drama and some other popular programmes, and in between you put the news, so that people watch, and they keep on watching, and it is a way to push people to watch that kind of public service value content. We tend to look at curation of online space in a similar sort of way. This is not always in the interest of the platforms, because if you have commercial incentives, if you have to maximise the value for your shareholders, then you probably want to put slightly different programmes, for instance 'Strictly Come Dancing' or 'Top Gear,' the kind of big thing, as opposed to a BBC documentary. (PSM 3, 2019)

This criterion was presented by the interviewee as being opposed to the popularity criterion (PSM 2, 2019), which they associated with the content curation and prioritisation strategies of 'the platforms' (PSM 3, 2019). Similarly, in the BBC Distribution Strategy, the distinctiveness of the BBC's approach to content curation is emphasised by highlighting its ability to guide audiences on the 'full range of the BBC's offer, rather than just the most prominent or most popular shows' (BBC, 2018c: 5). It is therefore about giving visibility and prominence to 'hidden gems' (PSM 2, 2019; BBC 2018b, p.11), rather than just prioritising the most popular shows. A research participant also suggested that they use a mix of editorially and algorithmically driven

prioritisation means to reach such 'a balanced and broad mix of content … so that alongside the algorithm showing 'here is the most popular show', there is also other interesting and editorially curated content within that selection as well.' (PSM 2, 2019)

> The curation team that works on iPlayer decides how these things get curated … they work on the principles of having a broad mix of content. In practice when people use the iPlayer, generally there will be a mix of different types of content … particularly some of the genres that feature less on other VOD services which go more towards drama and comedy rather than documentary and things like that. So we try to have a bit more of genre mix and smaller, or hidden gems as well. There are lots of examples of content that did not get big viewings on linear, but we manage to get big audiences on iPlayer because we have given it good prominence. (PSM 2, 2019).

However, when prompted to discuss in greater detail how this criterion is translated into different prioritisation measures, and how it is balanced with other factors that appeared to be used in their UI design choices, research participants were unable to provide concrete examples beyond the 'public service algorithms' on which BBC R&D has been working in recent years (see also BBC, 2017, 2018a, 2021; McGovern, 2019). As it will be further discussed in Chapter 8 (section 8.3.1.1), these types of algorithm are used by the BBC as well as other European PSM (European Broadcasting Union, 2020a, 2020b) to offer recommender systems based on diversity principles. Similarly, researchers have also been experimenting with 'diversity by design' recommender systems that optimise their prioritisation processes for diversity of exposure (Burri, 2015; Helberger et al., 2018, 2020; Vrijenhoek et al., 2021).

Public value of AVM content

This criterion is closely related to diversity, with interviewees referring to diversity in relation to 'public service value content' that should be surfaced alongside more mainstream and 'popular' content to diversify users' exposure to content through their viewing experiences, independently of their past consumption choices (PSM 3, 2019). While discursively the notion of public value is ingrained in the BBC's ways of achieving its public purposes and public interest mission (Coyle and Woolard, 2010; Mazzucato et al., 2020), the operationalisation of this notion into the broadcaster's day-to-day content curation and prioritisation practices is rather unclear.

An example cited by one interviewee directly refers to a positive nudging technique that could be used for both linear and non-linear services as 'a way to push people to watch that kind of public service value content' (PSM 3, 2019). AVM providers have full control over content curation and prioritisation within their own apps and services and can exploit that power to shape the UI and optimise prioritisation processes for different purposes. In the BBC case, one of the aims is to ensure the visibility of public value content and guide users on distinctive 'public service journeys' (PSM 3, 2019):

> the ability to choose what things are shown on the homepage, what plays next when we control that curation is a lot about making those public service journeys, and to introduce also new programmes. (PSM 3, 2019)

The normative idea of nudging users towards content that has a perceived high public value is also described as one of the 'constant drivers' or the 'constant objectives' of the BBC (PSM 3, 2019), and one indication that 'they work in the public interest' (PSM 3, 2019). This mission-driven approach translates into prioritisation measures that ensure 'great content that people have already paid for and make sure that they can get to it' (PSM 3, 2019). These public service journeys are linked to the organisation's public funding model, which is again contraposed to the practices of platform organisations such as Netflix or other AVM providers that have to 'make money' and therefore tend to prioritise popular content or content that would help them in maximising their revenues (PSM 2 and 3, 2019).

However, it is unclear how this criterion is coded and operationalised through the BBC's means of prioritisation. When prompted to define this criterion in more detail, PSM representatives often focused more on high-level and normative arguments about what content and services *should* be prioritised through new prominence regimes (Chapter 7), rather than on how the public value criterion is operationalised and used currently to make content more or less prominent within their own app.

Relevance of AVM content

Last but not least, relevance emerges also in the BBC discourse as an important criterion for prioritising content, presented in terms of content deemed 'relevant' for the final users based on their previous consumption habits and user profiles. Thus, while diversity and public value are normative criteria that derive from the distinctiveness of being a PSM organisation, relevance is conceptualised in relation to the BBC's personalisation strategies – similar to the way that technology manufacturers and platform organisations discursively defined this criterion in their prioritisation measures.

In the BBC's case, a contradiction emerged in the interviewees' interpretation of this criterion. This is inherently related to the underlying tension between, on the one hand, offering personalised, customised services and, on the other, respecting public service principles of universality and diversity. In striving to resolve this tension, interviewees described relevance in terms of the perceived interests and demands of their audiences, both as single individuals, and as a collective public.

As described in the BBC Distribution Strategy, personalised content curation is about: 'Giving audiences a more personal BBC by offering them the content that is most relevant to them, as well as that which is important to all audiences to fulfil its public purposes rather than for commercial gain' (BBC, 2018c: 5–6). To achieve this, a balancing exercise is required, since what is relevant to one person might not be relevant to all. This is potentially where criteria such as diversity and public value can be used to counterbalance a too narrowly

personalised offer on the UI. At first sight, balancing relevance and diversity is not an easy task, but algorithmically it can be done through the combination of metrics, such as those that are able to measure the relevance of the recommended content through NDCG (normalised discounted cumulative gain),[79] with metrics that are commonly used by computer scientists to assess diversity, such as distance,[80] and qualitative metrics used to evaluate the public value component of content.

In this case, to serve relevant content through the most appropriate personalised strategy and related content prioritisation measure, audience data is key. As one interviewee put it, the IP delivery world has allowed the BBC to increase its 'ability to personalise our offer and therefore give our licence fee payer more value and to allow them to extract more value from the content that we give them and give them a better service. It is greatly enabled by IP delivery in thousands of different ways' (PSM 2, 2019). At the same time, a complaint shared by other PSM organisations is that they have far less access to audience data than platform organisations like Netflix and Amazon Prime Video, and therefore their content curation strategies cannot compete with the level of sophistication offered by those services (PSM 2, 2019).

Recency of AVM content

Last, but not least, recency also emerged as an additional criterion used to prioritise content, described by an interviewee as a 'freshness' or 'freshest first' approach (PSM 3, 2019). Similar to commercial providers, promoting new programmes by giving them prominence is a way to attract audiences to new content. The BBC definition is different from Netflix's and Amazon Prime Video's apparent understanding of 'recency' (sections 5.3.2.2. and 5.3.2.3). For PSM that still rely heavily on linear viewing, the recency criterion refers to prioritising their catch-up services and surfacing the most recent episodes and/or news programmes that their audiences might have missed on live television (PSM 3, 2019). It is not about promoting a binge-watching habit or specific sponsored content, but an effort to link their on-demand apps with their linear programming schedules.

> Another principle is freshness, or we call it 'freshest first,' whereby the most recent episode of the most recent series, should be presented first to the audience. As we know, 70% of viewing is still linear viewing, so the concept of catch-up – 'I missed Tuesday['s] episode of *EastEnders'* – it is still a very real concept. So, we think that if people are searching for '*Peaky Blinders,*' they probably want to watch the latest episode from the latest series because they missed it live. But if you are Amazon, and you are not connected to a linear feed, then you do not think like that, and actually you might say if someone searches for '*Peaky Blinders*,' they

[79] See European Commission study 2022 (forthcoming)

[80] Computer scientists often use cosine similarity to assess distances. Cosine similarity is a metric used to measure how similar two items are. Mathematically, it measures the cosine of the angle between two vectors projected in a multi-dimensional space (Prabhakaran, 2018). It is normalised to vary between 0 (maximum similarity) and 1 (maximum dissimilarity). Such distances can be calculated for any content if the data is labelled or can be categorised.

> are looking for the first episode of the first season because they want to start a binge-watching of the whole series. (PSM 3, 2019)

5.3.2.1.2. Advertising-funded PSM: ITV Hub and All4

Channel 4 and ITV are the two other main national PSM organisations, but they are commercially funded via advertising revenues.[81] **The socio-technical criteria used by this type of PSM sit in between the BBC's and those of other commercial and private AVM service providers**. For instance, ITV's discourse around the criteria used to prioritise content recall both two criteria used by the BBC – namely **public value and diversity** – and criteria used by other private AVM service providers, such as **popularity**. To justify the latter, popularity was often associated with notions of quality and public value content, blurring the boundaries between commercial market logic and vaguely defined normative notions related to ITV's public service mission.

Similarly to the BBC, the notion of quality emerged in the interviews and in the publicly available documentation (ITV, 2018), but it tended to be described as an intrinsic connotation applied to all content produced by ITV and other PSM, and as an added justification to grant prominence and discoverability benefits to PSM (ITV, 2018: 1, 3), rather than as one of the criteria used to positively discriminate between one programme and another within their own UI.

> When you look at what we are able to do within the hub, we are able to carefully curate in the same place content that might be both really, really popular and some of the more public service value stuff. Often these things overlap, but in a way that manages to draw people to get them consuming different types of output, and always in a sense presenting them with a wide range of our content. And everyone else tries to do the same, so we do not have a monopoly … but we are able to do a bit of that sort of stuff, as the nature of the content inherently delivers certainly [a] better citizens outcome than you would get exposed to on Netflix for instance. (PSM 6, 2019)

From this blurred understanding of the criteria of public value, popularity and diversity, the tension that characterised these commercially funded PSM organisations often emerged. ITV and Channel 4 have to balance their need for a stable and sustainable funding model against their legal obligations and public interest mission as PSM. These twin demands are not always fully compatible.

The public service-value criterion is contraposed with the popularity criterion, since it refers to the type of content that has been associated traditionally with niche-market failure genres, such as news, current affairs, educational programmes, documentaries and other content for niche audiences and minority social groups,

[81] As explained in Chapter 4, I was able to interview more experts from ITV than Channel 4, due to the fact that Channel 4 has been going through a period of crisis and public pressure that might have influenced their representatives' willingness to engage with external researchers. So, the data discussed here are primarily informed by ITV's interviewees and their insights.

which by definition are less popular with broader audiences and hold less commercial appeal for other market actors. The niche-market definition of public value seems to build on a narrow interpretation of PSM services and public interest purposes as being to fix a market's failure and provide content that 'you don't get from the commercial market so whether that is news, regional news, current affairs, or actually the softer stuff that people don't notice, but the fact that we are dealing with, such as mental health or LGBTQ+, there is a very wide range of content that in itself speaks to the UK audiences about things that you simply don't get in the wider market' (PSM 6, 2019).

However, as also suggested in the quote above, 'the really, really popular stuff and some of the more public service value stuff … often overlap' (PSM 6, 2019). In other words, through a careful curation and prioritisation of content, ITV claims to surface not only public service value content but also popular content, justifying discursively the fact that its services also provide dedicated collections and recommendations on 'popular shows' and 'trending now'.

This argument is also used by pay-TV operators to claim that private AVM services likewise can create public value and therefore should have the possibility to receive similar regulatory benefits (Chapter 7). For ITV, the combination of these two criteria – public value and popularity – in the overall curation of content on the ITV Hub, is intended to 'draw people, to get them consuming different types of output, and always in a sense presenting them with a wide range of our content.' In this way the aim is to foster diverse exposure that can deliver a 'better citizens outcome' than users experience when exposed to content of ITV's commercial competitors such as Netflix (PSM 6, 2019).

Thus, this approach was presented as 'better' than that of their commercial competitors, who primarily rely on the criteria of popularity and relevance based on the perceived interests of users. Indeed, one research participant openly criticised the argument that content prioritisation measures are used to serve users 'whatever they want, what's best for them,' when actually the criteria are instrumentalised to profile and target users for their own commercial interest (PSM 7, 2019):

> The argument that they are just somehow serving the people whatever they want, what is best for them, it is not really true. … They [platform organisations] are all competing for redressable advertising or contextual advertising, where in some form they have learnt about you and what you might like, and as fast as possible they try to recommend you something, and we think that there is value in that, and consumers gets value out of that. … But, you end up seeing quite specifically that it is not just that they are spending lots of money, it's not just they control what is discovered, it's that they are able to hold the data about that, and effectively bring it from other areas – whether or not you knew that you were signing up to reporting that data across another product or not – and they are able to make

> recommendations dressed up as what's best for you, but effectively where they make the most money. (PSM 7, 2019)

What is questioned here is the conceptualisation and justification of the 'relevance' criterion and how the perceived user or customer interests are presented as public interests, while, in reality, they serve the private interests of the organisations themselves.

5.3.2.2. Subscription-based VOD: Netflix

As emerged from my data analysis, the main criteria used to prioritise content reflect Netflix's 'consumer-centric approach' and its driving imperative of 'finding the best stories and the highest quality content from anywhere that users can watch everywhere' (Platform 9, 2021). Based on the assumption that 'content from anywhere could be loved everywhere' (Platform 9, 2021), Netflix claims to challenge the traditional broadcasting paradigm, typical of PSM organisations with national and local remits, arguing that users do not necessarily prefer to watch content from their own countries and/or local regions but have broader interests which therefore need to be reflected in Netflix's personalisation strategies and prioritisation measures. In this context, **the following criteria emerged as key for determining what is prioritised and made more prominent to users:**

a) **relevance** of AVM content;

b) **popularity** of AVM content;

c) **quality** of AVM content;

d) **recency** of AVM content;

e) **diversity** of AVM content.

Some of these criteria echo those used by technology manufacturers and PSM organisations. However, as I further elaborate, their definitions and interpretation differ.

Relevance of AVM content

This first criterion to emerge from the analysis is relevance to users based on their profiles, preferences and consumption habits. As one of the interviewees argued, 'it's all about providing the user with the most relevant experience' (Platform 4, 2021), or, in other words, 'it's basically about providing the user with the content they want to see and what's relevant based on what they've looked at historically' (Platform 6, 2021).

To measure 'relevance', platform organisations such as Netflix commonly combine data from users' interactions with their services (like viewing history, personal ratings and personal preferences) with more granular information about their consumption habits, including when, how long and on which device users

were watching certain content on the organisation's app, without using demographic data (Platforms 9 and 10, 2021; see also Netflix, 2021). To then refine user profiles, collaborative filtering is used to infer preferences at an aggregate level, combining the viewing data of one user with aggregated, anonymous data from other users/members/subscribers with similar tastes and preferences on the same service (Netflix, 2021; Raimond and Basilico, 2016).

Depending on the sophistication of the recommendation systems of organisations and their broad approach to personalisation strategies, all these pieces of data may be used as inputs that each organisation can then process in their algorithms, adapting their UI design and recommendation systems to individual users. In the case of Netflix, the use of the relevance criterion was primarily justified by interviewees in relation to their customer-centric approach and their imperative to serve content that users might want and like. At the same time, behind this understanding of 'relevance' is the underlying commercial interest of a SVOD service such as Netflix which is to keep their membership base and increase subscriptions (Platform 1, 2020). As one research participant observed:

> One of the things that people appreciate from our service is – and a lot of the time they are not aware of it – the skill of its very sophisticated systems of recommendation to help to surface content we think that you, as a member and based on what you already watched, are going to want to see. What we find is that in general this leads people to discovering more stuff that they are enthusiastic about watching, and that keeps them watching and keeps them subscribing and that is fundamentally important to our business model. (Platform 1, 2020).

Prioritising based on how relevant certain content and/or a service is to the users also reflects the organisational interest in increasing users' traffic and their revenues per subscription which are the primary revenue sources for Netflix. Their 'carefully crafted recommendation system' aimed at serving 'relevant' content to their users was seen as a key means to ensure customer satisfaction and retention (Platform 1, 2020). Any measures to undermine the control that Netflix has over determining what is relevant and should be made more prominent on the home screen were perceived as a problematic intrusion (Platform 1, 2020).

Popularity of AVM content

A second criterion is popularity, defined as most-watched content either at the individual user level, or at aggregate level on a country or global basis across the multiple markets covered by the service provider. Thus, popularity is measured on the basis of a combination of metrics, comprising users' aggregated viewing data, viewing figures of content and programmes at global, regional and national levels, and individual users' preferences and viewing habits – but, according to the research participants, no demographic data is used (Platforms 9 and 10, 2021). In the case of Netflix, the UI features different catalogue rows that use the

popularity criterion to rank and prioritise individual pieces of content, showing rows like 'Popular on Netflix' or 'Trending Now,' but also a national popularity evaluation in rows like 'Top 10 in Country X Today'.

The combination of international and national viewing figures as prominence criteria is part of Netflix's broader organisational strategies and branding efforts. The aim is to address the challenges that cultural specificities present to a global SVOD service: offering a service that appeals to both local and global audiences. The use and interpretation of the popularity criterion is linked to arguments about self-referential online filter bubbles but is justified by Netflix and other organisations as a way to respond to users' interests and make 'content from anywhere' appealing 'for everywhere' (Platform 2, 2021).

These localised and personalised prioritisation techniques are soft but powerful nudges that have a significant impact on access to and consumption of content. As simplistically described by one of the interviewees: 'the 'Top 10' has been quite clever in that regard, in the sense of steering people towards popular and trending content, but also not making people feel obligated to watch it' (Platform 1, 2020). Indeed, after the first roll-out in a selected sample of countries – which included the UK – this strategy appeared to be a successful way to guide and nudge users through the catalogue, predicting what content they might be likely to watch (Platform 1, 2020):

> After the launch [of the Top 10 row in a sample of countries] we found that our members love being given some guidance about, you know, what other people are watching. It has not meant that everyone ended up watching the same ten things, but people are less overwhelmed by the volume of content that it is available, because that is really the biggest challenge. When you have thousands of titles on the service, how do you help people to find what they think they would like to watch? … Because [that is] one of the reasons why people are likely to cancel. … So the really big challenge – and the secret ingredient if you like – of the business, is how do you connect the right people with the right titles? (Platform 1, 2020)

In other words, to most accurately depict viewing trends and change prioritisations and the UI design accordingly, the popularity criterion takes into account individual users' preferences as well as local and global patterns (see also Raimond & Basilico, 2016). On the one hand, the platforms' aim is to make their 'algorithms work well around the world is to ensure that we can capture local variations in taste', while, on the other, it is to leverage their global catalogues and user databases, combining the regional and national models into a global model that improves their entire recommendation system and can be used for countries where they might not have sufficient members and related user information (Raimond and Basilico, 2016).

Quality of AVM content

Another key criterion for prioritising content is 'quality', defined as (a) high quality based on external ratings, professional reviews, and internationally recognised prizes and awards, such as the Oscars, the Lion of Venice,

Cannes' Palme D'Or, etc.; **and (b) a vaguely conceptualised notion seen as a means to serve public interest objectives while fulfilling their driving imperative of 'finding the best stories and the highest quality content from anywhere that users can watch everywhere'** (Platform 9, 2021).

As further explained by one of the interviewees (Platform 9, 2021), the first interpretation of quality is easily recognisable on Netflix's UI as they have created dedicated catalogue rows such as 'Award-winning TV shows,' or 'Critically acclaimed films', and in certain cases even more specific rows that tend to appear around the time of a specific festival, such as a 'Venice Film Festival' row. These rows are then ranked, and their listing varies over time.

The second interpretation of the quality criterion refers to the justification that three interviewees gave for their driving imperative of reaching audiences with the 'best stories' and 'highest quality content' from all around the world. When prompted to explain, one of the research participants argued that one way of fulfilling a public interest objective as a by-product of their commercial interests is to make available and prioritise high quality content that reflects multiple viewpoints and diverse genres (Platform 1, 2020). The other two research participants highlighted that in selecting and prioritising high quality content, their organisation is also fulfilling broader public interest objectives since they are able to serve the best and most enjoyable viewing experiences to their users (Platforms 10 and 11, 2021).

While, this aspect will be further discussed in Chapter 7 (section 7.3), it suggests that public interest considerations concern platform organisations as well, even though they rely solely on vaguely conceptualised notions of public interest objectives such as diversity, quality and customer interests.

> Having a number of different outlets producing and making available high quality content, reflecting multiple different viewpoints and competing types of genres would be the highest quality of output possible … and that is how I think about public interest. (Platform 1, 2020)

Recency of AVM content

Another criterion widely used by Netflix is **'recency',** which is defined differently from the 'freshness' of PSM (section 5.3.2.1). Recency has here a dual meaning, defined as: **(a) the newness of the content itself, which translates into making more prominent and discoverable on the service's UI recently produced or acquired programmes; and (b) recency of users' access, which translates into making more prominent on the service's and device's UI and homepages those content providers or programmes that were most recently accessed, watched or engaged with in some form by the user**.

When recency is defined in terms of a newly produced or newly acquired programme on a specific service, this can translate into a specific row, like 'New on Netflix,' a higher ranking on the listing within each catalogue row, or even dedicated promotional banners that are promoted at the top of the UI (Platform 9, 2021). The

banner is commonly used by Netflix to launch and advertise its own productions to boost the programme and grab viewers' attention, feeding into the organisation's broader marketing strategies (Chapter 6, section 6.2.3).

When recency is based on user engagement metrics, this translates into making more prominent content that has been recently accessed and watched by the user. An example can be found in the catalogue row 'Continue Watching …', which usually appears as first, second or third row on the homepage, presenting all the content that the user has started but not finished (whether a film or a TV show), ranked from the most to the least recent, to nudge the user to pick one of them up again and continue watching it.

Diversity of AVM content

Last, but not least, another criterion that according to Netflix's interviewees organically drives their prioritisation measures, especially their recommendation system and discovery functions, is 'diversity.' As explained by one of the research participants, 'diversity is completely ingrained in the algorithms' (Platform 9, 2021). Interviewees claimed that Netflix starts from the assumption that individuals' tastes are varied, thus, there is an incentive for the organisation to diversify the UI by design and through intentional nudges, such as by throwing in 'oddballs' from time to time to test whether users might be interested in watching a different type of content (Platform 9, 2021). Netflix's 'essence of diversity,' as one of the interviewees described it, refers to the fact that, thanks to their recommendation system and prioritisation strategies, Netflix can 'show a Korean drama or a series about an underrepresented community to users worldwide, allowing stories that might have not been seen once, can now be popular around the world' (Platform 9, 2021).

This links back to Netflix's belief that 'content from anywhere could be loved everywhere' (Platform 9, 2021), which was repeated several times during the interview. This interpretation of diversity appears to be associated with cultural diversity, and the criterion is operationalised in terms of diversity of content and sources which, through the recommendation system, can also lead to diversity of exposure (Platform 9, 2021). Finally, one of the research participants mentioned that they have been experimenting with 'explore algorithms,' which are randomised algorithms that curate content in a different way (e.g. different images for the same titles are shown to different users) to test whether certain nudges can be more or less effective for certain users. It was unclear whether these explore algorithms are similar to the BBC's public interest algorithms or EBU's diversified algorithms, but they were presented as an experimental form of positive nudges that could constitute an alternative to the classic recommender systems (Chapter 8, section 8.3.1.1).

5.3.2.3. Hybrid Subscription- and Transaction-based VOD: Amazon Prime Video

Interviewees from Amazon emphasised that the criteria used to curate and prioritise content are similar on both Fire TV (section 5.3.1.2.) and their Amazon Prime Video as they comprise:

a) **Relevance** of AVM content;

b) **Popularity** of AVM content;

Relevance of AVM content

Similar to Fire TV and Netflix, **relevance refers to the content that is perceived as 'relevant' or 'interesting' for the customers based on their preferences, consumption choices and viewing history**. The idea of 'customer interests' rather than normative public interest was therefore discursively used to justify their content prioritisation measures and personalisation strategies on Prime Video:

> Obviously, the way we present content depends on some personalisation on the UI, so the customer will see a personalised UI that relates to the main interest you know of the customer, and then there are certain factors that come into play, among them, there is likely to be the viewing history and something similar. Obviously, we want to find content that the majority of our customers is interested in. (Platform 4, 2020).

The fact that prioritised and personalised services are anchored on customer data-driven profiles rather than on pure 'content-driven agendas' (Platform 4, 2021) was presented as an 'obvious' fact and 'a general practice among industry' that has proven to be successful in predicting customers' decisions and behaviours in a way that 'assumes what they like' (Platform 4, 2021). Profiling users and customers is portrayed as instrumental to serve the best viewing experience, to provide what is 'relevant' and 'important' for them. On the other hand, introducing regulatory requirements that might modify these practices is portrayed as being against customers' best interests since it is a way to 'push content that users don't want to watch as that probably is the wrong content for them' (Platform 6, 2021):

> It will always come back down to what the customers want, the customers' attitudes and customers' content. And we always say that rather than having regulation, it should be about the content that is the most important, and what customers want to see. (Platform 4, 2020)

This lack of a 'content-driven agenda' was used discursively to justify the lack of normative criteria informing their prioritisation measures. Even though interviewees argued that their service intends to provide access to different sources and content and that 'quality' is an important factor in their prioritisation processes, at the end of the day, it was more about serving customers' interests and recommending what is perceived to be 'relevant' based on customers' profiles and consumption habits (e.g. Platform 4, 2020; Platform 6, 2021):

> In terms of how we decide what to offer to customers, we basically have a customer-centric approach, we think about what the customer wants, and then we work backwards from there. So it is about providing quality content that is also relevant for the customers. (Platform 4, 2020)

> We are not looking at the source of the information, but it is more about the specific content the customers are interested in. So we would always support that customer can get access to different sources, and then obviously if they get familiar with other sources and they might want to stick to it, that is fine, or if they want to look for something else, that's also fine. (Platform 6, 2021)

Popularity of AVM content

Popularity emerged as another criterion used to prioritise content on the UI through recommendation systems and dedicated collections. In this case, popularity is measured not only on the basis of individual users, but on preferences and viewing choices of users at aggregate level and on external ratings services such as IMDb, a worldwide rating and review system owned by Amazon[82]:

> It is also worth saying that it is not only the users' individual actions that influence what is recommended, but it is also users' actions on an aggregate level. So, we have, for example, categories like 'Top rated' where if a lot of users have said that a programme looks good, it will then appear in that category. So it is not just about focusing on the one user, but it is also about the broader customers we have. (Platform 7, 2021)

This is reflected, for instance, in some of the dedicated catalogue rows like 'Included with Prime: popular movies', which ranks movies included in Prime's subscription, granting a more or less prominent location on a dedicated row, or in the collection 'IMDb TV: popular movies and TV – free with ads' which appears later in the catalogue, and evaluates popularity on the basis of IMDb's ranking. My analysis suggests that popularity is an important criterion, but that it is also functional for the business model of Prime Video and the organisational interest of capitalising on subscriptions or advertising revenues.

5.4. Concluding Remarks

The first step to open up the black box of prominence is to investigate its technical means and the socio-technical criteria used by organisations in prioritising content on their devices and services: this was the aim of this chapter. This first part of the empirical analysis has therefore outlined the different technical means used to prioritise services and content on digital media platforms and what the main criteria informing them are. This investigation of prioritisation processes at the technical level uncovered interesting insights into the socio-technical aspects of this form of platform governance, in particular how different and competing organisational interests are transposed into various kinds of prioritisation measures, and also unpacked the

[82] IMDb (an acronym for Internet Movie Database) is an online database of information related to films, television programmes, home videos, video games, and streaming content online – including cast, production crew and personal biographies, plot summaries, trivia, ratings, and fan and critical reviews. An additional fan feature, message boards, was abandoned in February 2017. Originally a fan-operated website, the database is now owned and operated by IMDb.com, Inc., a subsidiary of Amazon, after its acquisition in 1998.

distribution of control over this form of 'algorithmic' gatekeeping power (Napoli, 2019) (Chapter 3, section 3.2.1).

Firstly, the analysis shows that control over prioritisation does not lie solely with platform organisations but is fragmented among different industry actors. Control significantly depends on the technical limitations of hardware and software architecture of the devices and services, as well as on levels of access to user data and content metadata. At the hardware level, control primarily lies with its manufacturers. However, where technology manufacturers do not use proprietary OS systems, their control is shared with OS providers, which are often the same platform companies that are expanding into this segment of the value chain, such as Google Alphabet and Apple. AVM services providers, however, have no control over the technical strategies used to prioritise content on internet-connected devices and their UIs.

Within the 'walled garden' environments of TV apps, the situation is the opposite: technology manufacturers have no control over prominence and discoverability, nor can they influence users' journeys to content – in fact, they have no insights into such journeys. Thus, even if AVM service providers have little influence over and little insight into how prioritisation can nudge users into their apps, they can use a wide variety of means to prioritise content within their own services. The combination of this wide range of technical means – recommender systems, search and browsing functions, editorially curated and algorithm-driven catalogues or collections, etc. – allows far subtler and more sophisticated means to guide user choices (Table 5.1). Profiling and targeting techniques can be more precise and effective than those used by technology manufacturers, thanks to a greater availability and richness of user data and content metadata.

How then do these gatekeeping forms relate to organisations' own interests and their institutional arrangements? Moving beyond the technological complexities and specificities of different systems, I suggest that we are not simply dealing with algorithmic black boxes, but with a set of socio-technical criteria, content policies and technical means that are related to organisational interests and objectives. These criteria and related prioritisation measures are therefore key factors influencing prominence and discoverability online.

The analysis shows that a mix of commercial and vaguely defined public interest considerations feed into the socio-technical criteria described by the interviewees (Tables 5.2 and 5.3). This mix differed depending on the organisation and, in certain instances, the same notions were defined and operationalised differently in practice. This was especially evident when claimed public interest objectives were deeply entangled with the perceived interests of customers and audiences and the private interests of each organisation. For instance, this is clearly shown in the case of the criterion of 'relevance' which was the most commonly used criterion, mentioned by all of the organisations interviewed.

Relevance is discursively associated with the intent to respond to customer demand and interests by surfacing, prioritising and recommending content that their users/audiences/customers 'want'. I also suggest that this is a way to discursively justify and normalise the constant monitoring, profiling and targeting techniques that all

these organisations use to curate content. This argument emerged particularly strongly in the interviews with representatives of platform organisations that did not start their core services within the AVM industry. These organisations have come into the AVM market with a perspective that differs both from organisations that have been in the sector for far longer such as commercial broadcasters or PSM, and from new market actors whose core business offer is producing and distributing AVM content, such as Netflix. Indeed, while Amazon Video's representatives emphasised that, although they value diversity and quality as criteria for the prioritisation of content, these are subordinated to those of relevance and popularity, as the latter are arguably closer to their 'customer-centric approach' (Platform 4, 2020).

However, these customer interest-driven criteria are underpinned by a market logic whereby these companies use content prioritisation measures to maintain and, ideally, increase their subscription numbers and revenue. Indeed, their vision of 'a customer-centric approach' ensures their services and devices appeal to a greater number of users across multiple markets, especially when both relevance and popularity are used as driving criteria. This was particularly evident in the case of some of the hardware solutions developed by manufacturers, like the 'red button' for remote controls that privileges popular services based on viewing and market share data across multiple markets in order to maximise the revenues on their hardware products. This commercially driven criterion also unduly discriminates against and disadvantages local and national providers that do not have the power to negotiate a dedicated button (Parcu et al., 2022: 66–67).

Moreover, the challenge of finding a compromise between relevance and popularity, on the one hand, and normative criteria and public interest considerations around diversity, quality and public value, on the other, emerged in the cases of Netflix and PSM organisations. The normative criteria in both cases appeared to be vaguely defined and it is unclear how they are operationalised in practice through the technical means that these organisations use. Furthermore, the tensions inherent in PSM remits and the distinctiveness that is expected of their services (Ofcom 1, 2019) emerged when their views and their understanding of criteria like relevance and public service-value were examined.

In the case of the BBC, for instance, relevance seemed to be understood as something in between what is 'relevant' to an individual user, but also what should be relevant to their collective audience, thus highlighting the fundamental contradiction that a PSM confronts in meeting its public interest objectives of universality and diversity, while at the same time adapting its offer and services to the increasingly personalised and narrowcasting viewing experiences that characterise online media consumption. In the case of ITV, it was unclear how a strict understanding of public service-value content is combined with a potentially broader definition of the same category that includes popular entertainment programmes. This combination was presented as a solution that better serves UK citizens and their interests and does not instrumentalise the fake notion of 'relevance' and the masked understanding of 'customers' interests' attributed to the platform organisations.

The analysis show that, despite using some public interest criteria in their prioritisation processes, PSM do not have a truly distinctive 'public service' approach to prioritisation in their own UIs. If prioritisation is used in similar ways by both commercial and public services organisations, we are still far from being able to burst the self-referential filter bubbles and ensure a diverse and pluralist media environment. However, BBC R&D and other European PSM are experimenting with alternative approaches to recommendation systems that are closer to their public interest mission: it is the beginning of the conversation, but we have yet to see how it will unfold.

In conclusion, within this institutionalised framework control over prioritisation is fragmented, but vertically integrated platform organisations are nonetheless able to retain a strong gatekeeping role at this level of governance. Prioritisation remains in this sense a battle for control over users' journeys to content in this broader governance system. Prioritisation is a means to that end, and organisations' private interests are therefore deeply embedded in prioritisation measures and the choice architecture of digital media platform systems. As a result, beyond some vaguely defined public interest criteria, such as quality and diversity, the criteria used by both public and commercial organisations tend to privilege the popular, trendy and recent content will attract and retain audiences and subscribers in the largest possible numbers.

To further unpack the black box of prominence, we need to understand how these technical aspects of digital media platform governance relate to broader market dynamics, power imbalances and organisational forces by moving to the second part of my empirical analysis: an investigation of prioritisation processes at the business and commercial level.

Chapter 6

Trading Value: Prioritisation as Site of Strategic Commercial Negotiation

6.1. Introduction

Chapter 5 investigated prioritisation processes at a technical level, uncovering a mix of commercial, private and vaguely defined public interest criteria used to shape the choice architecture of digital media platforms. As suggested in the previous chapter, these socio-technical criteria are closely related to organisational interests and strategies. Thus, this second part of the analysis complements the reflection on choice architecture by zooming in on those interests and the drivers for prioritisation measures and examining the organisations' business strategies and commercial negotiations that also influence these processes. In particular, this chapter responds to the following empirical sub-research questions:

a) *What are the business strategies and commercial negotiations used to influence content prioritisations online on digital media platforms?*

b) *What are the perceived interests and drivers behind such strategies?*

This dimensions of the analysis is important as it shows how prominence and discoverability are contested sites of commercial negotiation: a strategic and valuable asset over which organisations strive to gain control. In today's internet-distributed media environment, AVM service providers regularly engage in commercial negotiations with technology manufacturers, distributors and platform organisations to achieve prominence, easy discovery and higher visibility of their services on devices and interfaces.

With limited interfaces and increasing competition, these negotiations are depicted as a 'zero-sum game' (Pay-TV operator 1, 2019), where some AVM services gain the advantage of being prominent, and others are negatively discriminated against. However, the impacts of these positive discriminations are difficult to assess, especially discriminations that occur in a competitive industry and through complex technological architecture.

Economic arguments related to changes in market structures and competitive dynamics were at the core of the proposed revision of the EPG Code (Chapter 2). As outlined by Ofcom (Ofcom, 2018a) and supporting studies (see Expert Media Partners, 2018; Mediatique, 2020; MTM and Ofcom, 2019), since the introduction of the EPG rules (Chapter 2), the market has changed radically and routes to content have multiplied, thus reducing EPGs' importance and the impact they have on viewers' access to content and rendering them secondary, if not obsolete, especially for younger viewers.

The situation has changed, especially for PSM organisations because their EPG prominence benefits are deemed to be irrelevant in the online world. As highlighted by a PSM representative, 'in the old days of broadcast TV, things were relatively simple, there was regulation around how our content is distributed on different platforms, and there were not a huge number of variables to be negotiated between us and our distributors: we distributed our content through the channel, the platforms took that channel, and then they put up the EPG, which was within an order that was regulated.' (PSM 3, 2019).

Online, without such regulatory benefits, BBC iPlayer – or All4 or ITV Hub – is just one of the thousands of apps competing for a prominence spot on the different UIs. And to compete, the apps also have to engage in lengthy negotiation, involving a 'huge number of variables', such as payments for placement as a pre-installed default app or for a more prominent position on the homepage of the service's UI, sponsorship and promotional agreements, but also trade-offs in non-monetary benefits, such as data sharing deals for content metadata, in-app viewing data and general data on the users' journey to content (see also MTM and Ofcom, 2019: 27–29).

In alignment with my conceptual framework and to further examine the commercial negotiations of content prioritisation, this chapter firstly outlines the main strategies used by the industry actors to influence the prominence of their services on the devices and UIs. Secondly, I investigate the underlying interests and drivers behind those strategies, based on the arguments of the industry representatives interviewed.

By means of this investigation, this second part of the analysis demonstrates that current industry practices result in prominence being used as a trade-off in distribution deals and commercial negotiations. These processes are shown to be heavily influenced by the relations between, on the one hand, technology manufacturers and platform organisations that hold a gatekeeper position, and, on the other, local, national and international AVM services, including PSM and other, wholly commercial AVM service providers.

This commercial and institutional aspect of content prioritisation processes is also shown to be tightly coupled to the underlying industry dynamics and market structures, with tensions emerging as each organisation strives to increase its bargaining power and gain more control over access to content and users. Thus, I suggest that in the absence of regulation, prominence becomes a contested site of strategic negotiations, where public interest objectives are rarely taken into account.

6.2. All Apps Are Equal, But Some Are More Equal Than Others

Without the creation of new prominence rules online, prominence regimes are shown in this section to be created ad hoc by industry actors and influenced by commercial negotiations over prioritisation. The most common strategies used as leverage in these negotiations are: distribution; vertical integration as expansion; marketing and advertising; and data.

6.2.1. Distribution Strategies: Trading Prominence, but Who Should Pay?

Prominence on connected TVs' UIs is often a contract clause within broader distribution deals between AVM service providers and distributors, whether they are technology manufacturers, platform organisations or more traditional pay-TV operators. As explained by a pay-TV operator representative, while 'in terms of linear EPG we have the policy that Ofcom approved, in terms of the commercial UI, we have a commercial relationship with contracts that include also the PSBs. … I can't disclose the details of those commercial relationships, but they do concern how content is made available and discoverable' (Pay-TV operator 1, 2019).

Whether an app is prominently displayed on a connected TV's UI is not only because of the underlying technological structure (Chapter 5), but also because it has been negotiated and agreed as part of broader distribution deals. As described by a platform representative, it is a 'general practice' for content providers to negotiate prominence as part of distribution deals and to pay to have their services featured in certain areas of the UI or specifically recommended to the users:

> It is a general practice on all sides of distribution negotiations that you would always request, as part of the deal, prominence for your service, or you want to have your content placed in a certain area of the user interface. (Platform 4, 2020)

Despite being common, since prominence is perceived as a 'zero-sum game' (Pay-TV operator 1, 2019) with limited prominent spaces and a growing number of industry actors wanting them, issues often arise among interested industry actors in these negotiations. These problems are closely related to market structures, competition, and power imbalances among different industry actors. The result of these kinds of negotiation is often controversial. In certain cases, content can also be withheld if prominence is not offered (Platform 4, 2020). What 'fair and appropriate' prominence looks like is a contentious aspect of these deals, which requires compromises that not all stakeholders are willing to make:

> In some cases those negotiations end with a decision that a content provider will not provide you with the content at all, if they cannot get the placement they want. But, this is not limited to PSBs, commercial broadcasters also do this, and obviously, this could also be the other way around too when services like ours negotiate with device manufacturers. So placement of content was always part of commercial discussions. (Platform 4, 2020)

As repeatedly argued by UK PSM in their responses to Ofcom's public consultation, achieving prominence in line with their expectations and conditions of distribution can be difficult (e.g. BBC, 2018a, 2018b; Channel 4, 2018; ITV, 2018, 2022). Content providers - PSM in particular - often disagree with technology manufacturers and platforms on what is 'fair' and 'appropriate' prominence, and what it looks like on different services and devices. In certain cases deals have delivered rather unsatisfactory results where the smaller PSM, channels 4

and 5, 'continued to be pushed further and further down the list' or, in the case of Channel 5, do not even make it on the first page (Channel 4, 2021: 25).

Withholding the availability of their own apps or services can be the last resource that PSM have in case of significant disagreements. All4's app, for instance, was not available on the 2020 sets of LG TVs, because, as publicly highlighted by Channel 4, 'the level of prominence offered by LG was so poor that we could not agree a deal' (Channel 4, 2021: 25). However, such a solution is detrimental for the broadcasters as well. Compromises will therefore be needed from both sides.

As we move towards more complex choice architecture, there are 'changing expectations' of what prominence and discoverability are (Pay-TV operator 1, 2019; PSM 2, 2019) and how they can be achieved. In simpler cases – such as prominence on a smart TV's homepage – distribution deals need to include an agreement on 'a proportion of slots that represent fair prominence' for the providers, whether that is a percentage of prominent slots, and then those slots are populated in an iterative and personalised way thanks to the metadata that feeds the underlying means of prioritisation (PSM 2, 2019).

However, **these deals become more complex as we move towards ever more personalised and disaggregated services where prioritisation is influenced not only by the order of apps, but by other technical means such as text and voice searches, recommendation systems, discovery areas, etc.** (PSM 2 and 3, 2019). In these cases, determining what prominence appears as is 'one of the biggest and thorniest issues' to negotiate (PSM 12, 2020). This is where content providers themselves struggle to translate their idea of prominence into something that can be successfully negotiated through distribution deals. Reaching an agreement or even a shared understanding of how appropriate prominence appears on different devices and services – especially those that are personalised – raises numerous questions (PSM 12, 2020). And each organisation has different answers:

> The biggest and thorniest issue is: what does [prominence] look like? One thing is about prominence out of the box when your app is already downloaded, but then there are these sort of promotional areas and content aggregation areas, do we get a rail in there? Do we get certain amounts of content promoted in those areas? What does prominence actually look like? How does prominence translate into these content aggregation areas or how does that work across devices? It's quite easy in an EPG world, you're just number four on the on the EPG. There is [sic] problems in the digital space, what does that actually look like? So not only have you got to … get companies to pick that up, but you have to figure out how you want that reflected, and then how you monitor that as well, especially with areas that are personalised. (PSM 12, 2020)
>
> The challenges are a multitude, like the integration of linear and on-demand, the discoverability of content that customers value, whether that is free or paid for, the zero-sum

> game nature of this, and the changing expectations that come with the discovery of content, where that is through a visual UI or voice or whatever. (Pay-TV operator 1, 2019).

The opaquest scenarios where prominence is even harder to negotiate – and even to understand – concern voice searches and voice assistants (Chapter 5, section 5.2). In these cases, competition over who gets to be 'the top search result' is fiercer. More basic deals concern the responses to direct voice search: the BBC, for instance, has reached agreement with Amazon Echo and Google Home that when a user asks for a specific BBC iPlayer programme, it will be automatically directed to those services (PSM 3, 2019).

More issues arise around open questions or more serendipitous searches, when users do not exactly know what they are looking for and manufacturers and platforms can exercise more influence on their choices through prominence. For instance, when a user simply asks: 'Alexa, play me the news', what news providers is prioritised and on the basis of which criteria? These processes lack transparency, and they raise questions on whether prioritisation can be reliably measured or even governed through regulation (Chapter 7). While content providers still struggle to fully understand these processes, manufacturers and platforms have access to data that allow them to see the bigger picture (Chapter 6, section 6.2.4):

> When voice control comes into the TV environment through a smart speaker into a smart TV for instance, because we are back into the world of search, we are trying to make sure that *our* content comes out at the top of the list. So, depending on which voice assistant device the manufacturer integrates with – and sometimes they have their own like Samsung or Apple – we are negotiating the best position for *us* in search results across all of those devices. (PSM 3, 2019)

Furthermore, for national AVM service providers, like PSM, negotiating prominence online has become more difficult and complicated than in the past due to the entry into this market of global corporations. As argued by a PSM research participant, striking prominence deals is particularly challenging when negotiations are with platform organisations like Amazon, Google Alphabet and Apple. As argued by both PSM and pay-TV operator representatives (e.g. PSM 6, 2019; pay-TV operator 1, 2019), a 'fundamental strategic disadvantage' for PSM is that 'they are not scale players, they are by definition market national players, so the economics of distribution to direct customers are much more challenging for them than Netflix, or Disney, or Amazon' (Pay-TV operator 1, 2019).

For both legacy media distributors such as Sky and AVM service providers such as PSM, there is a perceived lack of bargaining power when negotiating prominence with companies such as Amazon, Google Alphabet and Apple: while Sky faces more competition in the market since these companies have established themselves as key gatekeepers of online content, PSM are increasingly dependent on the intermediary services offered by these companies for the distribution, curation and prioritisation of their content:

> All three of them are: (a) incredibly big; (b) we are incredibly reliant on them, so we have to find a way of working with them; but (c) they increasingly are trying to get into the area where we are in and squeezing us out. (PSM 6, 2019)

> We are constantly trying to navigate up against a lot of the content creators who want to go directly to customers and not through our aggregation services, and the increasing number of platforms – be it Apple, Amazon or Facebook – now operating at a global scale, can actually innovate around discoverability in a way that challenges us. (Pay-TV operator 1, 2019).

Prominence is treated as a valuable asset, but – to my interviewees – it seems to be traded in an uneven field. For content providers prominence is 'the area of greatest concerns, because the TV UI is a valuable space, a monetisable space, a marketing tool and a revenue stream' that is often controlled by other actors (PSM 4, 2019). Representatives from commercial broadcasters and PSM organisations repeatedly emphasised that the most disadvantaged players are national and local ones since they do not have the scale, resources and bargaining power to negotiate with global technology manufacturers or to compete with international platform organisations offering highly popular SVOD services. Thus, if greater prominence is granted to the highest bidder, PSM that cannot pay for it or smaller broadcasters that cannot afford to compete have very few chances to survive the 'SVOD bloodbath' (PSM 3, 2019):

> If you are Samsung and your HQ is in Korea, your job is to maximise your revenues, and you would do so by making global deals with Netflix, Amazon and YouTube, and maybe some others. And you would say: 'I put your services on every single Samsung television in the world, and it will be prominent, and in return, you give me X hundred million dollars.' And I do not know what 'X' is, but that is how it works. So Samsung would do that deal and would say to the UI designer, 'We have done [deals] with Netflix, Amazon, YouTube, Disney, Apple – that is five – so if we want there to be six spaces on the front space of the next year Samsung television, we would sell the seventh space for the highest possible sum.' … So our job is to get our app as prominent as possible on TV devices, and currently on average, we are probably number three, because most of the TV manufacturers have done these global deals, but so far we have managed to be on the front page, and we do not pay them because we are a public service. (PSM 4, 2019)

As admitted by the interviewee in the quote above, despite difficulties with current distribution strategies and related prioritisation deals, UK PSM have until recently been able to secure some form of prominence, at least on television sets distributed in the UK (see also Mediatique, 2020; MTM and Ofcom, 2019; Ofcom, 2018a). However, while platforms and pay-TV operators argue that 'the PSM themselves all retain a strong market position and therefore significant bargaining power, meaning they are able to require prominent positioning

across the different elements of their service as part of normal commercial negotiations' (Sky UK, 2018a: 15), the situation is rapidly changing in the UK.

With the Government's threats of Channel 4 privatisation (e.g. DCMS, 2022b, 2022d; Morris, 2022; Waterson, 2022b) and reductions to the BBC's funding (e.g. House of Lords, 2022a; Paton, 2020; Waterson, 2022a) in 2022, combined with declining audience and viewing shares and market saturation of the online AVM space, the diversity and strength of the UK PSM ecosystem is deemed to be at risk. In this scenario, negotiating prominence is expected to become harder, especially for the commercially funded PSM, which increasingly fear for their future sustainability. As argued by a PSM representatives, 'we are going to see the manufacturers drop Channel 4 from their front page because they just do not get enough viewing compared to some of the SVOD platforms, and then they will drop ITV, and they will drop us last. Even though we are a long way from that, yet it is going to get more difficult in the future if there is an SVOD bloodbath' (PSM 3, 2019).

It therefore emerges that scale and resources are important means of leveraging prominence in distribution deals. If even established and national PSM are struggling, smaller and local providers might not make it to the screen as they cannot negotiate their prominence. PSM representatives repeatedly emphasised this lack of an even playing field and the fact that 'unfortunately not all apps are equal' (PSM 6, 2019). The version of 'inclusion' or 'diversity' presented by technology manufacturers and platform organisations is, in these PSM representatives' view, intrinsically biased and discriminatory against national and local players. Prioritisation is therefore not neutral because economic and commercial incentives drive distribution deals that influence what is made more or less prominent to the final users:

> What you find over time is that certain apps do get more prominence and have a better curated experience, because they have a version of inclusion that they can buy, because they line up 120 countries, so that when a platform arrives in the UK and pre-launches a service, already it is biased towards a couple of very, very prominent SVOD services that are present on all kind of services provided by that platform, so the playing field is not level. (PSM 6, 2019).

6.2.2. Vertical Integration: Unfair Competition in the Value Chain

A second vantage point to secure prominence can be achieved through vertical integration strategies. In the AVM industry, vertical integration occurs when a company takes ownership and control of two or more key operational stages, such as owning different businesses in the same production value and/or distribution chain, expanding downstream or upstream.

Examples of vertical integration are numerous in this sector, used by pay-TV operators, technology manufacturers and platform organisations. For instance, Amazon has been expanding in the internet-distributed AVM industry both on its distribution side – through its SVOD service, Amazon Prime Video, and

its streaming media devices, such as Fire TV sticks – but also on the production side, through its production company, Amazon Studios. Similarly, Google Alphabet has been vertically integrating in the AVM market starting with its acquisition of YouTube, and then expanding from software systems like Android TV, to hardware production through the launch of streaming media Chromecast devices and Google TV (see Fig. 6.1).

The expansion strategy can be used to increase platform organisations' control over key gateways to content, influencing access and curation of content – including prioritisation – on different service and device UIs. While gaining control over content prioritisation is not usually the central goal of this type of strategy, it can be used as a vantage point to exercise stronger control over prioritisation processes as well. As argued by a PSM representative, 'if you are somebody like Sky or Amazon, or somebody who has their own vertically integrated offer, then clearly you['ve] got incentives to want to put your own content there' (PSM 2, 2019).

PSM have often emphasised the 'powerful positions' that global players have acquired by vertically integrating from content creation to distribution, which allows these actors to also create 'powerful vertical relationships with other global players' (ITV, 2018: 20). As emphasised in ITV's response to Ofcom's public consultation, we are entering a new and different phase of competition in the AVM online market where actors like platforms have vertically expanded along the value chain assuming a strategic position on both the hardware and software levels that can ultimately influence how content circulates online (ITV, 2018: 20).

By strategically positioning themselves in this market, companies such as Amazon, Google Alphabet and Apple are deemed to 'have the ability to in large part dictate in future what content is surfaced and when to UK citizens and consumers' (ITV, 2018: 20). Forms of dependency and control are subtle, but still highly significant for the development of the industry.

This in turn gives such actors a competitive advantage in prominence negotiations, especially over PSM and other local AVM services, potentially exacerbating a lack of equal bargaining power between these industry actors (e.g. PSM 2 and 6, 2019). In particular, PSM representatives working in the distribution teams emphasised that Amazon and Google Alphabet have shown a rather 'aggressive' approach as they expand their services along the entire value chain (e.g. PSM 2 and 6, 2019). The main fear for AVM service providers is to have a distribution world in the UK 'where Google and Amazon will be pretty powerful over time,' favouring their own services and/or other global players, rather than accommodating commercial deals at national or local level (PSM 4, 2019):

> Amazon is definitely showing quite an aggressive technique, trying to own the entire stack, right up to the physical hardware to everything else. (PSM 6, 2019)
>
> Take Amazon, they have their Fire devices, which are growing really quickly, they are heavily subsidised, and they are very cheap, and they are also coming into TV through Alexa. If you look at Amazon Fire TV devices, it is fairly obvious that they are there to promote their own

> content: most of the screen is taken up by their content, similarly in a way to the old pay-TV platforms that are vertically integrated. Of course it makes sense, but that makes the negotiation a bit harder, and there will come a point where your content is very important in that initial phase for the platform, but the danger is that over time it will become less critical for them. We see similar dynamics for Apple. (PSM 2, 2019)

These trends are perceived to be a potential threat to the existence of a healthy and diverse media market. While Amazon is more focused on distribution and production, Google's strategy is centred around controlling the software and hardware infrastructures. As described by a PSM interviewee, 'Google is effectively bringing up its OS throughout the television chain,' thereby disrupting the 'horizontal market of the traditional television sets operators – so the Samsung, LG and Panasonics of this world with whom, for example, Freeview, Digital UK and other PSM have been negotiating for some time – and they are becoming increasingly integrated largely through Android' (PSM 4, 2019).

Competition issues may arise on hardware and software levels. In particular, having control over the latter is seen as a means to control softer and more intrusive nudges that drive content prioritisation online, since OS providers can shape online choice architecture and monitor users' behaviour more closely than the technology manufacturers that only provide hardware devices (Chapter 5). As outlined by a research participant, 'OS providers are the intelligent ones who are beginning to run the system and beginning to make decisions about whose content is where and who is surfaced and how' (PSM 4, 2019).

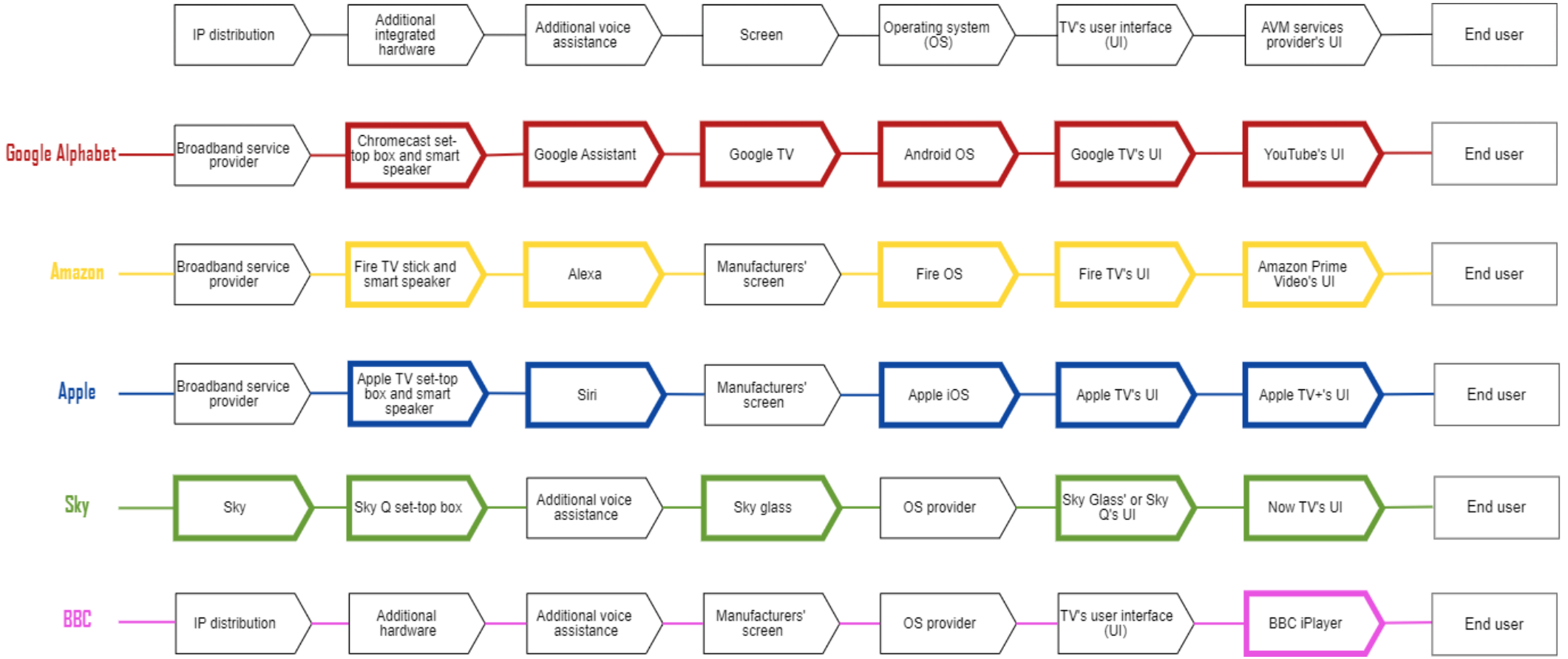
Furthermore, the OS sector is less open and competitive than the hardware system sector and it is – once again – dominated by platform organisations.[83] For instance, in the mobile phone ecosystem, [84] the Google Alphabet and Apple duopoly has created a stronghold over these two gateways that can have significant impacts on competition on different levels (Competition & Markets Authority, 2022). Impacts on content prioritisation processes that derive from such a gatekeeping position have also been raised in the 2019 BBC Sounds and Google Assistant case.[85]

[83] Depending on the types of device – whether it is mobile, tablets, personal computers], or TVs – the market shares of both Google Alphabet and Apple in the UK vary.

[84] Defined by the CMA as operating systems, app stores and web browsers for mobile services and devices (Competition & Markets Authority, 2022).

[85] This case refers to the BBC's removal of its podcasts from the Google Podcasts app in March 2019. It made the podcasts inaccessible to Google Assistant and other Google Home speakers due to a disagreement in their distribution deals (Clifton, 2019; Martin, 2019; Welch, 2019). One of the issues raised by the BBC in this case concerned access to data and prioritisation. The BBC stated that since the launch of Google Podcasts, Google Assistant had begun to direct people who searched for BBC podcasts or other audio content into the Google Podcasts service, rather than directing them to BBC Sounds or other third party services (Clifton, 2019). By doing so, thanks to the gatekeeping position held by the Google-owned smart speaker, Google was found to be exploiting third-party content to direct users to its own aggregation service.

Fig. 6.1. Illustration of end-to-end vertical integration examples in the AVM value chain of various companies[86]



Source: Author

[86] This illustration is based on Mazzoli and Tambini (2020), and it presents examples of how different companies have expanded along the value chain with services and products that enable them to control various segments of the value chain and influence users' journey to content. When a company offers a certain kind of product, the box is highlighted in a different colour. The standard box in black refer to the fact that a company has to rely on third-part services. For instance, Sky does not have a voice assistance service or a proprietary OS, thus, its Sky Glass and Sky Q work on Android OS. Apple and Amazon have not yet produced a proprietary TV screen, thus, their streaming media services such as Apple TV and Fire TV can be access through third-part manufacturers' screen from Samsung, LG or others.

To respond to this uneven playing field, PSM are looking at vertical integration strategies through their collaborative ventures, Freeview and Freesat.[87] However, even by vertically integrating with Freesat's connected devices and with the prominence of Freeview's services, PSM would not be able to gain the 'vertical control' they would hope for, since they still have to rely on other market actors to reach their audiences and distribute their content (PSM 4, 2019). Thus, PSM's bargaining power is perceived to be weak and the fear of falling off the screen and being invisible are still present:

> We have never got vertical control on Freeview either, it has always relied on the horizontal market and the power of the brands on Freeview. As Android and Amazon become stronger though, there is less incentive for them to have to negotiate collectively with Digital UK, they might want to try and negotiate individually, and some might get more prominence than others, rather than having a single bundle of PSB well positioned. … With something like Freesat, where we are vertically integrated, we are going to launch a new connected set-top box which will be our own, and that is a vertical development in a way. But the truth is that Freesat is quite a small, relatively to Freeview too. (PSM 4, 2019)

Unsurprisingly, the benefits that arguably derive from 'owning the entire stack' (PSM 6, 2019) and vertically expanding along the distribution value chain were not mentioned by the technology manufacturer interviewees or by those from the platform organisations. When I prompted representatives of the latter stakeholder group to respond to these claims, they justified the fact that they prioritise their own content and services as a form of 'self-preferencing' (Platforms 4 and 5, 2020). In this sense, they do not deny that through vertical integration strategies they gain greater control over prioritisation, curation and access to content, but they portrayed this as a common practice in the AVM distribution environment.

The platform organisation interviewees indeed argued that these practices can be justified objectively as a way to 'differentiate' your own services from others, and that they claimed that they do not purposely discriminate against other actors (Platform 4, 2020). Thus, while, on the one hand, they agree in principle that 'there should be no discrimination,' on the other, they argue that positive discrimination and forms of self-preferencing have always existed even before the advent of online media (Platform 4, 2020):

> Content providers have enough negotiation possibilities, and they are not being discriminated against … and in fact, we have not actually received a complaint by [a] third party yet that would say they feel discriminated [against] on the user interface. … What is actually surprising for us though is that the broadcasters are asking for that in negotiations, and then they turn

[87] Freesat is a collective venture between the BBC, ITV, Channel 4 and Channel 5, which has been operating for 12 years delivering linear TV and on-demand content over satellite. In 2020, Freesat launched a set-top-box, called Recordable 4K TV Box, which features a collection of catch-up and streaming apps such as BBC iPlayer, All4 and ITV Hub, as well as Netflix and YouTube. See: https://www.freesat.co.uk/?gclsrc=aw.ds&gclsrc=aw.ds

around, and go to the regulator complaining that they are being discriminated against. (Platform 4, 2020)

6.2.3. Marketing Strategies: Catching User Eyeballs And Maximising Advertising Revenue

A third organisational approach occurs when content prioritisation is part of marketing strategies used to promote own content and services and to sponsor third-party content and services on platforms. Marketing campaigns play an important role in shaping the UI of services and the prioritisation of certain content (ERGA, 2020; Parcu et al., 2022). For instance, in AVM services' UIs there are dedicated 'promotional areas' (PSM 1, 2019) where specific programmes are featured more prominently to the final user, usually in a top banner or in a specific and more prominent box on the homepage.

Content prioritisation marketing strategies may therefore be the result of sponsorship agreements with third-party content providers to promote a new series and/or a recently acquired title, or self-promotional strategies of vertically integrated companies (Platform 4, 2020; PSM 2, 2019). Dedicated banners at the top of the homepage of services such as Netflix and Amazon Prime Video are examples of prominence as a self-promotion measure:

> If you are somebody like Sky or Amazon, or somebody who has got their own vertically integrated offer, then clearly you [have] got incentives to put your own content there. Also, in both those examples, you may want to put not only your own content but other services that you would want to promote, through sponsorships deals for instance. (PSM 2, 2019)

However, not all industry actors consider this practice problematic. On the contrary, as argued by representatives of platform organisations and pay-TV operators, self-preferencing and self-promotional practices are considered not only 'acceptable' (Platform 4, 2020, Pay-TV 1, 2019), but also something that consumers might expect, since the practices differentiate the services from those of their competitors (Platform 4, 2020). From this perspective, using this form of positive discrimination is downplayed as just another innovative marketing tool used to respond to customer expectations and interests, which longer-standing players like pay-TV operators or cable operators have also used previously (Platform 4, 2020):

> We also think that the customer has a certain expectation when they sign up to our servers that they will also get our own content. … They signed up to our service and obviously they want to see our content. … There could be objective reasons that would allow services like ours to justify some form of self-preferencing. … Therefore we believe this is an objective reason to also display our offers more prominently because this is actually what also differentiates us from other services. … I would be interested if a broadcaster would also bring the same claims against Sky, because it has always been accepted that they can provide certain

> prominence to their own services and broadcast channels, and I have not been aware of such a big debate about them in the past. (Platform 4, 2020).

While marketing prominence and discoverability can be a way to give back 'some value' to subscribers to a particular paid service – since they are 'being reminded of what they are paying for' (PSM 6, 2020) – it becomes problematic from a competition perspective when vertically integrated companies use their position as gatekeepers to shape content prioritisation measures in their favour. In such cases, there is a thin line between 'acceptable' self-promotion and 'unfair competition':

> On the one hand some of that is acceptable as Sky has always promoted its content and if you are a Sky subscriber you probably get some value in being reminded of what you are paying for. But what is interesting when you talk about things like prominence is the extent to which they are able to tip into unfair competition. (PSM 6, 2020)

Using prominence as a marketing tool is not just a strategy used by platforms. Commercial PSM also mentioned that they strategically use prioritisation measures to 'have the right balance between personalisation and merchandising as well,' and to increase the distinctive value of their services (PSM 7, 2020). In two instances indicated by representatives of Channel 4 and ITV, the use of prominence in their marketing campaigns and self-promotional efforts was justified as a way to 'show breadth' (PSM 7, 2020) and increase diversity of exposure by 'forcing' and 'pushing' into promotional areas content that is 'of public good' (PSM 1, 2019). In such cases, 'marketing and editorial functions' seemed to be aligned in driving viewing based on the diversity and public value criteria discussed in Chapter 5.

Finally, promotional agreements are introduced by technology manufacturers as additional clauses that can be included in sponsorship or broader advertising deals. For instance, among the catalogue rows of Amazon Fire TV's UI (Chapter 5), there are 'sponsored' rows where content providers can be prioritised and more prominently shown if they have paid to be there. As explained in their help-pages, sponsored display on Fire TV is driven by cost-per-click, so providers pay only when customers click their advertised content, and they can choose their own bids and budget through the self-service advertising portal (Amazon Ads, 2022; Amazon Fire TV, 2022).

This advertising-based prominence was criticised by one of the PSM representatives who argued that, despite the efforts of Amazon's representatives to sell them this option as part of their distribution agreements, they have no certainty about the 'effectiveness' of these 'quite expensive' measures because data about the user navigational journey is not shared as part of these deals. Thus, while these prioritisation measures are marketed by Fire TV and technology manufacturers as a way to 'promote your app' (Amazon Fire TV, 2022) and 'get your content discovered' (Amazon Ads, 2022), information asymmetries associated with their functioning seem to undermine their perceived effectiveness in achieving such goals:

> If you have a promotional area outside of your app, we cannot see whether someone has clicked on an item, then come through to our app and watched it or not, because if that navigational journey has started outside the app, we cannot see where that has started. So, we do not know (a) if those promotions are happening, and (b) if they are happening, how effective they are. … For instance, Amazon tries to monetise some of those areas. So, the main slot on Fire TV that they are constantly trying to sell us, is quite expensive to get that level of advertising, and from what we can gauge, it is hard to tell if it is effective, because they will not allow us to see the navigation journey history. … We do not think it will provide that much more viewing, but we do not know, it is a mystery to us. (PSM 1, 2019)

6.2.4. Data Strategies: Trading Data to Refine Choice Architecture

The fourth type of organisational strategy used to influence prominence negotiations is what I describe as **data strategies, intended here as negotiations over access to users' data and content metadata among market actors.** Users' data and high quality metadata are important when it comes to content prioritisation measures since they enable optimisation processes, in order to provide more targeted recommendations and personalise what is made more prominent and visible to the final users:

> Data is seen by us and by all other service providers, and all of the platforms, as something incredibly important. … It is incredibly important to understand how people are consuming our content, to be able to first personalise our recommendations, and also reach that understanding of how our content is consumed to potentially influence commissioning decisions, strategies, etc. so having that data is clearly important. (PSM 2, 2019)

Given their importance, **content metadata and users' data can be valuable in achieving 'non-monetary trade-offs' in the commercial negotiations over prominence**. Access to content metadata and app performance data appeared as a key feature of prominence negotiation processes between PSM and the technology manufacturers and/or platform organisations (PSM 2, 6, and 7, 2019; PSM 12, 2020).

Firstly, **metadata is depicted both as a necessity and as a valuable asset**. It is construed as a necessity because without metadata content would not be as easily and efficiently surfaced to the final users. High quality metadata are needed to surface content through search and browse functions on app and device UIs (Chapter 5). Metadata is construed as a valuable asset because they can be used to improve and optimise content prioritisation measures and make the overall experience of the UI smoother and easier. Content providers therefore use metadata in negotiated trade-offs for a more prominent placement and/or higher ranking.

However, access to metadata is not straightforward to negotiate, as emphasised in several instances by representatives from providers, pay-TV operators and technology manufactures. For instance, public and

commercial broadcasters might limit access to their metadata if they disagree with the technology manufacturers over the ways in which their content and services are ranked in search results or presented on a smart TV (PSM 3, 2019); or if they do not receive sufficient 'reassurance' about the ways in which such metadata will be used to influence content prioritisation on the manufacturers' devices (PSM 7, 2019):

> For search to work, a platform needs to access all our metadata so that when someone puts in a search term, they can search for the title and other terms. … There are still some instances where we do not give the platform our metadata, and we do not appear in the search, because we were unable to agree on the presentation of the search results. (PSM 3, 2019)

> All of them want from us access to our metadata, but with no reassurances on the back of that … especially with voice search, all of them have ambitions over voice. Siri, Alexa, and all of them want to shape and control the voice paradigm. We want to lean into it, but you get no reassurance that when somebody says: 'play [X programme]'[88] the latest episode of [X programme] would play from [our service] with the right attribution. … So, you are leaning into these technologies without any firm reassurances on how your data would be used, and what experience the consumer will have on the back of that. (PSM 7, 2019).

In this context, tensions seemed to emerge when granting access to their metadata was seen for PSM as a loss of control over the ways in which content is surfaced and prioritised. In contrast, for technology manufacturers, platform organisations and pay-TV operators, metadata were perceived as a means to provide a more integrated, better viewing experience – as exemplified in the quote below:

> It is about them providing us with the content in a way that will allow it to be integrated into the platform, and to allow it to be integrated with the UI, which requires the right metadata. What a lot of them [i.e. PSM] want though, is simply an app's space on our UI, right? … First of all, this means that if the content is only available via that link to the app, it is not discoverable in the search function within our UI, neither can you promote it. But it is also a bad customer experience to leave our UI into another app-hosted environment. (Pay-TV operator 1, 2019)

Alongside metadata access, users' data can also be deployed to negotiate trade-offs for prominence. As highlighted by an independent consultant and external expert, to influence prioritisation measures at the level of a device's UI and within-app UI, trading prominence in exchange for increased access to data could be beneficial for both parties involved, whether the content provider is negotiating with technology manufacturers or with platform organisations:

[88] I have removed references to the actual title of the programme and service made in the original quote in order to protect the interviewee's anonymity.

> A trade-off there could be that the platform says: 'we will give you some more prominence, but we want you to share data on what is happening inside your app so that we better understand our customers and we can share the greater thing.' And there is quite a big tension there, because obviously the broadcasters want to be prominent, but they also want to be important, have some power, and really understanding their audience in a way that lets them provide the best service they can. … So basically where some of it might be commercial, and it might literally be an exchange of money, I think quite a lot of it is: 'we will give you a bit more prominence on the platform, if you give us more access to user data.' (External expert 2, 2020)

Users' data is treated as a valuable asset and a source of competitive advantage that both parties involved indicated they were not willing to trade away easily. Profiling techniques are used to refine prioritisation measures such as UI design, dedicated collections and recommendation systems to provide users with a viewing experience that is 'relevant' to them – or perceived to be relevant by the service providers (Chapter 5). However, not all industry players have access to the same amount or type of data.

On the one hand, AVM service providers have a full overview of users' behaviours and choices within their apps which are seen as 'walled gardens' (PSM 6, 2019). On the other hand, they cannot monitor what happens outside their apps and so they have limited understanding of and often no data access to the users' journey on the devices' UIs. Gaining access to such user data could be beneficial for PSM too as it would allow them to understand what types of prominence work better on the UI, and what types of programme and content should be prioritised on different devices to increase user traffic to their services:

> On *certain devices*, when you start our app, it is like going to our website, and everything you do once you are in the app, we get the data for that. So we know for instance how many people have watched X programmes on our app on *a certain game console* last week, or how many people have watched X programmes on iPlayer through *a specific smart TV*, etc. So we can work out which platforms are most used for which type of content. This is how we know to get *game consoles* more youth-oriented feed than *other smart TVs* for instance. But increasingly we are trying to get data from the platforms about how people come to our app, then what they do when they are in the app itself. So we are asking for more of that data … and what we would like to do with that data is to be able to work out the differences in the UI design and try to influence the manufacturers to say if they chose this design, it would be better or worse than this other one, etc. (PSM 3, 2019)[89]

[89] The terms highlighted in italics replace any reference to specific products used in the interviews to preserve the anonymity of interviewees and organisations.

Improved data access can allow AVM providers to refine their content prioritisation measures, and also to evaluate the impact that different types of choice architecture and nudge have on users' choices. This is why striking data access and sharing deals among industry actors can be beneficial, but it also further perpetuates the constant monitoring and profiling techniques that characterise these environments. However, what emerged in the interviewees is that these actors have eyes on different segments of a user's journey, and they all have slightly different blind spots (PSM 6, 2019). The fragmentation of the value chain and the various levels of access to data therefore creates information asymmetries that gatekeepers and AVM providers can leverage, trading-off various parts of a user's journey to content in order to gain a fuller picture:

> When you are in our app, you are in a walled garden and you know exactly what is going on, where are they going, and you can act accordingly. … In some cases, thanks to some of our relationships, they are willing to say how users got there, but in a world where voice is also starting to become a thing, what is the utterance that led that traffic to our app? Some partners are not particularly keen on sharing that information. The real challenge that we have got is the bad journeys, the ones that did not lead them to our app, or the ones that tried but did not find it for whatever reasons. That is a massive challenge because obviously … those sad parts, you are just blind to them. (PSM 6, 2019)

> The apps know exactly who you are and what you're watching, so the TV can show what they know, but we are purely providing a framework, so if there's no data, there's just nothing to show, and it looks worse for the user. (Tech manufacturer 2, 2021)

To conclude, this section has highlighted the significant role organisational strategies and related commercial negotiations among industry actors have in influencing what services and content are prioritised to the final users. In these negotiations, prominence and discoverability are seen as valuable assets, traded in an industry where there is unequal bargaining power between national and local AVM services and global companies that strategically control key gateways to content.

This leads us to question the motives, rationales and drivers behind these negotiations, and whether there are any public interest considerations among them. The following sections consider the attention paid to precisely those underlying organisational interests and drivers that feed prioritisation strategies: why are different industry actors using distribution, vertical integration, marketing and data strategies to secure their prominence and influence content prioritisation processes?

6.3. Unpacking Perceived Interests and Drivers Behind Prominence Negotiations

Being prominent and easy to discover are means to an end: 'ends' differ since they are tightly connected to the interests, drivers and business models of the organisations concerned. A political economic approach would reduce prioritisation processes to previously discussed commercial transactions, but these are only one part of the picture. While commercial interests can influence these negotiations, there are also other considerations and norms at play.

Discursively, PSM representatives often described their incentives and interests in contraposition to the private and economic interests of technology manufacturers, internet platform organisations and pay-TV operators, suggesting that the fundamental challenge of negotiating prominence boils down to the fact that their incentives as PSM 'are not always going to be aligned with the incentives of platforms' (PSM 2, 2019). As my analysis will show, **when it comes to content prioritisation, public and private media organisations and national and international players are not as diametrically opposed as is generally thought, and there are significant differences and similarities in the drivers and underlying interests.**

The main shared drivers behind negotiating prominence and discovery are aimed at achieving greater reach, stronger control over the ways in which content and services circulate online, and enhanced bargaining power vis-à-vis competitors and distributors so as to rebalance dependency relationships among different industry actors. Indeed, my analysis shows that the perceived value of prominence and discoverability lies in the role they play in maintaining, and ideally increasing, viewing figures and reach, thereby strengthening actors' position in the market. Negotiating a more prominent app placement on the UI or a higher ranking in the search results, so that content and services are more easily accessed and consumed, is therefore crucial.

However, the incentives behind such shared drivers differ. PSM organisations were found to be interested in retaining their audiences, reaching new ones – especially younger audiences – to secure their future survival and the provision of a public service alternative in an online environment. However, platform organisations and pay-TV operators more often referred to their interest in retaining and increasing their subscribers, providing a compelling and competitive offer, and serving their users' or customers' interests. Finally, technology manufacturers admitted that the main incentive behind their negotiations over prominence is to maximise their revenues and therefore to leverage global distribution deals that are less costly and therefore more profitable than **producing different devices on a country-by-country basis.** Consumers' interests and public interests often emerged more as by-products of the driving commercial, economic and private interests of some of these organisations, rather than their driving ethos.

As in Chapter 5, the discussion in the next sections of these key drivers of commercial negotiations over prominence and discoverability is structured on an organisational basis, dealing first with technology manufacturers, and then with AVM service providers.[90]

6.3.1. Technology Manufacturers and Platforms

Maximising revenue

For these organisations, commercial and economic incentives appeared to be stronger than any public interest or consumer interest considerations. Indeed, **the main driver behind negotiations over prominence identified was to maximise revenues by selling prominent slots on their UIs and devices, while containing the production and distribution costs of their products.**

As discussed in section 6.2.1, technology manufacturers often negotiate prominence through global distribution deals, especially when it comes to the types of measure that impact on the production of their hardware products, such as dedicated remote buttons. This was acknowledged as a contentious point in policy debate when PSM and commercial broadcasters argued that they do not have access to such level of prominence in their negotiations with technology manufacturers (Chapter 7).

Their response to why this is the case was rather simple: it is not in the manufacturers' commercial and economic interests. Prominence is one way for these organisations to maximise their revenues, since by selling a prominent slot on their hardware products they are able to increase profits from the distribution deals with international companies such as Amazon Prime Video, Roku TV and Netflix, without increasing their production costs, since they do not have to adapt their products for each national market.

Prominence is 'a marketing tool and a revenue stream' for manufacturers – as argued by a PSM representative – and 'if you are Samsung and your HQ is in Korea, your job is to maximise the revenues,' regardless of the fact that such a decision could be at the expense of smaller national and local providers (PSM 4, 2019). This is 'not a secret,' on the contrary, as clearly explained in the quotes below, 'this is the approach that a lot of large consumer electronic vendors take' (Tech manufacturer 2, 2021):

> They want to monetise that prominence, so if you are a TV manufacturer then you can sell those slots, so Netflix or Amazon can buy a spot on that. When you make almost zero margin, which is pretty much the world of LG or some of those players - perhaps a bit less Samsung - every little thing helps. (PSM 2, 2019)

[90] As in Chapter 5, quotes from certain platform organisations, such as Amazon, will feature in both sections since they act both as manufacturers – with products like Fire TV sticks - and as providers of AVM apps – with SVOD and hybrid SVOD-TVOD services like Amazon Video Prime.

> We are a global manufacturer, like many of the others … so our model is based on global platforms, and we build global platforms. And we have no barriers if, for example, the BBC wanted to distribute their services globally, then it would be appropriate for them to have a dedicated button, but we cannot build local proprietary variations, it is just not cost-effective for us to do that. It is just the way we operate as a business. We have very tight margins, and we are under extremely severe competition from manufacturers who are operating in more favourable regimes from a political perspective, so our business model would not survive if we had to make country-specific and costly implementations such as hard buttons.' (Tech manufacturer 1, 2021)

Given the global nature of most of the technology manufacturers operating and selling internet-connected devices like connected TVs around the world, any regional customisation of prominence on such devices would incur extra costs that the manufacturers are unwilling to cover (see also Samsung Electronics UK, 2018; TechUK, 2018a). Public interest considerations are therefore absent in this case, and the threat of any public interest-driven prominence regimes is worrisome for manufacturers. Liberal, deregulated regimes would indeed favour the status quo and leave it up to the outcome of current distribution deals to decide whether all LG or Samsung smart TVs should have Netflix and Amazon Prime Video 'red buttons' rather than a BBC button in the UK and a RAI one in Italy:

> It costs money to make all of these sort of technology developments, and that means that global companies like us strive to deliver as much of a global platform. It also entails a number of global deals with some of the larger content providers, and there is no secret … who those are. But we try to customise at a software level to try to accommodate national and local requirements and popular content from local content providers, in which we could pick less globalised products, companies that tend to take a very niche approach and they have got very small share market share. So it is always a balance, and this is the approach that a lot of large consumer electronic vendors take. (Tech manufacturer 2, 2021)

For global manufacturers it is simply more 'cost-effective' to negotiate prominence with the same providers across all markets (Tech manufacturer 1, 2021). On the software level, national and local providers with a 'smaller market share' (Tech manufacturer 2, 2021) are able to negotiate a prioritised placement on the homepage, even though the default settings would still display them after the global organisations such as Netflix or Amazon Prime Video. However, on the hardware level, negotiated prioritisation for national and local content providers remains impossible, and manufacturers' economic interests prevail over any public interest considerations. The national and local providers are thus disadvantaged, since they have neither the scale and reach of their international competitors, nor the resources to match the payments that these manufacturers receive from global distribution deals.

6.3.2. AVM Service Providers

6.3.2.1. PSM Organisations

During my data collection, interviewees from UK PSM often described prominence as one of their core priorities: a key means for their future survival. But why is it so important for these organisations?

The BBC, ITV and Channel 4 have both similar and different interests which they discussed as driving their pressing need for prominence. **All three portrayed prominence and discoverability as a means to (a) retain and increase their audiences; (b) gain control over access to content and user journeys; (c) create public value for their audiences; and (d) maintain historical regulatory benefits. Where such organisations differ is around their justifications and interpretations of how and why prominence could help to create public value, and the fact that Channel 4 and ITV are also interested in using prioritisation to attract advertiser and audience eyeballs and ideally increase their advertising revenues.**

Retaining and increasing audiences

While manufacturers and platform organisations tended to highlight that there is insufficient empirical research to demonstrate a correlation between prominence and greater reach, representatives from PSM, commercial broadcasters and pay-TV operators argued the opposite. This latter group indeed shared the assumption that, similar to the positive impacts that a higher ranking in EPG and LCN achieves for audience reach, online prominence and discoverability can also increase the numbers of people viewing their content (Ofcom, 2018c). Channel 4, for instance, has argued:

> Prominence maximises the impact of the PSM content, as it ensures it reaches the widest audience possible. The importance of prominence in driving viewing is widely accepted. … Perhaps the most compelling evidence of the importance of prominence in maximising viewership is the willingness of global SVODs to pay large sums of money to secure the top slots even where there is still the additional barrier of users having to pay to access their services. (Channel 4, 2021: 25)

For the three main PSM organisations (i.e. BBC, ITV and Channel 4), prominence can significantly influence user traffic and viewing figures, as explicitly claimed by an interviewee: 'Prominence determines to some extent how much your content is watched' (PSM 2, 2019). Thus, negotiating a good prominence deal appeared to them to be a way to retain their relationships with audiences, drive traffic to their services and, ideally, to reach new audiences, especially younger viewers. Similarly, traffic and reach drive the PSM organisations' internal content prioritisation measures, as these are seen as a means to grab and maintain audience attention:

> It really, really matters that people can find us, because if people are consuming only in an on-demand space on their smart TVs, if they do not see us, we are not prominent in their lives, they will just go and watch Netflix or Amazon or whatever has paid for that prominence. Therefore, our brand gets eroded and our relationship with young people gets eroded, and we cannot get that back. That is why this has become a priority across the organisation, because once you lose that relationship, that brand relationship and that trust … it is very difficult to get back to that place. (PSM 1, 2019)

> For instance with the games consoles and platforms that are specifically aimed at younger viewers … that is why we make a different feed for them … mainly because we have a massive problem with attracting younger audiences, so we want to do everything that we can to try to get appropriate youth-focused content in front of young people, correctly attributed. (PSM 3, 2019)

Securing prominence on devices and correctly prioritising content on their own services are therefore seen as part of the solution to shrinking audiences and the fact that they are struggling to negotiate prominence in a highly competitive and increasingly globalised market is a major source of concern. In a nutshell, it is about grabbing audiences' attention and driving them to their own apps, hoping that such reach and traffic will translate into a stronger and habitual relationship between audiences and AVM content providers. Prominence is therefore seen as one of the possible responses to maintaining viewing share in an intensely competitive environment where trust in traditional media and consumption figures generally have been declining in recent years (Newman et al., 2022; OECD, 2021).

As outlined by one of the interviewees, 'it's still ultimately trying to drive as much traffic as possible back to the our app … for us the ideal is that we are discovered in these places and then users are returned to our app, and they stay there, so these places act as a sort of extra level of prominence and we can reach an amount of people that we wouldn't be able to reach otherwise, and traffic that we can get that back to our app, and ultimately keep them there.' (PSM 5, 2019).

Gaining control over access to content and users' journeys

Linked to the aim of reaching audiences is the interest of content providers to obtain direct access to such audiences and in strengthening their control over such access through prominence. As argued by one PSM participant, in today's online media environment that is 'more focused on the content-first discovery', PSM organisations 'are not in control of the rules governing the system anymore, which presents a massive challenge because, particularly in the world of recommendation and personalisation … it is not as easy to game the system in the same way that there is a stock way of presenting our linear channels' (PSM 5, 2020). Their anxiety about a perceived loss of control over the ways in which content is curated and proposed to viewers is deepened by the ongoing evolution of the market and their growing fears of 'falling off the screen' (PSM 12, 2020), and losing relevance for their audiences (PSM 4, 2019, and 6, 2020).

As argued by an external consultant expert, securing prominence for PSM is also a way to prevent the transformation of the TV environment into a sort of 'Google Search model, where you're searching for what to watch on TV, and there's no protection anywhere to say that BBC has to be more prominent in the Google Search results, as content just comes from anywhere at all, and PSM like BBC want to protect that as much as they can in the TV environment by making you associate BBC content with BBC, by controlling your journey to the app and once you get inside their app' (External expert 2, 2020).[91]

A core interest driving PSM to use prominence is to secure greater control over access to and discovery of their content and services. This would in turn allow them to re-establish more direct relations with their audiences (PSM 6, 2020), or as described by a research participant, 'to have unmediated access to people and their homes' (PSM 4, 2019). This is also why, in most negotiating processes, PSM tend ask for prominence for all their services and apps rather than allowing distributors to cherry-pick the content to be promoted on their respective UIs:

> It should be up to a PSB to also hold control over the ways it offers its schemes, its total programming offer, which is tied in quite closely with how we should actually solve the problem. You can discuss prominence on a given programme on a given project, but you can also discuss prominence of an offer in its entirety because public service media have a duty to cater for many audiences and for different groups, and we feel quite strongly about securing the ability of broadcasters to shape its offering, and to cater for the audience. (PSM 10, 2019)

> So what is content discovery looking like in these new paradigms? It is kind of a control thing. And where the power of content is still high, the control is still partially in our hands, for instance when [programme X] airs, that is going be on the front page of every single provider during those big content moments, but when you have [programme Y], or other soaps that are continuous, how do we maintain prominence in the same way? Google or Amazon are not going to choose to show Coronation Street every single day. (PSM 5, 2019)[92]

Creating public value for audiences

Beyond these internal organisation-driven interests, there are also public interest considerations linked to prominence. What I have categorised as the intent to create public value for audiences includes PSM arguments that refer to their distinctive use of prominence to promote public interest objectives of diversity, pluralism and social cohesion which, in turn, contributes to the creation of individual and societal value for

[91] External experts from independent and UK-based consultancy firm specialised in the AVM sector.
[92] The terms in square brackets replace any reference to specific programmes used in the interviews to preserve the anonymity of interviewees and organisations.

their audiences (Chapters 3 and 8). There are, however, differences in the ways in which the BBC, Channel 4 and ITV describe this type of driver.

For the BBC, negotiating its own prominence on other devices and services was characterised as a way to ensure the value for money promised to its licence fee payers. As outlined in several instances in its distribution strategy, 'the more convenient they are to find, the more they will be used and the better value they deliver for licence fee payers' (BBC, 2018c: 2). Thus, prominence, easy access and discoverability serve in a way the BBC's mission and duties towards its licence fee payers, creating additional value for them (BBC, 2018c: 10).

Research participants also highlighted that, thanks to the distinctiveness of PSM's services and their own content prioritisation processes, by being more prominent, they are also able to deliver greater societal and individual value to their audiences since internally they are a pluralistic media organisation that also prioritises diversity of exposure and social cohesion (PSM 13, 2020). Even if PSM – like any other AVM service provider – are interested in 'use,' they are also aware that such 'traditional metrics are in danger of driving us [PSM] towards a market-driven behaviour, especially if we are just measured on hours, on just pure volume metrics' (PSM 13, 2020).

However, design principles for choice architecture and content prioritisation do not necessarily have to be driven by such metrics. On the contrary, PSM interviewees argued that they could be driven by public interest purposes:

> We are trying to create a sense of social cohesion, so this idea of a shared conversation; to broaden people's outlook, by introducing them to material that they might otherwise not have encountered or having them encountering challenging points of view in a way that is not just listing negative reactions – which is what Twitter is trying to do – but in a way that promotes debate and understanding. We are trying to provide this idea of multi-genres, this idea of mix. … This is a set of design principles that we have got for our online services. … Where the BBC is different again comes back to the fundamental differences in the business models: we take money from you, and we return it to you in value that you could not get if you [were] just acting individually. By all of you paying, we can return an experience that is greater than the sum of its parts. (PSM 13, 2020)

As elaborated in the quote above, 'use' and 'volume' metrics are important – and prominence is a means to increase them – but the primary interest is in returning greater societal value that encompasses individuals' values and interests. As argued by an interviewee, ideally the public interest mission of the BBC should be translated into prioritisation criteria and design principles that contribute to the organisation's overall creation of public value in a way that competitors cannot do due to their different drivers and business models (PSM 13, 2020). The idea of public value, which will be further discussed in Chapter 8, encompasses both individual and societal components of public value, highlighting that even the design principles of choice architecture

could be personalised and still provide a service that collectively adds value to society. This is a possible way in which public interest could prevail over the economic motivations of an organisation.

However, the same cannot be said for ITV and Channel 4, which cannot simply discard the fact that audience attention is key to their business models and advertising revenues. Being able to surface a wider and more diverse content offer is not simply a way to pursue diversity of exposure for users, but also a means to achieve a higher return on investment in their content, as well as to retain their existing audiences and make their services more appealing to new users (PSM 5, 2019). Thus, ITV and Channel 3's public interest objectives appeared in my interviews to be more deeply entangled with their own commercial interests, as the boundaries between the two are blurred:

> Being able to surface more of our content, having a wide breadth is making more of our investment, and a lot of our strategies are focused on our light viewers … but we want to broaden the amount of people that are watching us around the country. To do that, we need to make a better use of our breadth, and personalisation, AI, and machine learning tools are an amazing way of doing that. (PSM 5, 2019)

Maintaining and increasing advertising revenue

For commercially funded PSM, for example ITV and Channel 4, the tension between their commercial and public interests emerged above all in the context of maintaining and increasing their advertising revenue. When curating and prioritising their content they need to find a balance between surfacing more 'traditional' public service content to respect their remit and leveraging their 'biggest, loudest, noisiest programmes' to attract advertising revenues and traffic. As these organisations rely heavily on advertising revenue, being prominent on different devices and services and strategically prioritising their own content on their apps are seen as ways to maintain and, ideally, to increase this revenue.

> Of course, there are people who manage our online services who want to put the biggest, loudest, noisiest programme on our homepage, because that is what drives traffic and that is what our success and viewing consumption are based on. But there are some people who would want to have our news, because advertising that programme on your page would be advertising public service content. This is in a way the same challenge that always existed in the linear channels. There is a tension there: it is the tension of being a public service organisation that is publicly owned and commercially funded. That is a tension that runs through every decision we make in our organisation: are you doing that to make money, or are you doing that to deliver your remit? And how do you balance those two things? (PSM 5, 2019).

As with any other organisational strategy, these commercially funded PSM have to constantly find a balance between their own commercial and economic interests, on the one hand, and their public service remit, on the other. As highlighted in the quote above, this inevitably creates a 'tension,' which in this case is translated into potentially contradictory or at least different design principles for their curation and prioritisation of content. At the same time, this is not something entirely new, as this balancing act was also required for their linear channels, but online it is increasingly challenging to achieve the balance, especially in a period of great difficulty for these organisations (Chapter 2).

Maintaining historical benefits

Last, but not least, achieving prominence online is a way for PSM to maintain a benefit that historically was granted to PSM linear services through EPG regulation (Chapter 2). In the PSM's view, as EPG prominence was – and still is – a regulatory benefit granted in exchange for their public service remits and legal obligations (PSM 1, 2019), online prominence regimes should follow the same rationale. These organisations do not believe that they should be paying for prominence nor that it should be a difficult contractual clause to negotiate, since, they argue, they have already earned it by respecting their legal obligations and serving a public interest mission:

> Prominence has been one of the benefits that we get in the EPG – and actually there are also other things like spectrum, but that is really *the* benefit that we get, which gives us a prioritised place in the EPGs. Therefore, you do not have to trade value for that, it is something that has been granted to us, and we think that essentially, we pay for that through our PSB obligations … whereas the current digital system is that we pay for it, again through trading value in commercial negotiations. (PSM 1, 2019)

The current situation in the 'digital system' is perceived as unfair because it does not recognise or reward the PSM's legal obligations as, historically, linear broadcasting used to. As highlighted in their public consultation responses, the PSM argue that this historical regulatory benefit should be transferred to the online world, achieving 'a continuation of the way things have been previously on broadcast' (PSM 2, 2019):

> In a world where content is more disaggregated, it is also about which bits of content to give prominence to, and our incentive is to clearly maintain, a continuation of the way things have been previously on broadcast, where PSB content gets prominence, and it is discoverable. (PSM 2, 2019)

6.3.2.2. Subscription-based and Hybrid VOD Services

While in Chapter 5 differences between SVOD and hybrid SVOD-TVOD services provided by platform organisations were sufficient to discuss them separately (section 5.2.2) when it comes to commercial

negotiations I grouped them together because they **all share three core interests in prominence negotiations: using prominence and discoverability to (a) grow their businesses by increasing subscribers and related subscription revenues; (b) gain control over access to content and users' journeys; and (c) offer a distinctive and competitive service.**

Growing the business by increasing subscribers and revenues

As much as PSM wanted to use prominence to retain and increase their audiences, platform organisations that offer SVOD services wanted prominence to retain and increase their subscribers – and their subscription revenues. However, the ways in which this main driver was justified slightly differ depending on the organisation.

For instance, while Amazon's representatives consistently refer to their 'customer obsession' and their interest in providing 'all the services that customers want' (Platform 4, 2020), what emerged is an instrumentalisation of their perceived idea of customer interests and needs in order to drive more people to sign up to their Prime membership. Negotiating a good prominence for this organisation becomes instrumental in attracting more subscribers and retaining existing ones by creating 'the best membership possible' and 'the best subscription model it can be' (Platform organisation 4, 2020). In this membership offer, Amazon Prime Video was positioned as a peripheral business used to attract more customers to Amazon's core business and one of its main sources of revenue, i.e. its general Prime membership:

> We always think about what customers want, and work backwards from that. We are therefore really keen for our membership service to be the best membership possible for our customers, and that is where our service came to play: customers love to watch entertainment, and that is part of our bundle as a subscription service. So we thought: 'people like to watch entertainment, so if we offer it then they would be more likely to stay with their subscription.' So it is all focused on ensuring that we can offer the best subscription model it can be. (Platform 4, 2020)

Research participants from other companies (e.g. Pay-TV operator 1, 2019; Platform 1, 2020; PSM 6 and 7, 2020) also emphasised this driver when describing the main interests of platform organisations that are not 'content-first' companies like other broadcasting and media organisations. For companies such as Amazon and Apple, SVOD services are peripheral businesses which 'are complementing other bigger projects that they are trying to sell' (Platform 1, 2020). Indeed, these platform organisations often cross-subsidise their core businesses by means of their SVOD offers, so negotiating prominence for the latter is expected to contribute to the growth of their core business:

> For Amazon, their Prime subscribers are the most important subscribers because a Prime subscriber spends more money than the average. … So, making Prime as stickiest [sic] as

> possible and increasing access to data makes Amazon do things like launching a streaming media platform in the form of a streaming stick, or launching a TV and have a service on the TV that they can give to their subscribers for free in order to retain them in their Prime subscription. (PSM 6, 2020)
>
> Amazon Prime is much more about getting people to sign up for free delivery, while content is almost a sweetener that makes it even more attractive. (Platform 1, 2020)
>
> And also bear in mind that *our* model is very different from Amazon's one and from the other platforms: Amazon is all about selling a Premium delivery service, Apple is about devices, we are about content, we are a content service first. (Pay-TV operator 1, 2019)

Interviewees from Netflix and Sky, which also offer SVOD services, often reiterated that their interests differ from organisations like Apple and Amazon because their core business sits within the AVM sector. However, despite their discourses, even for Netflix and Sky prominence is a mean to support their commercial and economic interests. For instance, Netflix's financial sustainability depends on subscription growth. Negotiating prominence through global deals with manufacturers or other content platforms is therefore part of their broader business growth strategy.

As highlighted by one of its representatives: 'in terms of our commercial strategy, our development teams are especially important to our growth as a service because they negotiate the commercial partnerships that we enter into, both on the content platforms – like set-top boxes – and also consumer electronic devices and manufacturers. Getting a Netflix button on all Samsung's remote controls, or something like that for instance, is a huge part of the way we are building up our strategy to grow as a service' (Platform 1, 2020). Thus, even if their core business is different from Amazon's and Apple's, they are still very much interested in using prominence to grow as a business and to increase their subscription-base and related revenues.

Gaining control over access to content and user journeys

Similarly to PSM, organisations that offer SVOD services want to use prominence to strengthen their control over access and user journeys to content. Going directly to their customers, as described by a pay-TV operator representative, is a way of gaining control over the 'last mile' of their users' journeys and to establish themselves as key gateways to content and customers (Pay-TV operator 1, 2019). Gaining such control not only allows an organisation to directly influence access to content and nudge user choices, but it also gives them 'leverage' and 'economic bargaining power' in the commercial negotiations over content prioritisation (Pay-TV operator 1, 2019):

> Content businesses with the internet have realised that they can potentially go directly to their customers. … So either they have to go directly to their customers as a primary business

> strategy, or they need to go directly to customer as an edge to give themselves some leverage. And obviously that has affected our relationship with other global players, Disney or Netflix for instance, but it has also affected our relationship with the PSB, which are trying to do the same. (Pay-TV operator 1, 2019)

From their perspective, the ideal situation would be to become the main access point through which users can directly search and watch AVM content from different apps (Pay-TV operator 1, 2019; External expert 2, 2020). This could offer a smoother and better integrated customer experience as argued by some interviewees (Pay-TV operator 1, 2019; External expert 2, 2020). Ultimately though, these organisations appeared to be most interested in being 'valued' as the main access point because it would decrease the power of competitors while increasing their own gatekeeping power (External expert 2, 2020).

Platform organisation representatives, for instance, described prominence as a means to 'ensure that we are available, not just available everywhere, but available through the routes in which people access the local market to discover content' (Platform 1, 2020). Hence, these organisations have increased their efforts to secure distribution deals and strategic partnerships that would allow them to control access through different gateways, from remote controls to homepage UIs. The joint subscription offered by Sky and Netflix is an example of how strategically dividing up control over access to content can be a mutually beneficial deal. As described by an interviewee, 'from Sky's perspective, it helps their customer base to see Sky as a one-stop shop for all their entertainment needs and people don't need to leave the Sky ecosystem to watch Netflix; while Sky marketing internally drives take-up for [Netflix's] services as you can now easily add your Netflix subscription to your Sky bill' (Platform 1, 2020).

Offer a distinctive and competitive service

Finally, the third key driver that emerged in my analysis concerned the use of prioritisation to offer a distinctive and competitive service. From this perspective, content prioritisation measures (Chapter 5, Table 5.1) are seen as a means to customise an AVM service and differentiate its offer from that of its competitors. Platform organisations that offer SVOD and hybrid SVOD-TVOD services were strong defenders of free competition in the marketplace, and from this perspective, they had strong reasons to freely decide what to make more or less prominent on their UI.

This driver emerged, in particular, when platform organisations and pay-TV operators described their marketing strategies (Chapter 6, section 6.2.3.). Having the freedom to sponsor third-party content on their UI through prominent placements or even self-preferencing their own content and services on the homepage and catalogues, were justified as a way to offer a distinctive and competitive service without additional regulatory burdens that would negatively impact their freedom to curate content and innovate products (Platforms 4 and 5, 2020).

6.4. Concluding Remarks

Building on the evidence that indicates that choice architecture is not neutral (Chapter 5), my second level of analysis here in Chapter 6 deepens the findings of the preceding chapter by showing that content prioritisation is deeply influenced by commercial relations and the corporate interests of the various industry actors. By investigating the business strategies used to influence content prioritisation and the organisational interests driving them, **this chapter sheds light on prominence as a site of contest: strategic negotiations tightly tied to market structures, competitive industry dynamics, and an uneven distribution of bargaining power among the different actors.**

However, while interviewees repeatedly described it as a 'zero-sum game', in which if one actor buys a prominent position for its app, the others lose, my analysis shows a more complex picture.

On the one hand, the organisational strategies discussed in this chapter are often exercised in asymmetric ways, which tend to disadvantage national and local AVM providers such as PSM, and favour SVOD service offers from platform organisations. Once we have dismissed any claims about the neutrality of choice architecture, we see that not all apps or services are equal; on the contrary, 'some are more equal than others' and prominence helps bring this about (section 6.2). **As a means to positive content discrimination, successfully negotiating online prominence and discoverability provides a competitive advantage and allows an organisation to strengthen itself by gaining (some) control over key gateways to content.** Indeed, attaining gatekeeping power in an increasingly fragmented value chain appeared as one of the key drivers shared by all the organisations examined.

On the other hand, such power does not solely derive from platforms' vertical integration or expansion strategies, nor it can be confined to the limits of a static 'zero-sum game', which is how neoclassical economics would have interpreted it. My analysis suggests that commercial negotiations over prominence cannot be reduced to a battle between PSM, national and local AVM services versus global technology manufacturers and platform organisations: **the distribution of control over content prioritisation measures is not binary, but more complex and fragmented.**

We are faced with a moving environment where different interests and different kinds of value are traded off to gain more prominence and discoverability. UK PSM like the BBC or ITV, for instance, tend to rely on soft power and their distinctiveness to strike prominence deals with varying degree of success. To do so, they rely on the fact that without their PSM content, technology manufacturers and platform organisations would ultimately lose some of their user base too. The PSM interviewees described the possibility of withholding their content and services as a desperate move, the last resort in this battle, and yet, it is a highly powerful move for those services that operate under a must-carry/must-offer regime (Chapter 2).

At the same time though, even if the BBC is able to withdraw its content from services like Google podcasts until it achieves its desired level of prominence and content attribution, those PSM with less soft power, such as Channel 4, Channel 5 or local players like STV are struggling harder, and often have to settle for lower levels of prominence in order to remain available to viewers on connected TVs. Smaller organisations with less stable funding sources and less well established brands, have to go through 'tortured negotiations' to trade their value for prominence, using what commercial leverage they have, recognising that it is not equally available to all industry players (PSM 1, 2019). If established organisations like Channel 4 are already struggling due to their relatively small scale and resources (PSM 1, 2019), even smaller and local providers often do not even make it onto the UI screen.

Finally, this chapter highlights that in the process of content prioritisation there are numerous strategies and contradictory incentives that can influence its outcomes. Even within this complexity though, at the moment of writing, commercial and corporate interests often prevail over public interest objectives, raising concerns for the overall diversity and plurality of today's online media systems.

This is clear both for technology manufacturers and platform organisations. Maximising revenues emerged as the paramount driver for technology manufacturers which aim to leverage global distribution deals to their advantage. Arguments favouring free competition were typically used to support strategies adopted to help platform organisations increase their SVOD service customers and secure a competitive advantage, indicating their underlying interest in growing as a business and being available everywhere and to everyone. Thus, on the one hand, the main differences among their corporate interests of these organisations appeared to be linked to their business models and core service offers. On the other hand, all organisations viewed prominence as a means to increase their user traffic, reach their audiences and, ultimately, to remain relevant in a highly competitive and almost-saturated market.

The situation is not so clear-cut for PSM, however. On the one hand, PSM representatives expressed self-interested objectives underpinning prominence negotiations – such as retaining their audiences, increasing user traffic, maintaining historical privileges, and gaining control – or at least not completely losing it – over access to content and user journeys online. Moreover, commercial PSM interviewees were just as interested in maintaining and increasing their advertising revenue as their competitors – which is not so surprising, given that commercial PSM's sustainability depends on that too. On the other hand, public interest objectives played a key role in shaping their prioritisation strategies. According to all PSM, prioritisation measures can support their public service mission and enhance the creation of public value when public interest objectives such as diversity or social cohesion are used to design the measures. By developing public value criteria to optimise prioritisation measures, the PSM would be positioned to offer personalised services that also collectively add value to society.

Chapter 7

Debating Policy Interventions: Objectives and Principles for a New Regime

7.1. Introduction

The third and last part of my empirical analysis concerns the regulatory dimension of content prioritisation processes, which focuses on the policy debate around the revision of the existing EPG Code and the creation of a new regime fit for the online world (DCMS, 2022d, 2022e; Ofcom, 2018c, 2019b, 2019c).[93]

As outlined in Chapter 2 (section 2.5), the UK was at the forefront of new policy proposals to regulate online prioritisation processes. Their existing EPG prominence rules are centred in public service broadcasting legislation and Ofcom's EPG Code (Ofcom, 2010), which grants must-carry and prominence benefits to PSM linear channels. However, such rules do not apply to digital media platforms nor their intermediary services. Hence, in 2018 Ofcom launched a review of this regulatory instrument, outlining options that could extend PSM prominence benefits to the online world. Ofcom's public consultation and the parallel policy debate around the online prominence and discoverability of PSM prompted broader regulatory questions about online practice that demand our attention.

For some industry representatives, especially content creators working in news media and PSM, the regulation of online content prioritisation processes is as much of a policy priority as that for online content moderation (e.g. PSM 3, 2019; PSM 13, 2020, External expert 2; Platform 3, 2020). Content moderation and prioritisation are indeed described as two facets of one issue in relation to online platform ecosystems and their content policies: a negative facet and a positive one (Platform 3, 2020). As exemplified by an interviewee (Platform 3, 2020), this is reflected in the policy debate which also presents two interlinked problems: how to introduce obligations around mis- and disinformation, hate speech and illegal content on the one hand; and, on the other, how to ensure that 'good', 'trustworthy', 'general interest' or 'public interest' services and content are visible, discoverable and prominent on digital media.

> There are two facets to [the issue of online content]: one is positive, one is negative. One is around keeping bad content off platforms, but the other one is about promoting good content or credible information or European works or whatever. So, there are two sides of this policy debate: how we create a policy environment that enables and encourages companies to remove bad content, stop bad actors, remove harmful content; and then the flip of that is how

[93] This chapter will refer mainly to the concept of prominence, rather than discoverability. Even if these are defined as two interrelated outcomes of content prioritisation processes (see Chapter 3), the relevant regulatory framework in the UK uses the notion of the prominence regime as the means to regulate processes of content prioritisation on digital media platforms.

> to encourage good content, whether that is credible and reliable information or others. … Then in a wider set of questions on more audiovisual content, we have come from a world of linear television with prominence obligations, but what – if anything – does that mean for new ways of content distribution? So, I think it is both those problems: removing harmful content but also promoting other types of content. These are the two policy priorities here. (Platform 3, 2020)

But how can this be achieved in a world that is technically and commercially different from linear broadcasting and its EPG system? The introduction of new regulatory obligations in a space that so far has been governed by technological strategies (Chapter 5), commercial negotiations and market dynamics (Chapter 6) sparked disagreements and concerns among industry actors. Policy objectives like fostering a plurality and diversity of media services online while safeguarding PSM and users' freedom of choice are all used in this policy debate to justify diverging policy solutions, showing not only the inherently contradictory claims of this political debate, but also how malleable these concepts are, and how they can be instrumentalised to achieve opposite aims.

My analysis shows that stakeholders disagree on the perceived advantages and disadvantages of this new regime and question its proposed design. At the centre of this contestation is **the definition of the scope of application** (i.e. which organisations will have to apply the new rules and what 'appropriate prominence' looks like on their services and devices), and the **material scope of a new prominence regime** (i.e. which AVM services should be granted this regulatory benefit).

The latter aspect is closely linked to a core normative discussion on the definition of 'public interest services,' which traditionally the UK's broadcasting rules have defined in terms of PSM content and services. However, as policymakers and regulators develop new prominence regimes, some industry stakeholders have questioned the assumption that only PSM are offering 'public interest services', calling for the application of public value criteria to a wider range of public interest services on different platforms. In Germany for instance, the new Interstate Media Treaty proposes a broader material scope of application for its prominence rules, with a list of public value criteria that also allows private media organisations to apply for such benefits (Die Medienanstalten, 2020) (Chapter 2, section 2.2).

As I also argued in Chapter 2 (section 2.4), these are core considerations in the creation of any new prominence regime, but they also raise difficult normative questions about how to design a public interest framework that can positively shape today's digital media systems. Based on the typology I advanced earlier in this thesis (Chapter 2, section 2.4), the prominence regime that the Government intends to establish, based on statutory legislation, would introduce prominence and must-carry benefits only to UK PSM services, including their VOD, and would cover a limited set of digital media platforms and their connected devices (DCMS, 2022e; Ofcom, 2019c, 2020c) (see Table 7.1).

Table 7.1. Proposed UK prominence regime[94]

Level of intervention (vertical extension)	Type of regulation (horizontal extension)	Scope of application (complying services)	Material scope (beneficiary services)	
			Material scope	Definitional criteria
National	Statutory obligations in legislation complemented by Code of Practices and Guidance by the regulator. Existing EPG rules and must-carry obligations for linear channels will be extended with availability and prominence obligations for internet-distributed services	EPG providers and manufacturers of connected TVs	PSM's linear channels and internet services incl. on-demand services	Public service remits

However, what these rules will look like in practice is still open for debate and there are a number of open questions that the Government and Ofcom will have to address. How far should the scope of application go? Could the material scope now limited to PSM be extended to other public interest services? What kind of guidelines and codes of practice should be developed to ensure a transparent and fair implementation of this new regime? These are questions that every media and communication regulator has to tackle when creating a prominence regime for the online world.

Furthermore, this new regime should also be contextualised within broader UK and EU policy developments (Chapter 2). The UK Government is also the first to develop an entire new regime with its Online Safety Bill that will regulate online content moderation. However, in treating this process as separate from the new prominence regimes the Government is therefore overlooking that we are dealing here with two sides of the same coin: any intervention in one process will have indirect effects on the other. In addition, the same digital media platforms targeted by the UK's new prominence rules will also have to comply with similar obligations in other European member states such as Germany, and with the package of European laws on digital services, the Digital Services Act, the Digital Markets Act and the European Media Freedom Act (Chapter 2, section 2.2).

[94] This table summarises the new UK prominence rules of PSM as recommended by Ofcom (Ofcom, 2019c) since at the time of writing new legislation has not yet been introduced by the UK Government. This overview is based on the typology advanced in Chapter 2, section 2.4., which indicates the horizontal and vertical dimensions of this new regime (Puppis, 2010), its scope of application, and material scope. It should be noted that while Ofcom limited the scope of application to connected TVs, it also suggested that this aspect of the new regime should be flexible enough to adapt it to changes in technology, viewer behaviours, market development and demographic variations without an intervention of the Secretary of State (Ofcom, 2019c: 4).

As we deal with global issues of platform governance, future codes and guidance in this space will have to take into account these policy developments.

To unpack the regulatory dimension of prioritisation, this chapter first analyses the policy and advocacy strategies adopted by interested stakeholders in the consultation on the EPG Prominence Review and discuss the perceived advantages and disadvantages of a new regulatory intervention (section 7.2). **Second, it moves beyond this advocacy rhetoric by addressing the underlying concerns that existing content prioritisation practices raise for media pluralism and prompting a critical reflection on what problems new regimes could (and should) be addressing** (section 7.3). In doing so, the chapter answers the last two empirical sub-questions of my thesis (Chapter 4, Fig. 4.5):

a) What are the advocacy narratives of new rules for prominence and discoverability?

b) What are the underlying concerns for media pluralism that such rules could address?

In doing so, this chapter assesses the need for a new prominence regime and the perceived implications of its material scope and scope of application, aiming to contribute to this evolving policy area by advancing a set of public value criteria applicable to both public and private AVM organisations (Chapter 2). While the analysis is empirically rooted in the UK case, the implications of new prominence regimes and the definition of public interest services are also considered in the context of broader European and Council of Europe policy developments (Chapter 2, section 2.3).

7.2. Contradictory Policy Objectives and Diverging Advocacy Positions

This first part of the analysis answers the first empirical question by focusing on the political debate and the advocacy battle between two informal coalitions of the main stakeholders (Van Den Bulck and Donders, 2014): **one in favour of an extension of the EPG prominence regime for PSM, and one against it.** Based on the public consultation responses,[95] these two coalitions are constituted by:

a) The International Broadcasting Trust, the Voice of the Listener & Viewer, The UK Writers Guild, UK PSM organisations and affiliated organisations, e.g. Freesat, Digital UK and YouView – all broadly in support of an extension of the PSM prominence regime; and

[95] The relevant questions are 16, 17, 18, and 19, all of which concern the extension of the PSM's prominence regime. They respectively asked:
[Question 16] Do you think that the prominence regime should be extended to ensure PSB Players can be easily found?
[Question 17] Do you think that the prominence regime should be extended to ensure PSB content can be easily found via recommendations and / or search? If so, what key parameters would you set for this aspect of the regime?
[Question 18] Do you think that the prominence regime should be extended to platforms and devices not currently captured by the EPG prominence regime? If so, how do you think the regime could be extended and who should be captured?
[Question 19] Do you think that the prominence regime should be extended to online services? If so, who should be captured?

b) TechUK, Samsung, and Sky, who all oppose an extension of the PSM prominence regime, and the Producers Alliance for Cinema and Television (PACT), the UK trade association for independent producers and distributors, which is in favour of a partial extension, depending on how material scope and scope of application are determined.

In addition, my interviewees revealed that representatives of other technology manufacturers and platform organisations can be understood as being against the introduction of these new rules, while European trade associations representing commercial broadcasters and news media organisations were said to be in principle in favour of an extension of the regime, but with a broader material scope that is not limited to PSM.

Interestingly, the high-level logics and objectives claimed by the opposing groups were similar in that they were both using similar political and cultural justifications, but they argued for rival solutions. My analysis shows that **stakeholders in favour and against this revision shared two key objectives that were used to justify their opposing views, namely: ensuring media pluralism; and protecting users' freedom of choice. Behind these high-level objectives, there were diverging arguments and conflicting opinions as to how they could be achieved, which reveals the different interests driving these organisations' policy strategies.**

Thus, by examining the stakeholder views, values and normative frames within this policy debate, I reveal their contradictions and shed light on the underlying interests of the stakeholders (Parker and Parenta, 2008; Van Den Bulck and Donders, 2014), and highlight the need to move beyond the advocacy rhetoric of these stakeholders in order to develop an online prominence regime that can safeguard pluralism without harming users' freedom.

7.2.1. Perceived Advantages of a Regulatory Intervention: the Holy Grail?

Overall, the need for regulatory intervention is strongly supported by all UK PSM. Even before Ofcom publicly communicated its decision to revise the EPG Code and related prominence rules, UK PSM started to jointly lobby for the extension of this regulatory benefit to the online world, presenting the 'modernisation of the regime' as 'one simple policy aim' that would guarantee their survival in an increasingly globalised and competitive landscape (PSM 1, 2019). It should be noted that UK PSM are not always aligned in their advocacy strategies and policy requests, but in this case they strategically decided to align (e.g. Jackson, 2017; Lewis, 2021; McCall et al., 2018; Sweney, 2018; Sweney and Conlan, 2019), and to 'speak as one voice' as described by a research participant (PSM 1, 2019). Channel 4 expressed their shared views as follows:

> Prominence is the lynchpin which holds public service broadcasting together. Put simply, there is very little point in asking broadcasters like Channel 4, ITV and even the BBC to produce certain types of content, be it in a licence requirement or through a statutory remit, if that

> content is not easily accessible to viewers. Prominence maximises the impact of the PSM content, as it ensures it reaches the widest audience possible. (Channel 4, 2021: 25)

This joint strategy was adopted because creating a new prominence regime for their services was 'one of their top priorities' (PSM 4, 2019; PSM 8, 9, 10, 2020), if not 'the number one priority' (PSM 1, 2019). As an interviewee highlighted, 'prominence has always been something that PSBs have been lobbying for [for] a really long time' (PSM 1, 2019), but only in the past two years, had they made 'the conscious decision in the lobbying of prominence, to be aligned' (PSM 1, 2019). Discursively, these organisations emphasise that the stakes have become higher for themselves as well as for other local and national actors, so they had to streamline their advocacy efforts and to collaborate in order to raise this policy issue up the political agenda.

However, these lobbying efforts should be framed within a broader crisis that PSM organisations are currently experiencing, as they seek to overcome financial and scheduling challenges and as their audience share slowly declines, especially among younger viewers (BARB, 2018, 2020; Ofcom, 2019a, 2020a). In addition, as my research progressed, the situation for UK PSM worsened, with increasing political pressures and financial difficulties, especially for the BBC and Channel 4.

For instance, in 2022, the Government launched a public consultation on Channel 4's future, including its ownership model and remit, and threatened to privatise the organisation through its new broadcasting legislation, also known as the Media Bill (DCMS, 2022b, 2022c; Morris, 2022; Waterson, 2022b).[96] However, following a period of political turmoil and the fall of two Governments,[97] the political will changed and the privatization plan was abandoned but its business models and future sustainability are still under scrutiny (DCMS, 2023; Waterson, 2023). In addition, in the same year the Government also froze the BBC's budget until the renewal of the licence fee in 2027, threatening the organisation with a plan then to change its overall public funding model (e.g. Paton, 2020; Sandle and Holton, 2022; Waterson, 2022).[98]

These events are examples of how political uncertainties and pressures can significantly impact UK PSM and their future. In this scenario, extending PSM's linear prominence benefits to the online world is depicted as a survival strategy, almost a 'holy grail' solution to the core issues raised by today's digital media platforms. From this perspective, a new regime could be advantageous not only for PSM, but it could also: (a) tackle the unfair competition arising from the activities of platform organisations and their intermediary services; (b) protect

[96] For more information, see the public consultation of DCMS (the Department for Digital, Culture, Media & Sport of the UK Government) (DCMS, 2022d) and the inquiry of the Communications and Digital Committee of the UK House of Lords (House of Lords, 2022b).

[97] While the privatisation of Channel 4 was strongly supported by Boris Johnson's Government, in 2022, his Government fell, followed rapidly but the fall of his successor Mary Elizabeth Truss, leaving the future of this organisation uncertain and legislation did not proceed. With the third and current Government led by Rishi Sunak the plan was then abandoned.

[98] For more information, see the inquiry of the Communications and Digital Committee of the UK House of Lords (House of Lords, 2022a).

national and internally pluralistic AVM service providers;[99] and (c) ensure users' exposure to diverse content through positive nudges.

7.2.1.1. Curbing Platform Organisations' Power by Tackling Unfair Competition

First, new prominence rules could positively intervene in the ongoing 'battle' (ITV, 2018: 2) or 'combative relationship' (Pay-TV operator 1, 2019) between local and national AVM providers, on the one hand, and global players, on the other, to promote fairer competition in the market. With current prioritisation processes, PSM representatives often highlighted how established UK players are apparently being unfairly discriminated against, disintermediated, and replaced by global distributors and providers of AVM content, as the power 'to shape and influence what we watch, listen to or buy from the comfort of our homes' (ITV, 2018: 2) shifts towards these commercial and global players.

PSM and Ofcom representatives were particularly vocal in emphasising how the concentration of market power and strategic control over access to content that organisations like platforms and technology manufacturers have gained is leading to unbalanced negotiations over prominence and discoverability, where one side can exert much more influence than the other, with the long-term risk of losing the overall plurality of content and content providers online. As an interviewee from Ofcom highlighted, 'it is a finite space we are talking about, these assets are valuable, and the arrangements work differently … and given that we can see competition just heating up, we are not quite sure how that will play out … but it is reasonable to assume that this space is going to get a little more crowded or a lot more crowded, it is not going to stay the same. … So it is necessary to design that legislation, or regulatory rules' (Ofcom 1, 2019).

PSM representatives directly contradicted the arguments used by platform organisations and technology manufacturers who asserted that their choice architecture are neutral and based on objective criteria, which can automatically prioritise 'high quality content' (Chapter 7, section 7.2.2.3.). In the PSM's view, 'the power of the programme' and the quality of AVM providers are not sufficient to influence the outcomes of prioritisation processes (PSM 10, 2020):

> Everyone likes to think that it is just the power of the programme that drives success, as in people always watch the good programmes. But we can show you the empirical data of how our content performed on a platform like Freeview, where PSBs are advantaged in terms of navigation, and a platform like Sky or Apple TV or whatever, where we are disadvantaged – it is not just neutral, we are actively disadvantaged. There is a huge delta in our volume metrics performance in those two environments. So, whilst we would love to say, 'well it's because

[99] As it will be further explained in the chapter, by internally pluralistic, I refer to media organisations that offer a variety of genres and viewpoints. I therefore rely on the notion of internal pluralism discussed also in Chapter 3 (Karppinen, 2013; Parcu et al., 2022; Valcke et al., 2015)

> our content is great,' it is not. It is because we are number one/two/three in the channel listing. (PSM 10, 2020).

The active 'disadvantage' that PSM have is often related to some of the commercial and market dynamics discussed in Chapter 6. In particular, as PSM representatives often highlighted, they do not own 'the entire stack', while vertically integrated companies such as Apple, Amazon or Google Alphabet can leverage their gatekeeping power to self-promote and prioritise their own content and services (Chapter 6, section 6.2.2). This competitive edge plays out against not only PSM, but any national and local content creators as it favours the platform organisations and other global SVOD services that can more easily negotiate with fellow platform organisations and tech manufacturers (e.g. PSM 2, 4 and 6, 2019; see Chapter 6, sections 6.2.2 and 6.2.3 for full quotes).

Both PSM representatives and associations such as the International Broadcasting Trust and the Voice of the Listener & Viewer argued that market forces alone would not be enough to ensure a fair, transparent and pluralistic media ecosystem. From this perspective, a system of positive discrimination combined with transparency requirements, they suggested, was a possible solution. They used a technologically deterministic argument to support this view, according to which technological change has facilitated the rise of global online platforms and distributors as key intermediaries in the AVM industry, and television screens are just one 'key battleground' in a broader 'commercial battle to shape and influence what we watch, listen to or buy from the comfort of our homes' (ITV, 2018: 2–3). In this battle, UK PSM players feel they are on the losing side (ITV, 2018: 2–3), especially the commercially funded PSM which argue they are 'actively disadvantaged' on the commercial VOD and SVOD services that are owned by organisations like Apple, Amazon or even Netflix (PSM 10, 2020).

7.2.1.2. Ensuring Diversity of Exposure Through Positive Nudges

Second, online prominence rules are not only portrayed as a solution for a 'healthy broadcasting market in the UK,' but also for 'the personal and social benefits of audiences' (Ofcom 1, 2019). Both PSM and Ofcom representatives repeatedly expressed their concerns over the undue interference that the intermediating technology manufacturers and platform organisations can exercise over the curation of and access to content.

The core issue to address is their control over access to content and the influence they can exercise over user behaviour and choices in the interest of their own financial and commercial returns. In other words, new prominence rules are needed to address the flaws of today's online nudge and behavioural economics, which are perceived to have significant impacts on reach and access:

> Because we are number one/two/three in the channel listing, lots of people encounter our stuff because of that. … People are not making active choices when they are scrolling through Netflix or Sky's EPG, they are looking for the least bad thing they can watch next. So that type

> of nudge economics or that behavioural economics is really, really important, but we have not found a way in. (PSM 10, 2020)

A possible 'way in' is the new prominence regime for PSM, which in their view would ensure that people have access to an 'information utility that is designed around their wellbeing, rather than the financial performance of shareholders' (PSM 13, 2020). The emphasis is therefore on the urgent need to limit the influence that platform organisations have over how content is curated online, which, PSM representatives and others argue, is driven by commercial and profit-maximising purposes, rather than by public interest objectives (PSM 1, 6 and 7, 2019).

Furthermore, the lack of transparency in the criteria used to make content more prominent and discoverable is used as a supporting argument to further question the gatekeeping role of platform organisations and technology manufacturers. As one of the interviewees described it, 'when those people [i.e. Amazon and Google Alphabet] become the gatekeepers to all the information, how much control do they have, and what check points do they have? (PSM 1, 2019). The rationale behind a new prominence regime is to ensure that those providers that are best placed to serve audience interests are granted regulatory benefits with fair and transparent processes that do not harm users' freedom of choice (Ofcom, 2019c, 2022a). Their freedom to access and consume whatever content they want is therefore still a 'prerogative,' but positive content regulation is seen as helping to address current issues with access and diversity of exposure (Ofcom 1, 2019).

Indeed, Ofcom states in several instances that one of the key principles to be upheld under any new prominence regime should be 'protecting the viewer's ability to personalise what they see, not preventing active consumer choice' (Ofcom, 2018c), and ensuring audiences' 'freedom of being able to watch what they want, when they want, through a smartphone or tablet' (Ofcom, 2018a). Thus, a new prominence regime is seen as added value, a positive or 'soft paternalistic' intervention (Thaler and Sunstein, 2008) that would not harm audiences or negatively impact on their freedom, but will 'encourage' them, with no imposition, to access alternative content produced with a public service-driven mission:

> The heart of the issue is about delivering personal and social benefits to audiences. So, what content do you need to do that? Who is best placed to do that? Then you make sure that that content is widely available and encourage the viewers as it is easy to find. That is done in a way that balances the wider market, because the regulator is not pro-PSB at the exclusion of all others, but it is about healthy broadcasting market in the UK. You as a viewer, if you want to watch entirely fully commercial channels, or you want to watch Netflix, this is your prerogative, but you should know that other content is there for you, and it should be easy to find, and you should be encouraged to find it easily.' (Ofcom 1, 2019)

The idea of 'encouraging' people and positively nudging their behaviours, is often present in PSM advocacy strategies as they claim that new prominence rules are not only necessary to ensure that content and

information are produced and distributed not just for maximising profits and subscriptions, but also to ensure that users are exposed to a diverse set of opinion, views and media sources. These arguments are similarly used by external experts coming from international news media organisations that highlight the importance of positive discrimination in favour of quality and trusted journalism to ensure diversity of exposure, while disincentivising the spread of misinformation (External expert 3, 2020).

Leveraging the rationales and objectives of the former EPG prominence legislation, these actors call upon the government and regulator to 'not shy away' from similar interventions, and to 'feel courageous enough to translate that social pact into new spaces' (PSM 13, 2020). The following quote is one of the clearest and most direct examples of this type of argument, which occurred in several instances during my interviews:

> There should be legislation to ensure that people also … make space for an information utility that is designed around their wellbeing, rather than the financial performance of shareholders: that is the difference … In the past, we did not shy away from that. If you look at EPG legislation, the premier spots in a traditional television index system are reserved for organisations who are prepared to commit to a set of social goods, that is the trade. Then the rest of the market is allowed less prominent positions with less obligations. For whatever reason, we have not felt courageous enough to translate that social pact into the new spaces. (PSM 13, 2020).

7.2.1.3. Protecting National, Internally Pluralistic AVM Service Providers

Third, new rules could also be beneficial for the UK AVM industry overall and its internal pluralism. The rationale for intervention here is to use prominence as a means to create and maintain 'a safe space online' to showcase and make visible national players 'because their ability to create that space themselves on global platforms is, if it ever existed, fading fast' (PSM 6, 2019). UK PSM emphasise that the whole UK media industry could benefit from their prominence, because PSM are key investors in local and national programming, and based on their remits, they have to invest in more niche-market-failure genres, such as news, current affairs, educational programmes, etc. If left completely to global organisations, these kinds of content could be undersupplied as these actors do not understand or care about the specificities of the UK and its national culture (PSM 1, 4, and 6, 2019).

As outlined by one of the interviewees, 'from a consumer's point of view, that would be a market failure, because a global market is crashing into the national market, and the global market is going to undersupply content of particular peers in [the] national market' (PSM 4, 2019). This core argument is then discursively linked to a broader 'virtuous cycle of reach, funding and high levels of investment in UK content' (BBC, 2018a: 4) that PSM and their value creation can foster through prominence – a virtuous cycle that, it is claimed, is in danger of being interrupted without regulatory intervention. In this sense, prominence is depicted as 'the key

regulatory intervention which supports PSBs' ability to sustain their investment in UK-made public service content' and without such intervention the whole UK national and local media industry will inevitably suffer (Channel 4, 2018: 2).

The objective to use prominence regulation to support and sustain the distribution of and access to national content and programmes is also found in the content-based approaches of the AVMSD and its insistence on prominence for European works (ERGA, 2021b; European Commission, 2020a), and the new discoverability rules in Canada (Government of Canada, 2021a, 2021b) (Chapter 2, sections 2.2-3). In the latter case, the need to regain and foster cultural sovereignty combined with the necessity to find alternative sources of support for a national media industry in crisis was the rules' main rationale (Government of Canada, 2021a), and similar policy objectives drove the rules about quotas and prominence for European works in the revised AVMSD.

The rationale used by UK PSM is said to tap into a protectionist intent to safeguard 'UK-originated content' (BBC, 2018a: 4), 'UK-made public service content' (Channel 4, 2018a: 2) and 'UK players' (ITV, 2018: 2) against global competitors, emphasising the key role of PSM as the 'beating heart' of the UK AVM industry (PSM 1 and 4, 2019). A strong normative understanding of the PSM's value creation underlies this argument, contraposing them to private media competitors and platform organisations.

By discursively linking prominence to their societal, economic and democratic contributions, the PSM and their supporters can be understood as trying to assert that not only is this regulatory intervention needed for the survival of the British media industry, but it would make the industry thrive by fostering a 'virtuous cycle' ('BBC, 2018a: 4) of public value creation that PSM has historically contributed to. As outlined in Channel 4's public consultation response: 'the key regulatory intervention which supports PSBs' ability to sustain their investment in UK-made public service content ... both increases the impact and effectiveness of socially important content while also maximising its commercial viability for commercially funded PSBs – thereby incentivising continued investment' (Channel 4, 2018: 4).

In each of the three narrative strands of this stakeholder coalition, a new PSM prominence regime is portrayed as the solution to everything: it could not only address the ongoing PSM crisis but also solve some of the pressing challenges stemming from the growing gatekeeping power of digital media platforms. However, this portrayal is somewhat biased, and drive by the need for PSM to stay relevant in an increasingly competitive online system. Indeed, as also demonstrated in Chapter 6 (sections 6.3.2. and 6.4.), achieving a prominent location and being easy to discover is not just a way for these organisations to serve their public interest mission. On the contrary, prominence and discoverability also serve their corporate interests as they are seen as the strategic means to retain and increase audiences, gain control over access to content and user journeys, transfer their historical benefits from the linear world to the online one, and, for commercially funded PSM, to maximise their advertising revenue (sections 6.3.2).

Thus, while the pro-regulation narrative highlights the potential advantages of a new regime and presents the rationale for such intervention, at the same time a PSM-centred approach to prominence would firstly serve the interests of PSM, and then, if these organisations continue to uphold their public service mission, it could also indirectly contribute to the broader media system, as they argue. In a country where there is a thriving, independent and pluralistic PSM market, such intervention could bring those claimed advantages, but regulatory oversight of how PSM respect their remits and mission is key to achieving this. In this regard, as Chapter 5 demonstrated (sections 5.2.2 and 5.3), public value criteria are not the only criteria used by PSM to prioritise and curate content on their services, and truly alternative approaches to recommendation systems that fully foster diversity of exposure are still in the experimentation phase.

Finally, PSM prominence should not be seen as the 'holy grail' for all issues concerning today's digital media platforms and it is not a one-size-fits-all solution that can be applied uniformly to all their intermediary services. As I will further argue in the following concluding chapters (Chapter 8 and 9), PSM prominence is one piece of the puzzle but does not necessarily correct the industry's structural power imbalances nor the growing gatekeeping power of global platform organisations and technology manufacturers.

7.2.2. Perceived Disadvantages of a Regulatory Intervention: A Censorship Tool?

On the other side of the policy debate we find technology manufacturers, pay-TV operators and platform organisations which strongly disagree with the need for intervention. Even if these actors recognise the importance of PSM, their position is built on the assumption that this policy debate is mainly driven by the 'PSM's rhetoric' (McDonald, 2018), with 'little hard evidence that demonstrates there is a problem that requires a legislative or regulatory solution' (Sky UK, 2018a).

Some research participants described this whole debate as 'a conflated policy issue' (Pay-TV operator 1, 2019), or a mere 'political discussion' (Platform 4, 2020), which was then instrumentalised by PSM organisations to strengthen their 'negotiation position' (Platform 4, 2020) or to 'tilt the bargaining power in their direction' (Pay-TV operator 1, 2019). Most of these participants' advocacy efforts and arguments were used to diminish the importance that PSM give to prominence and to emphasise the lack of evidence and data on the impact of content prioritisation processes on user access to content (e.g. Pay-TV operator 1, 2019; Platform 4, 2020). As one of the interviewees repeatedly argued: 'there is no bottleneck, there is no issue of making content fundable on our user interface, if the customer wants to watch something the customer will find it,' but 'if the customer would really have a hard time not finding the content that they actually want to watch, they can easily change the servers and move to a competitor' (Platform 5, 2020).

The main rationale for this advocacy position relied on the idea that free market competition and deregulation are optimal solutions for users and a mandated prominence regime would have negative implications for both user experience and for the future development of the industry. In particular, in the view of these participants,

an overly prescriptive approach to prominence rules could be a potential threat to: (a) external pluralism and free market competition; (b) users' freedom of choice and customer interests; and (c) innovation and technological developments.

7.2.2.1. Threats to External Pluralism and Distortions of Free Market Competition

First, this group of stakeholders argued that there is no real need for this type of intervention, and if such positive discrimination were to be granted only to PSM organisations, it would simply strengthen their negotiation and bargaining power, while negatively impacting on competition in the UK media industry (Chapter 6, sections 6.2.3 and 6.4). In several instances, interviewees from pay-TV operators and platform organisations highlighted not only the absence of evidence of a problem with the current prioritisation processes, but also the potential implications of an additional 'regulatory leg-up' (Pay-TV operators 1, 2019) for PSM in terms of the overall market dynamics (Pay-TV operator 2, 2020; Platforms 4 and 5, 2020).

These stakeholders strove to refute PSM claims that new prominence rules could support the UK AVM industry as a whole. In their view, prominence would ultimately benefit PSM only, and policymakers should consider alternative regulatory paths to support a plurality of national, local and international media actors and content in the UK. In this regard, some interviewees called on PSM organisations to 'try out a new and more mutually beneficial and efficient approach' (Pay-TV operator 1, 2019), such as establishing partnerships or collaborations that would benefit the national media industry as a whole, while others attempted to suggest alternative regulatory interventions for Ofcom, such as requiring 'key global VOD providers such as Netflix and Amazon to invest in and produce more local programming' (Samsung Electronics UK, 2018: 5). A pay-TV operator representative summed the situation up as follows:

> What we see in the debate around prominence right now is that PSB are essentially making arguments which they believe will tilt the bargaining power in their direction, and essentially give them the ability to say to distributors, 'you have to have our content, and you have to give us the prominence we want, but we're still going to demand payments.' So it is a shit thing for bargaining, and obviously we are going to push back on that very strongly … in particular when it comes to commercial PSBs. (Pay-TV operator 1, 2019).

Representatives of platform organisations were generally opposed to any positive discrimination mandated by regulation as 'it is obviously something that is not working for the industry, because you are reducing the competitiveness of different services through regulation' (Platform 5, 2020). Furthermore, threats to competition were seen as being even more serious if the positive discrimination was in favour of the BBC, which is already a 'global powerhouse' with 'incredible soft power and influence' in the UK and abroad and has significant leeway in the negotiation with distributors (Platform 4, 2020). However, not everyone on this side of the debate agreed on this point.

On the contrary, interviewees from pay-TV operators claimed they would have been more willing to accept the BBC's prominence, as a national, publicly funded media organisation (Pay-TV operator 1, 2019; Pay-TV operators 2 and 3, 2020). But they were opposed to increasing regulatory benefits in favour of the commercially funded PSM (Pay-TV operator 1, 2019; Pay-TV operators 2 and 3, 2020). Since the funding models and commercial drivers of Channel 4 and ITV are arguably similar to those of any other commercial broadcaster or pay-TV operator, interviewees were against giving their 'commercial rivals a regulatory leg-up' (Pay-TV operator 2, 2020). In arguing this, pay-TV operator representatives claimed that they should not be discriminated against in relation to commercial PSM, since they are 'essentially doing exactly the same' (Pay-TV operator 2, 2020).

From this perspective, if Ofcom were to introduce prominence for both publicly and commercially funded PSM, companies such as Sky should also benefit from it since they too play a key role in the unique mixed ecology of public and private UK media organisations (Pay-TV operator 2, 2020). As argued by my interviewees representing pay-TV operators, both public and private media organisations should have the possibly to access such regulatory benefits. This argument was also supported by external experts representing community and news media, as well as by European trade associations representing commercial broadcasters and news media organisations. These stakeholders do not neatly fall into either of the two advocacy coalitions identified above (section 7.2) because while, in principle, they agreed with PSM organisations about the necessity of curbing the global platforms' market power and introducing online prominence rules, they also supported pay-TV operators in calling for a broader definition of the category of actors that should be granted such prominence (External experts 3 and 7, 2020).

7.2.2.2. Threats to Users' Freedom of Choice and Customer Interests

The counterargument to the need to achieve diversity of exposure through positive nudges concerns the perceived threats to freedom of choice. In their arguments against a new prominence regime for PSM, technology manufacturers, pay-TV operators and platform organisations often contraposed this regulatory interference with their intent to prioritise based on consumer choices and interests. In particular, both publicly and during the interviews, one of the biggest concerns expressed is in reference to the UK PSM's call for 'significant prominence for all PSB television services on all significant means of accessing TV content, e.g. major platforms, devices and services' (BBC, 2018a: 4) and 'regardless of how viewers access content, including through algorithmically generated recommendations and voice search' (Channel 4, 2018: 3).

Such a wide scope of application for a new PSM prominence regime was seen as too far-reaching, 'massively intrusive' and having 'severe implications for the users' (Pay-TV operator 1, 2019). As the same research participant argued, this level of regulatory intervention is comparable to the infringements on users' freedom of expression and choice that take place in authoritarian countries such as China (Pay-TV operator 1, 2019):

> One of the things that the PSBs seem to be asking for is prominence on search, and they don't just mean search on traditional UI, but across the internet. That's massively intrusive, and very hard to police. Such obligations have severe implications for the users too. … What the commercial PSBs are asking sounds to me a bit aggressive, and it appears to be a very intrusive regulatory proposal. I would be asking myself if I wanted a government body or a legislator to intervene like that, but you know … we are not China. (Pay-TV operator 1, 2019)

From this perspective, a prominence regime that applies uniformly to all online services and internet-connected devices – including their search functions and recommendation systems – would raise concerns from both a consumer perspective and a fundamental rights perspective because it would empower governments and/or regulators to intervene in what users can or cannot access online. As suggested by a research participant (Pay-TV operator 1, 2019), that the power of positive nudges in this sense could be misused to promote only state-approved discourses online. This could be the case especially in countries with authoritarian governments, or with PSM organisations that are not independent of political interference. This is the case in countries such as China (Cyberspace Administration of China-CAC, 2019) (Chapter 2, section 2.3),[100] where arguably new regulatory proposals and policy developments are *de facto* leading to soft forms of propaganda and censorship (Mazzoli and Tambini, 2020: 42–43).[101]

This idea of undue state interference that negatively impacts users' freedom of choice and goes against customers' interest was also conveyed by interviewees representing platform organisations (e.g. Platform 1, 2020) and technology manufacturers in their contributions to Ofcom's EPG prominence review. For instance, as highlighted by technology manufacturers and platform organisations in their responses to Ofcom's consultation (Samsung Electronics UK, 2018; TechUK 2018) and in my interviews (Chapter 5, sections 5.2.1.1–2, 5.2.2.2.2), a key criterion for prominence is 'relevance,' defined as relevance to customer choices and preferences, or at least to what are identified as such in consumer profiling. Thus, in the view of technology manufacturers and platform organisations, any regime that imposes prominence rules on specific apps will restrict consumer choice (Samsung Electronics UK, 2018: 2; TechUK, 2018: 1).

> If you have a government intervention that says, 'actually, forget about your carefully crafted recommendation system – we require you to put X, Y and Z, on the first row of the home screen,' firstly, it is probably not going to make people want to watch the content. Secondly, it is going to make

[100] With the "Provisions on Ecological Governance of Network Information Content" the Chinese Government has introduced new rules that encourage platform services to optimise and make prominent the information and content that adheres to the "mainstream value orientation of the Government" on all their services and devices, including search and recommendation system results (Cyberspace Administration of China-CAC, 2019).

[101] "Soft" is used here to differentiate this form of indirect state (and private) influence over what discourses and information should be prioritised from what is traditionally associated with state propaganda, i.e. material prepared by government that is distributed to a mass audience with a manipulative intent aimed at influencing and furthering a political agenda. It also refers to the soft forms of influence that hyper-nudges can create online (Yeung, 2016). Indeed, as discussed in Chapter 8, hyper-nudges involve subtle and yet powerful tools and strategies to amplify and prioritise certain AVM content and services over others, with the indirect aim of influencing access and user choices (Mazzoli and Tambini, 2020: 42).

> them … feel terrible towards the service overall, because suddenly they are thinking, 'oh this service does not get me, it is now telling me to watch this, and I have no interest in watching this.' Because the majority of consumers are not going to be aware of the underlying regulatory requirements that have put that content there in the first place. That is potentially problematic. (Platform 1, 2020)

Adjectives like 'unwanted,' 'inappropriate,' 'aggressive' and 'intrusive' are often repeated in public consultation responses to strengthen their argument that such regulatory intervention not only is not needed, but would be actively detrimental since it would 'force something upon the viewers'(TechUK, 2018: 6) and therefore go against their interests. As I further argue in the concluding part of my analysis (Chapter 8), positive content regulation is thereby contraposed to an idea of neutral content prioritisation processes, which does not acknowledge that choice architecture is not neutral and that we are dealing with socio-technical systems whose purpose is precisely to guide users and shape their decisions.

7.2.2.3. Threats to Innovation and Technological Developments

The third category of perceived threat is concerned with innovation and technological change. With a rather technological determinist view, research participants from both technology manufacturers and platform organisations argued that a 'prescriptive approach to prominence obligations' would not allow the flexibility and safeguards their companies required to innovate and adopt new technical solutions, such as AI-driven search and recommendation systems to 'provide true and more appropriate recommendations according to individual characteristics and requirements that reflect the needs of the individual' (Voice of the Listener & Viewer, 2018: 6).

Innovation was depicted as a means to respond to customer expectations, rapid technological developments in this sector and growing competition (Pay-TV operator 1, 2019; Platform 4, 2020). Thus, any regulatory intervention in this space was perceived as a threat to the ability of these companies to innovate:

> Platforms are evolving at a pace to keep up with customer expectations, so if you start imposing lots of obligations on this company and its search function, the consequences for innovation and platform development in the UK would be very significant. (Pay-TV operator 1, 2019)

> If we go into these regulatory discussions, I sometimes have the impression that they [i.e. policymakers] just want every user interface to look the same, and you have to have the same offers presented in a certain extremely strict order, etc. So, this is obviously something we believe it is not working for the customer, and it is obviously also not working for the industry, because you are reducing the competitiveness of different services through regulation. (Platform 4, 2020)

Similarly, in its response to Ofcom's consultation, TechUK highlighted that 'an overly prescriptive approach can stifle innovation and restrict consumer choice', since 'many consumers now consider other national and global content and services to be of equal interest to traditional PSB content and therefore these services should not be unduly disadvantaged or discriminated against in any prescriptive legislation' (TechUK, 2018: 1). The primary concerns here are therefore both the scope of application and how far legislation should go in prescribing what appropriate prominence should look like, as well as about the material scope, and state interference in deciding which AVM services should be prioritised. Sky, too, suggested that a highly prescriptive prominence regime would harm their freedom to innovate and in doing so even 'reduce the scope for diversity between providers' (Sky UK, 2018a: 20):

> Any new prescriptive regime that stipulated how user interfaces should be organised and removed the freedom of operators to present information in the way they think best would create a homogenous market: this cannot be in consumers' interest. (Sky UK, 2018a: 20)

What finally emerges in addition to the advocacy narrative of this second stakeholder coalition is a technological deterministic view that builds on an instrumentalised view of 'consumers' interest'. This actually reflects the justifications that both technology manufacturers and platform organisations were using in describing their socio-technical criteria for prioritisation in Chapter 5 (section 5.2). These industry actors argue that the best way to 'serve customers' interest' is to maintain their freedom to experiment, to decide what is best for their customers and to persist in their ongoing targeting and profiling techniques that prioritise content based on user data. At the same time though, these are the same organisations that have stronger control over key gateways to content and understand how prioritisation can be a powerful tool to nudge users, drive traffic and eyeballs.

As also emerged in Chapter 5 (section 5.3), the divergence in these advocacy positions is closely linked to the ways organisations conceptualise notions of 'diversity', 'public interest' and 'consumers' interest', and adapt their conceptualisation to support opposing policy objectives. Thus, this part of my analysis confirms that behind the claimed objectives of safeguarding pluralism, market freedom and users' freedom of choice, lie the self-interests of these organisations. These private companies after all primarily exist to serve their shareholders, so ultimately they are about increasing subscribers and competitive advantage including their bargaining levers against content providers. Public interest considerations are therefore often used as empty discourses to influence the policy debate and avoid additional regulation.

In conclusion, this section revealed **not only a lack of consensus among stakeholders on whether intervention is needed, but also a constant interrogation of the objectives of new prominence rules and their implications, based on the self-interest of these organisations.** Research participants, both in their consultation responses and in my interviews, were trying to shift the terms of the debate to avoid the imposition of new regulations, or if that seemed unavoidable, to push for any new prominence rules to work in their favour. At the same

time, beyond the organisations' advocacy rhetoric, all stakeholders agreed that prioritisation processes can nudge and influence user choices and have an impact on access and consumption of content, with both short and long-term consequences for the overall diversity and plurality of the UK audiovisual media industry.

A new prominence regime could have both negative and positive effects depending on its material scope, scope of application and the overall accountability of the regulatory process. This creates tensions among industry representatives and opinions diverge about who should (or who should not) be allowed to have such an influence on users, and how to draw boundaries between soft paternalistic interventions, from either private companies or the government, and more intrusive measures. Indeed, undue power and interference over user access to content could be (and has been) deemed to come equally from private market actors and from the state.

The politics of prioritisation depict **a struggle among national governments, regulators, private and public media and platform organisations to establish control over users' journeys to content and to determine what content and services should be prioritised.** While this struggle will continue, regulation could change its outcomes. I suggest that to support media pluralism and diversity online without harming users' freedom of choice and media independence, regulators and policymakers should move beyond the advocacy rhetoric and devise prominence regimes that could contribute to solving **two structural issues in our modern digital media platforms system: the growing concentration of gatekeeping power and its impacts on external pluralism; and the pervasive use of hyper-nudges and their impacts on diversity of exposure and freedom of choice**.

The following sections shed light on these two sets of problems by drawing together the insights from my analysis of the technical (Chapter 5), business (Chapter 6), policy and regulatory (Chapter 7, section 7.2) dimensions.

7.3. Moving Beyond the Advocacy Rhetoric

Choice architecture contributes to prioritisation practices that reproduce historical industry battles for securing control over key gateways to content, reinforcing both structural imbalances between content providers and dominant platforms and their intermediaries, and problematic user targeting and profiling techniques. These imbalances are especially important in smaller media systems and vis-à-vis local and national providers that do not have the capacity, soft power or leverage to negotiate a favourable deal with global technology manufacturers and platforms.

As this second part of my analysis will show (sections 7.3.1 and 7.3.2) , in the short-term, these asymmetries in power can impact the diversity of content to which users are exposed to and, in the long-term, they can have negative repercussions on the sustainability of national, regional, and local players. Furthermore, as private and commercial interests continue to prevail over public interest considerations, media organisations

are moving towards a form of institutional isomorphism that reduces the distinctiveness of PSM and limits the emergence of alternative and more mission-driven models to content prioritisation. Without appropriate incentives in place, this tendency can exacerbate the dominance of commercial personalised UIs, search functions and recommender systems that exploit users' data to maximise user engagement, rather than ensuring audiences' diverse consumption of content which may also impact negatively on engagement with public interest content.

These issues demand intervention, but the creation of new governance systems for such a dynamic and complex environment is not a straightforward task. As the policy framework that could, directly or indirectly, interfere with content prioritisation processes, is currently undergoing significant changes, we are moving into uncharted territory of a contemporary policy area. At both national and European levels, whilst there seems to be a general understanding of the importance of prominence of public interest services, there is disagreement about the interventions that may be necessary, the framework for defining what such services are, and their potential implications for media pluralism (Parcu et al., 2022: 159).

As demonstrated by a EU-wide study of these new regimes (Parcu et al., 2022: 159–160), a lack of clarity around the underlying issues stemming from online content prioritisation processes, combined with a lack of clarity around the desired policy objectives of new prominence regimes, could ultimately result in unbalanced and policy initiatives, which, in turn, could have unwanted consequences for the overall media ecosystems. By building on the advocacy discourses and informed by the findings of Chapters 5 and 6, there are two core challenges that regulators and policymakers should be addressing through new prominence regimes online: the growing concentration of gatekeeping power and its impacts on external pluralism; and the pervasive use of hyper-nudges and their impacts on diversity of exposure and freedom of choice.

7.3.1. Concentration of Gatekeeping Power: Concerns for External Media Pluralism

As emerged from my analysis (Chapter 6), control over gateways is perceived as a valuable asset and a source of competitive advantage that the parties involved are not willing to trade off easily. Through commercial negotiations, technical strategies and/or political leverage, organisations strive to retain and increase their control. To do so, organisations utilise different kinds of power. My analysis confirms that organisations like platforms and technology manufacturers leverage their gatekeeping power, strategically gaining control over key gateways along the audiovisual media content value chain (Chapter 6, Fig. 6.1). As a response to the growing concentration of gatekeeping power in the hands of few global actors, it emerged that some content providers, especially established PSMs like the BBC, use their soft power to influence the negotiation of content prioritisation.

Soft power was not considered in my initial conceptual framework (Chapter 3, section 3.3.). However, my analysis has brought to light the extent to which it plays an important role in negotiation processes. The

concept of soft power developed in the field of international relations from the work of Joseph Nye (Nye, 1990, 2005). In media and communication studies this is a relevant concept since the media are often identified as a source of soft power that can influence normative structures of our societies (e.g. Rosenau and Singh, 2002). In my research, interviewees referred to this notion (e.g. sections 6.4. and 7.2.2.1) when describing the influence that traditional and well-established UK PSMs have in industry dynamics and policy processes. The BBC, in particular, was depicted as a 'global powerhouse' with an 'incredible soft power and influence' in the UK, which gives it significant leeway in negotiations with distributors (platform 4, 2020). The notion of soft power was used to describe the ability of certain media organisations to influence and persuade to achieve policy outcomes in the debate on new prominence rules and to reach commercial deals in the negotiation for prominence with other market actors.

The interplay between soft power and gatekeeping power can therefore be understood to influence how In this context, even if from an external pluralism perspective, a wide and diverse range of services and sources is available and accessible online, in practice, forms of discrimination and new types of interdependencies among industry players continue to occur as a result of these power dynamics. Thus, despite what interviewees from technology manufacturers, platform organisations and pay-tv operators argue (e.g. sections 6.2.2, 6.4 and 7.2.2.21), the existing distribution of prominence and discoverability benefits is far from being neutral and non-discriminatory. On the contrary, my evidence confirms that the choice architecture and related design choices are never neutral (Thaler et al., 2013; Yeung, 2016). They are intrinsically part of intermediary services whose function is to aggregate, organise, curate and moderate content: activities that require positive and negative discriminations (e.g. Gillespie, 2017, 2018).

Could 'fair' and 'appropriate' prominence ever be achieved? If so, how would it look on different services and devices? As the analyses shows, this is a crucial area of contestation in the politics of prominence and discoverability. Objectively 'fair' prominence is not feasible given the socio-technical nature of these developments and agreement among all stakeholders is unlikely to be reached, but it is possible to propose mechanisms and incentives that might lead to a fairer and more appropriate distribution of these benefits to minimise the long-term detrimental implications for media pluralism online.

As suggested, to mask their private interests, most content prioritisation and broader content curation policies are discursively justified as 'a way to respond to customers' interests' by prioritising and recommending what is deemed to be 'relevant' for them (section 5.3). This instrumentalization of customer interests was present in my analysis of the positions of public and private actors. By conflating the definition of customer or user interests with the notion of public interest, industry actors used this vague and malleable concept to justify almost any content prioritisation decision and their broader content policies, shifting attention away from the structural imbalances that lie behind these processes.

Alongside the opaque hyper-nudging and profiling techniques, my analysis also uncovered deeper structural issues and power dynamics in today's online audiovisual media industry. I have shown how different forms of gatekeeping power and soft power are enacted in content prioritisation processes and their technical, commercial and political negotiations. These power dynamics are related to underlying market structures and competitive dynamics, as industry actors strive to strengthen their control over key gateways to content and services, on the hardware and software levels. Thus, even if prominence regimes are primarily associated with content regulation, competition is also a key aspect in this policy area – as highlighted in several instances by interviewees from technology manufacturers, platform organisations and pay-tv operators (sections 7.2.1.1. and 7.2.2.1.).

Technology manufacturers and platform organisations – especially those like Apple, Google and Alphabet that 'own the entire stack' in the value chain (PSM 6, 2019) (section 6.2.2) – are able to leverage their role as gatekeepers on the hardware and software levels and shape the technological architecture in a way that is favourable for them – either by self-preferencing their own services (section 6.2.3) or by maximising their revenues through global distributions deals (section 6.3.1). Although existing competition and antitrust frameworks are not effective in tackling these forms of contemporary algorithmic gatekeeping power (Napoli, 2019: 58–59), they impact on competition and the external dimension of media pluralism. Vertically integrated and global actors are able to leverage their resources to strengthen their position in the market, while local and national providers are faced with a 'fundamental strategic disadvantage' (pay-tv operator 1, 2019) (section 6.2.1).

To some extent, similar issues emerged in the past, with the advent of cable and satellites. For instance, in the US in the 1970s and 1980s, national television networks had to rely on distribution via local affiliates or commercial operators which could pre-empt national programming (Napoli, 2019: 58–59). In the UK and other European countries, the gatekeeping power that cable and satellite operators had was a source of concern and European legislators feared that, without legislative intervention, distributors could have refused to carry certain programmes, or, alternatively, might use exclusivity contracts to take certain programmes away from traditional carriers, threatening the idea of universal and free-to-air content (European Audiovisual Observatory, 2005, 2012).

While the disintermediation of internet-distributed AVM has changed the relationships between AVM providers and cable and satellite operators, similar practices can be traced to new platforms and tech manufacturers players. As implied by some platform representatives (e.g. sections 5.2.1.2 and 5.2.2.2), national and local AVM organisations are valuable only within a commercial logic and as far as they maintain a sufficient appeal to national audiences. The popularity and relevance of these services were shown to be based on market and audience share figures (e.g. sections 5.2.1.2 and 5.2.2.2). As PSMs and local actors are faced with a steady loss of audience share and growing competition, their fear of 'falling off the screen' (PSM

12, 2020) in the near future is becoming more acute (section 6.3.2.1). And 'that's where the balance of power lies' (External expert 2, 2020).[102]

The ascendance of cable television and policy debates that led to the creation of must carry and EPG prominence rules foreshadowed some of the issues with content curation and prioritisation practices on platform organisations and their intermediary services. Despite the fact that scarcity is no longer an issue and the idea of creating new prominence regimes for the online world is not without controversy: technology manufacturers and platform organisations *de facto* have a form of gatekeeping power similar to that which cable and satellite operators had before the introduction of must carry and EPG rules (European Audiovisual Observatory, 2005). In other words, they have the ability to drop local and national AVM services: an ability which they can – and have acted upon (Chapter 6, section 6.2.1.).

At the same time, although the relations between distributors and AVM content providers have changed, this does not necessarily mean that certain national actors have no power. What was depicted as the 'negotiation power' (platform 3, 2020) or 'bargaining power' (platform 2, 2020) of the UK PSMs in my analysis should not convey a black-and-white picture of PSMs vs global competitors and the nature of this power needs to be better understood. My analysis suggests that PSMs in the UK can exert a form of soft power that is related to their 'brilliant reputations that are not replicated amongst other competitors' (platform 2, 2020), and the strengths of a diverse PSM sector that is unique in Europe and worldwide.

In particular, the 'soft power' of the BBC arguably has allowed this organisation to maintain its relevance, its prominence and its bargaining leverage even in difficult negotiation processes, enabling it to strike favourable distribution deals and ensuring the prominence of its apps and services on various devices and platforms (e.g. sections 6.4. and 7.2.2.1). However, the same cannot be said for other PSMs. Organisations like ITV and Channel 4 are already in a much weaker position in relation to companies like Netflix or Amazon Prime (External experts 2, 2020).[103] Lacking the protection of stable public funding and the status that the BBC has in the UK, my analysis shows (Chapter 6) that brand, market share and resources are not always sufficient to annually negotiate their prominence with technology manufacturers and platform organisations.

Alongside the soft power of PSMs, there is evidence that the extent to which this gatekeeping power can negatively impact national and local actors depends upon the national specificities of the industry. Indeed, the characteristics of each national AVM industry play an important role in how local and national AVM providers are able to negotiate their prominence and respond to the growing gatekeeping power of technology manufacturers and platform organisations (Mazzoli, 2021). The UK is in this sense a peculiar case. The UK AVM

[102]Experts working in a specialised and UK-based consultancy firm working in the media and communication sector.
[103]Experts working in a specialised and UK-based consultancy firm working in the media and communication sector.

industry embraces a rich variety of public and commercial media organisations, as well as national, local and global actors.

However, as highlighted by the Media Pluralism Monitor, the market tends to be dominated by a few major players and there is a high risk of undue commercial and private interference over editorial content (Craufurd Smith and Cavaliere, 2018: 7).[104] This tendency, combined with uncertainty about the future in an unregulated and highly competitive industry, is threatening for traditional media, especially for smaller PSMs and local services. Thus, it can be argued that what is simply a fear of falling off the screen for the BBC, for Channel 4 and other local services is an existing risk. This is why their attempts to re-establish a prominence benefit through regulation can be seen as instrumental for their future sustainability.

At the same time, while PSMs are disadvantaged by the current market dynamics, my analysis suggests that the creation of prominence regimes that favour them unconditionally would also be problematic. As highlighted in chapter 7 (section 7.2.2.1), by granting these benefits only to PSMs, there could be foreseen consequences for the overall plurality of the sector due to state interference that could lead to forms of discrimination against smaller and local players whose future sustainability is increasingly under threat.

In countries where PSM independence is under threat,[105] granting prominence to those organisations can strengthen their governments' political influence over the media, leading to soft forms of propaganda and censorship. Soft in the sense that they operate through sophisticated and yet subtle mechanisms, here described hyper-nudges (section 7.3.2.) This does not appear to be the case in the UK in my analysis, however, since private organisations and not the state were shown to have relatively stronger control over the choice architecture, using regulation by design to exert control over what content and services are accessed and shown to the final users.

To conclude, I suggest that the crux of the problem with new prominence regimes is to define their material scope and scope of application through accountable and independent public interest frameworks that can avoid undue interference from both private corporations and the state.

[104] For instance, as of 2018 - which was the last year in which the MPM reviewed the UK market post-Brexit - the top four television groups accounted for over 70% of the audience share; in radio this figure was in excess of 80%, and in print the top four newspaper groups accounted for around 77% of the newspaper readership (Craufurd Smith and Cavaliere, 2018: 7).

[105] Examples of European democracies where PSM's independence is under threat are for instance Poland or Hungary where the rise of more authoritarian governments have transformed PSM organisation into state-administrated broadcasters (see e.g. Połońska and Beckett, 2019), but also Italy, where RAI-Radiotelevisione Italiana is often under strong political influence due to the lack of adequate guarantees (see e.g. Carlini et al., 2022; Carlini and Brogi, 2021).

7.3.2. Institutional Isomorphism in Profiling and Nudging: Concerns for Freedom of Choice and Internal Pluralism

Alongside these power interplays, the choice architecture in the audiovisual media sector is also shaped by increasingly sophisticated hyper-nudging and profiling techniques. As also argued by David Hesmondhalgh, Roman Lobato, and Catherine Johnson, internet-connected devices can shape which content and services are most visible on their interfaces, and they routinely gather data concerning user behaviour, often without the user's knowledge (Hesmondhalgh and Lobato, 2019; Johnson, 2020b). Thus, as viewers visit integrated devices and services, the industry is engaged in a battle to control the gateways to content and services online and the user data generated from them (Johnson, 2020b: 166). **This control can be understood as enacted through hyper-nudges and a choice architecture that constitute a form of regulation by design** (Yeung, 2016) which is applied in today's platform governance systems.

This regulation by design is based on sophisticated **profiling and targeting techniques used to prioritise content which, in turn, are influenced by the R&D strategies and technological developments of each organisation, their different levels of access to users' data and content metadata, and their business models**. I therefore suggest that it is important to move beyond algorithm centrism since algorithms and recommender systems are part of broader socio-technical prioritisation processes and distinctive organisational strategies (see also Leerssen, 2020; Möller et al., 2018).

These processes are highly personalised and iterative; thus, the relations with users at an individual and collective level are pivotal, but this aspect is not at the centre of my analysis in this thesis. My findings highlight a constant effort by every organisation to shape these relations and predict them through efforts to implement carefully curated choice architectures which enable hyper-nudges.

Behavioural nudges and regulation by design are not new. For instance, they are the basis for advertising and targeting techniques since they are part of the historical and 'epic struggle to get into our heads' (Wu, 2017), as well as part of government interventions to influence consumer behaviours in areas such health, food and environmental policy (e.g. Sunstein, 2015; Thaler et al., 2013; Thaler and Sunstein, 2008). Even though modern intermediary services rely on this 'deceptively simple design-based mechanism of influence' (Yeung, 2016: 2), they operate within a more complex and sophisticated context where nudging techniques can be more subtle and yet more targeted and opaque than the previous ones. As described by Karen Yeung:

> By configuring and thereby personalising the user's informational choice context, typically through algorithmic analysis of data streams from multiple sources claiming to offer predictive insights concerning the habits, preferences and interests of targeted individuals (such as those used by on-line consumer product recommendation engines), these nudges channel user

> choices in directions preferred by the choice architect through processes that are subtle, unobtrusive yet extraordinarily powerful (Yeung, 2016: 2).

My analysis indicates that on an institutional level, similar industry and policy logics can be found in the industry practices and policy debate specifically around prominence regimes online. Thus, what Yeung describes as 'hyper-nudges' (Yeung, 2016) on an individual level are also arguably at the centre of the institutionalisation of content curation and prioritisation techniques. This is because the subtle and yet powerful impacts that these hyper-nudges have on individual choices are what make prominence and discoverability so valuable and yet contested.

These impacts have not been explored in this thesis. My analysis instead demonstrates that every organisation is putting a lot of effort, time and resources into refining the choice architecture of their services, while influencing the architecture of hardware and software systems through which their services can be accessed. Data analytics is a key instrument to improve the effectiveness of prioritisation processes in nudging users' journeys to content. Control over access to data and content metadata has been shown to be perceived by all industry actors interviewed as a valuable and strategic asset – hence, the consistent emphasis by my research participants on maintaining control over access to data or trading it off as part of broader distribution deals and commercial negotiations (section 6.2.4).

As a form of self-regulation by design aimed at guiding and influencing users' choices, the technical means used to prioritise content (sections 5.2.1 and 5.2.2), can be described as 'digital decision guidance processes' (Yeung, 2016: 4). According to Yeung, digital decision guidance processes are designed so that it is not the machine, but the targeted individual, who makes the relevant and final decision, while these technologies seek to direct or guide the individual's decision-making processes in ways identified by the underlying software algorithm as 'optimal', by offering 'suggestions' intended to prompt the user to make decisions preferred by the choice architect (Yeung, 2016: 4–5).

These processes are implemented via a recursive feedback loop which allows dynamic adjustments of the standard setting and content policy phase and the behaviour modification phases of the management cycle of these systems, enabling an individual's choice architecture to be continuously reconfigured in real-time. Thus, this dynamic loop is not only influenced by an algorithmic-driven and automated system, but also by the input given by the choice architect – the focus in my analysis - which, in turn, is part of the organisation's content and policy strategies.

As demonstrated in Chapters 5 and 6, the criteria used to optimise and refine these techniques vary depending on the organisational interests, missions and business models. Since users often deal with automated media systems and algorithmic processes, the role of the choice architect behind them is key, and so is the role of the organisation within which she/he operates and its governance systems. Thus, it is not just the algorithms that have institutionality, as suggested by Napoli (2014), but also the broader choice architecture in which

they are used that needs to be understood. In this sense, both the choice architectures and hyper-nudge techniques are part of broader media and platform governance systems and their respective institutional arrangements.

Within this context, **content curation and prioritisation processes are a clear example of how institutional forces can affect content outputs, flows and industry dynamics.** In particular, the ways in which these institutional forces are affecting the distribution of AVM content online suggests a **tendency towards institutional isomorphism in the online AVM industry which I suggest is bringing public and private actors in this field much closer to each other than they often claim.**

As discussed by DiMaggio and Powell (Powell and DiMaggio, 1991), and expanded by Napoli in his institutional theory of algorithms, institutional isomorphism refers to the tendency for organizations in a particular field to resemble one another across a variety of dimensions (Napoli, 2014b). The explanations for this tendency are numerous.[106] The tendency towards institutional isomorphism that emerged from my empirical analysis concerns similarities that PSMs and their commercial competitors share in shaping the choice architecture of their services and discursively justifying these choices. PSMs were found to be increasingly mimicking content curation strategies and practices of the most popular SVODs, and they use remarkably similar technical means and data-driven strategies to nudge users of their services (section 5.2.2), with at least some similar socio-technical criteria (section 5.2.2.1).

Even though Chapter 5 shows that a mix of privately driven and vaguely defined public interest-driven criteria are used by private and public organisations to curate and prioritise content, the criterion that is central for most of the hyper-nudging techniques of all organisations is what I describe as 'relevance'. Relevance sits alongside criteria like popularity, recency, quality, diversity and public value, **but in a way that is emblematic of how organisations instrumentalise notions of 'user interests' to justify their constant monitoring, profiling and targeting**. Underneath their claims of technological neutrality and users' freedom of choice, I have highlighted evidence of seamless efforts to grab user attention and to use it for their own organisational purposes. Thus, user behavioural data, consumption habits, and viewing preferences are exploited by both public and private actors in their efforts to 'stay relevant' in today's highly competitive environment.

The argument of 'serving the people whatever they want, what's best for them' was particularly evident in the discourses of technology manufacturers and platform organisations (section 5.2.2.1.2), and it was criticised by PSM representatives as a justification to mask the fact that 'in some forms they have learnt about you and what you might like, and as fast as possible, they try to recommend you something, thinking that there is value

[106] Explanations for this tendency include: coercion, which involves the pressures exerted on organizations by other organizations upon which they are dependent, and by cultural expectations in society within which the organization functions (DiMaggio &Powell, 1991b); (b) mimetic processes, which involve organizations responding to uncertainty in their environment or objectives by modelling themselves on similar, or more successful organizations in their field; and (c) normative pressures, which involve the processes of professionalization (education, training, acculturation) that result in increased similarity across organizations (DiMaggio & Powell, 1991b)

in that, and consumers get value out of that' (PSM 7, 2019) (section 5.2.2.1.2). At the same time, even the PSMs seem to assume that there is value in prioritising content in more targeted and personalised ways, which they justify as a way of showing what is 'relevant' for the users.

The 'relevance' criterion itself has been shown in my analysis to have a dual and contradictory meaning for PSMs and their mission. On the one hand, their understanding of 'relevance' is to some extent similar to the platforms' arguments around customer interests, and it is an argument used to justify their efforts in remaining relevant to their audiences, and for the commercially funded PSMs, to compete for audience attention in order to maximise their advertising revenues (section 5.2.2.1). My analysis shows that there is an added and yet contradictory aspect in their discourses that speaks to a universal 'relevance', i.e. content that is considered of public interest and should be deemed relevant not only for the individual, but for society as a whole (section 5.2.2.1). Thus, in a way the 'relevance' criterion which emerged as important in Chapter 5 symbolises this tension in the discourses around content prioritisation practices for both public and private actors.

I suggest that this tendency can be seen as a way for PSM to respond firstly to growing uncertainty in their environment by modelling themselves on more successful organizations in their field, and, secondly, to the external pressures exerted by the societal and cultural expectations of an ever more personalised and targeted viewing experience. However, the concern about this form of isomorphism is the possibility that organizations are increasingly likely to produce similar outputs and similar practices (see also Napoli, 2014: 351). This outcome could lead both public and private actors to optimise their content curation processes on the basis of similar socio-technical criteria as their choice architectures come to be based on similar assumptions about the significance of profiling and data mining techniques to refine personalisation and curation strategies.

The necessity to cope with the persistent uncertainty of audience demand for content and growing competition in an almost saturated market, I suggest, can therefore compromise the emergence of public interest-driven alternatives. Ultimately, the same practices that characterise the emergence of today's surveillance capitalism are being institutionalised and perpetuated (Yeung, 2016, 2019; Zuboff, 2015). I suggest that this is a result of the false premises of providing customer benefits and protecting freedom of choice that the industry actors use to reinforce their data-driven practices for their own benefits.

Thus, given this tendency towards organisational isomorphism there is reason for a deep concern about the future of the whole online AVM industry: a question of value distortion and an overall loss of public value. This could lead to a vicious cycle for the industry, especially in terms of internal pluralism, diversity of exposure and freedom of choice. From a pluralism and diversity perspective, depending on where prominence is enforced and how, using hyper-nudges as positive interventions can result in reinforcing certain behavioural and consumption patterns, unduly discriminating between certain types of services and content that do not match industry criteria and metrics, and exploiting a choice architecture for the organisation's private objectives. Similar processes have been unmasked when it comes to news media consumption on social media, where

curation strategies based on relevance, popularity and personalization have greatly gained in importance (Helberger et al., 2014).

As argued by Helberger et al., 'for most major news aggregators, as well as search engines, social networks and digital app stores, editorial judgments are limited to the criteria on which their popularity and personalization algorithms are based, and whether they block access to offensive or illegal content in order to comply with local legislation' (Helberger et al., 2014: 21–22). As illustrated by numerous researchers, the dynamics of many search, recommendation, and navigation algorithms emphasize popularity as a key criterion in generating results (see also Bucher 2012, Jones, 2012; Webster, 2011), leading to specific feedback loops that are self-reinforcing. In other words, if popular content is what is most frequently and prominently recommended, this further enhances its popularity relative to other available content and inhibits less popular content from gaining popularity (see Cho & Roy, 2004; Napoli 2014).

Furthermore, my research highlights how organisations constantly monitor user behaviours, at least within the confines of their devices and UIs. Researchers have advanced measurement and assessment frameworks, with related metrics and indicators to assess diversity (Helberger, 2015; Helberger et al., 2018, 2020; Parcu et al., 2022; Ranaivoson, 2013), that could be used to assess the effects that prioritisation measures have on diversity of exposure. However, access to such data by independent parties is lacking and since these digital decision guiding processes are personalized to each user, the aggregate result remains opaque at a systemic level.

I argue that the subtle character of these processes could give a sense of freedom of choice which does not take into account that user choices are nudged and influenced by the software and hardware architecture of carefully curated and personalised spaces. Even if there is some scope for user agency, there cannot be the freedom to choose among different prioritisation services unless viable opt-in/opt-out functions exist. I suggest that a concerted effort is needed to change these practices at systemic level, starting from making viable and easy to use alternative models.

As supported by civil society organisations (ARTICLE 19, 2021; Brown, 2021; Panoptykon Foundation, 2021), opening up the online media market through decentralised services and interoperable recommender systems could allow alternative recommender systems that optimise for diversity, for instance, to be accessible on different UIs. This, in turn, could allow more active, rather than passive, personalisation and empower users in making conscious choices about what they access and watch online.

Continuing in the present direction means that these tendencies could have implications for the industry as well as for users' viewing experiences. First, it could lead to a disappearance from the screen of those services that do not comply with the main socio-technical criteria and related metrics of content prioritisation (Tables 5.2 and 5.3).

Second, for those services that have not 'fallen off the screen', similar content would benefit from prioritisation techniques at the expense of less commercially-viable content such as news, current affairs and cultural programmes, reinforcing the trend towards an 'internet of entertainment' (Noam, 2017). Interest in news and overall news consumptions has declined considerably and steadily in many countries, especially on traditional media as users are increasingly accessing news on smartphones and through 'side-door' sources such as social media, search engines and aggregators services (see e.g. Newman et al., 2021, 2022). A tendency towards positively discriminating to prioritise only content and services based on consumption and engagement figures can exacerbate this downward trend and contribute to an overall loss of internal diversity in the online media landscape.

Third, a narrow interpretation of socio-technical criteria like relevance and popularity, which is not balanced with other public interest-driven criteria, can further reinforce the dominant model of optimisation where user behaviour is the primary influence in engagement-optimised systems. This would be at the expense of other values and inputs that could be used theoretically to shape prioritisation techniques and design choices.

My empirical analysis shows that alternative solutions already exist, or at least are starting to emerge especially among PSM organisations and research groups. As highlighted by a BBC representative, content curation on both linear and non-linear services is 'a way to push people to watch that kind of public service value content' and 'the ability to choose what things are shown on the homepage, what plays next when we control that curation is a lot about making those public service journeys' (PSM 3, 2019) (Section 5.2.2.1.1). To foster those 'public service journeys' associations like the European Broadcasting Union and other PSM organisations such as Sverige Radio (SR),[107] NPO,[108] ARD[109], and VRT[110] have been experimenting with recommender systems that do not optimise for engagement, but for more public interest objectives, such as diversity.

In particular, the EBU PEACH-Personalisation for Each project has developed a 'diversified algorithm' (European Broadcasting Union, 2020a, 2020b), whose goal is 'to recommend content which will broaden a user's horizon' (European Broadcasting Union, 2020a). Similarly to collaborative filtering,[111] the diversified algorithm also gives higher scores to content which other similar users liked, assuming that they all have similar tastes and prioritising 'relevant' content based on such assumption. At the same time, the diversified algorithm selects the most mutually different items from these high-scored items,[112] so that the resulting set of

[107] Sveriges Radio, abbreviated SR, is Sweden's national publicly funded radio broadcaster. See: https://sverigesradio.se/
[108] Nederlandse Publieke Omroep, abbreviated NPO is a Dutch public broadcasting organisation that administers public broadcasting services in the Netherlands. See: https://www.npostart.nl/
[109] Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten, abbreviated ARD is a joint organisation of Germany's regional public-service broadcasters. See: https://www.ard.de/
[110] Vlaamse Radio-en Televisieomroep, abbreviated VRT is the national public-service broadcaster for the Flemish Community of Belgium. See: https://www.vrt.be/en/
[111] Collaborative filtering is one of the most common approaches in recommender systems for many applications. The diversified algorithm in particular builds on the Matrix-Factorisation-Based collaborative filtering.
[112] Such distance is measured based on latent factors.

recommendations is diverse and still relevant. The resulting recommender system therefore prioritises based on both relevance and diversity criteria with the intent to expose users to a wider range of content.

Such recommender systems have been implemented and adapted by numerous EBU Members. Sveriges Radio for instance, gives prominence to its 'SR public values' in its recently developed news algorithm (Beckett, 2020; Sveriges Radio, 2020). News content is categorised based on its recency, importance for the general public, and for what SR defines as its core 'public values', such as diversity, universality, and localism (Beckett, 2020; Sveriges Radio, 2020). Alongside a new public interest framework for its AI and Machine Learning systems (BBC, 2018b), the BBC has launched a collaborative project with the Ada Lovelace Institute, looking at how public values are operationalised in their daily practices and what optimisation means for PSMs that seek to maximise social value (Ada Lovelace Institute, 2021).

These are attempts of PSMs to create mission-driven algorithms that better reflect their public service purposes. PSMs are not alone in these mission-driven innovations. Researchers have theorised (Harambam et al., 2018; Helberger, 2019; Moeller et al., 2018; Sørensen, 2016, 2019b; Sørensen and Hutchinson, 2017; Van Den Bulck and Moe, 2018) and tested new mission-driven algorithms (Möller et al., 2018; Van Drunen et al., 2019; Vrijenhoek et al., 2021). Last, but not least, my interviewees noted that Netflix is experimenting with curation options and techniques that include a diversified algorithm that does not solely optimise for user behaviour. These efforts are still heavily focused on 'algorithms' and technical solutions.

As we are at an early stage, we do not yet know how impactful these solutions can be on access and consumption of content. Furthermore, they are all rather small scale initiatives or ongoing R&D experiments, primarily focused on algorithms and recommender systems; thus, they are not yet scalable as structural public interest alternatives. **Nevertheless, they show that a conversation has begun and there is potential for change.** If we accept that these processes are socio-technical, we can start thinking about incentives that could change the underlying profiling and targeting strategies and reverse or stem the tendency towards institutional isomorphism. What is missing at this moment of writing are sufficient incentives to support a broader uptake of similar solutions that could impact broader content prioritisation processes.

To conclude, I suggest that **the second core problem with new prominence regimes online is how to define, operationalise and scale up public interest alternatives with socio-technical architectures that privilege public value criteria over others.** As I will argue in Chapter 8, small scale alternatives already exist, but the organisational isomorphism identified in my analysis is moving the sector in the opposite direction. Nevertheless, as regulation evolves and institutional arrangements are not yet settled, there is a window of opportunity that could be used to promote more public interest-driven innovations in the sector, which might prompt organisations to change their content and data strategies and optimise their UI designs based on different criteria. To do so, new forms of governance of online content prioritisation processes are needed.

7.4. Concluding remarks

While Chapters 5 and 6 analysed the technical and market dimensions of prioritisation, this chapter focused on its regulatory one. In so doing, this third part responded to the last empirical questions, unpacking the perceived advantages and disadvantages of new rules for PSM prominence, and investigating the core concerns that regulators and policy makers should address when designing these regimes.

The analysis reveals a lack of consensus among stakeholders on whether an intervention is needed in the first place, and disagreement about the perceived advantages or disadvantages of new prominence rules online. Issues of competition, media pluralism, diversity, freedom of choice and consumer interests emerge in this debate, and they are instrumentalised by the two main stakeholder coalitions to support opposing public policy aims. My analysis has, however, criticised how participants in the debate instrumentalise key notions – highly malleable and often ill-defined in the policy discourse – in an attempt for further their particular aims.

On the one hand, arguments in favour of open and fair competition, of market deregulation, and freedom of the expression were strategically deployed by those who oppose the creation of a prominence regime online for PSM. In particular, extending a prominence regime to all intermediary services offered by platform organisations was seen as an intrusion, a threat to both the freedom of media and to technology companies' ability to innovate, as well as to users' freedom of choice and expression. Moreover, the request to limit these benefits to PSM channels and services appeared to stakeholders opposed to a new regime to be anachronistic. They called instead for a broader and more inclusive definition of public interest content and its providers. However, views strongly diverged even among those broadly opposed.

On the other hand, new prominence obligations for UK PSM were proposed as safeguards for a pluralistic, diverse media ecosystem and as a means to curb the growing gatekeeping power of the technology manufacturers and platform organisations driven primarily by their commercial private interests, rather than a consideration for public interest. The stakeholder coalition supporting intervention argued that, thanks to the highly regulated nature of UK PSM, their obligations to invest in UK-originated content and provide universally accessible and diverse services, an online prominence regime could indirectly benefit not just the PSM, but also the broader UK media industry and its audiences.

However, the advocacy narratives adopted by these stakeholder coalitions are actually hiding more self-interested objectives.

UK PSM are going through a profound crisis, with declining audience share, funding instability, and political uncertainty about their future. Achieving prominence is therefore for them a way to survive in a highly competitive environment without entering into difficult commercial negotiations or technical gimmicks. Prominence for PSM is a way to rebalance one aspect of the power asymmetry between content providers

and the tech manufacturer and platform organisation gatekeepers. Platforms, technology manufacturers and pay-TV operators instead are ultimately trying to avoid that and to maintain their control over access to and the distribution of content online: they are unwilling to give up that power, and prominence is a central part of that.

These divergent advocacy positions on PSM prominence rules can be boiled down to a contested understanding of what services should be granted such prioritisation, on the basis of what criteria, and who should have the power to make such decisions: industry actors? Policymakers? Or a combination of thereof? As an Ofcom representative rhetorically asked during the interview: 'if the objective of this policy intervention is actually to deliver personal and social benefits to audiences, what content do you need to do that? Who is best placed to do that?' (Ofcom 1, 2019).

Pay-TV operators, technology manufacturers and platform organisations argue that market actors and their 'Good Samaritan principles' (Tech manufacturer 1, 2020) are well placed to make such decisions, safeguarding in this way users' freedom of choice and the market's freedom from undue state interference. PSM organisations, civil society organisations and Ofcom over potentially exploitative, profit-driven processes of prioritisation, and therefore argued that PSM, with the support of an independent regulator, would be best placed to make such decisions.

However, as the policy debate evolves and regulation is pending, it is important for both policymakers and regulators – such as Ofcom - to move beyond the advocacy discourses of these stakeholder coalition and identify what are the core challenges with today's content prioritisation processes that regulation could address. I suggest that the crux of the matter are two main problems that prominence regimes should address.

First, there is a pressing need to curb the growing digital dominance and algorithmic gatekeeping power of platform organisations that have vertically expanded throughout the media value chain. This power is exacerbating existing inequalities in the market where smaller local and national players are disadvantaged, if not actively discriminated against, while popular global players win the battle for prominence. Only the soft power of established media institutions, like the BBC, with the possibility to withhold content have been able until now to secure a prominent location of services and content. However, without an intervention that can safeguard other types of public interest services, most of them are likely to 'fall off the screen' (PSM 12, 2020), with negative long-term impacts for media pluralism and diversity online.

Second, a tendency towards an institutional isomorphism raises concerns for both user freedom of choice and for media pluralism and diversity online. To comply with the dominant market logics, private and public organisations were shown to tend to optimise content prioritisation processes based on similar criteria that are mostly influenced by private and commercial interests rather than by public interest considerations. This, in turn, arguably is compromising the emergence of alternative models, apart from small-scale examples or PSM R&D experiments, which do not (yet) have the potential to bring about structural changes in the market.

Moreover, this tendency is also strengthening the already problematic profiling and data mining techniques that are increasingly used by public and private organisations to shape the choice architectures of their online services and related digital guidance processes that can nudge user choice and behaviours.

A new regime could be a way to address these problems. As legislation in the UK and in other national and regional contexts is still evolving, I suggest that we should start to think about new governance systems that could be driven by a public interest framework, where public interest services could be granted prominence in a transparent and accountable way that is independent of market and political interference.

Chapter 8

Towards a Public Interest Framework for Governing Digital Media Platforms

8.1. Introduction

The previous chapters (5, 6 and 7) respond to my empirical sub-research questions shedding light on how prioritisation processes are shaped and influenced at the organisational level (Chapter 4, Fig. 4.5). These industry dynamics can be understood as new iterations of historical battles for users' time and attention and in the case of advertisers, their eyeballs: it is one aspect of broader struggles between established media organisations and new digital platforms as they all strive to gain control over gateways to content and data. These struggles are played out differently and with more targeted strategies that shape individuals' behaviours and choices through digital decision guidance processes and hyper-nudges that influence people in relatively predictable and yet unseen ways (Yeung, 2016; Yeung and Lodge, 2019).

Platform organisations and their intermediary services have taken on distributive and aggregator roles for media. Algorithms and data-driven strategies – those rules that contribute to prioritisation processes - are playing a key part in influencing what news users receive and how content circulates on intermediary services. While this is particularly evident in the case of social media,[113] my analysis confirms that similar logics and patterns can be found in the broader audiovisual media industry, where UI design, algorithmic-driven nudges and content policies also influence what content can be most easily discovered, accessed and consumed.

These industry and technical developments, in turn, inflect the regulatory and policy debate around the creation of new prominence regimes online, raising complex questions about whether regulators should intervene or leave the private and ad-hoc construction of prominence regimes to the market. Promoting a category of public interest services that is accountable, universally accessible, and internally pluralistic could, I suggest, indirectly help people to access a more diverse range of content (e.g., different genres, including information that is personally relevant, promoting national and local content, and different viewpoints), as they are more likely to be exposed to such diversity (Chapter 7, section 7.3.1).

While Ofcom is currently committed to using PSM services as a proxy for public interest services, researchers (García Leiva, 2020; Lobato and Scarlata, 2022; Mazzoli and Tambini, 2020; Parcu et al., 2022) and policymakers (Chapter 2) are exploring broader ways to define this category that could cater for those national

[113] These developments and how they apply on social media and news have been discussed also by Caplan, Napoli and numerous other researchers (Bell, Owen, Brown, Hauka, & Rashidian, 2017; Caplan & Boyd, 2018; Napoli 2014, etc.)

contexts where PSM systems are not as independent and as diverse as in the UK. In authoritarian countries and troubled democracies where the audiovisual media industry is dominated by state-administrated broadcasters or PSM that are not fully independent from state and political influences, prominence rules could be used by Government as soft forms of censorship or propaganda. In these cases, state-driven prominence regimes could have implications for democracy and human rights – as in China with their new prominence regulation (Chapter 2 and Chapter 7) (Mazzoli, 2021; Parcu et al., 2022).

Thus, depending on their design, positive online regulation in the form of prominence rules could have different impacts on online media ecosystems, their freedom, plurality and diversity.

This is why, at an important moment of institutional change in media and communication policy, my research has examined these organisational and institutional arrangements **to shed light on these practices so as to advance understanding and contribute to the reformulation of industry and policy practices.** Determining what content and services should be prioritised, I suggest, should not be simply a process driven by commercial interests and economic incentives, nor should it be left to opaque and algorithmic-driven optimisation processes. **It demands a discussion on how we can define *public interest services* independently of state and private interference and create accountable and transparent prominence regimes that promote public values and positively shape this market and the innovation processes.**

By examining these developments at the institutional level, my analysis has contributed rich insight and complexity to the understanding of this set of issues. While the previous analysis (Chapters 5, 6 and 7) focused on empirical questions, the next two sub-sections bring my empirical findings into conversation with my theoretical approach and provide answers to my overarching research questions (Chapter 3, section 3.4):

> *RQ1: How is content prioritisation governed on digital media platforms?*
>
> *RQ2: Inspired by the UK case, what would be the elements of a public interest framework for new prominence regimes?*

8.2. A Changing Governance System for Content Prioritisation Online

Informed by my conceptual framework, which brings a critical institutional lens to the study of media governance (Puppis, 2007, 2010) and the public interest (Napoli, 2014a, 2015, 2019) (Chapter 3), I have assumed that a choice architecture and its digital guidance processes (Yeung, 2016) are not neutral; nor are they simply algorithmic black boxes. On the contrary, they are understood to be deeply embedded in the governance and institutional arrangements of the actors that create them. This approach has enabled me to examine content prioritisation processes and their technical measures, framing them in relation to broader organisational strategies to critically address the positive and negative implications of privately- and state-driven prominence regimes.

My empirical analysis has shown how these new forms of intermediation are shaping access to and curation of audiovisual media content online, driven by different and competing definitions of what services and content should be prioritised for the final users. It also revealed how content prioritisation is being governed and negotiated across three dimensions:

- A technical dimension where prioritisation is influence by software and hardware solutions, and related socio-technical criteria that organisations use to nudge users;
- A market dimension where prioritisation is shaped by market dynamics and commercial deals over prominence and discoverability and the economic drivers behind them;
- A regulatory dimension where the governance of content prioritisation is shaped by lobbying and advocacy strategies used to influence the ongoing revision of PSM Prominence Rules in the UK.

The previous chapters emphasised that there is a combination of private, commercial and public interest considerations driving content prioritisation processes within each dimension. From a private and commercial perspective, prominence is seen as a means to gain and strengthen control over key gateways to content, increase traffic and reach, drive eyeballs and advertising revenues and, ultimately, to guide users' content choices online. On top of this, some organisations – especially PSMs and to a lesser extent commercial providers like Sky and SVOD like Netflix – argue for the use of prominence to achieve public interest objectives. In this case, notions of quality, diversity, public value, and consumer interests are manifested in empty discourses to justify organisational strategies around prioritisation processes and related prominence and discoverability decisions. However, the ways in which these notions are translated and operationalised into technical, commercial and policy strategies was found to vary depending on the organisations' objectives, their incentives, and their underlying business models.

Gatekeeping power can be enacted in all three dimensions, as industry players compete over the control of key gateways and access to user data and content metadata. This form of gatekeeping power occurs through various means and influence factors. Indeed, different organisational strategies, incentives and industry dynamics influence such processes on all three dimensions, not in a mutually exclusive way, and in a complementary way. The effect of these negotiations can be understood as cumulative: it is not just about a black-box algorithm or a UI design choice, nor only a distribution deal, nor solely about a regulatory obligation; all of these elements contribute to a sophisticated choice architecture that influences what services and content are prioritised to the final users.

Despite the diverging positions of these stakeholder coalitions, regulation is pending in the UK, while prominence regimes are being institutionalised in other national, regional and international contexts (Chapter 2). As my analysis shows, even if prominence rules on linear television date back to broadcasting and telecommunication legislation and the 2003 UK Communication Act, until recently, online content

prioritisation processes were primarily influenced by technical means and commercial negotiations among industry actors. Their governing systems were therefore dictated by industry dynamics and technological developments. However, as this thesis reveals, we are moving away from privately driven governance (Mazzoli, 2020) and moving towards new arrangements that sit at the intersection of media and platform governance.

Informed by my conceptual framework (Chapter 2, section 2.4), Figure 8.1 showcases the horizontal and vertical extensions of this changing governance system. The proposed PSM prominence rules in the UK are framed within a broader and evolving regulatory framework, which other individual countries, European policymakers and international bodies such as the Council of Europe are also trying to influence.

At the national level, new prominence rules for PSM were expected by the end of 2022. However, when the Government does establish some high level principles in a new Media Bill (DCMS, 2022e), it will be up to the regulator, Ofcom, to develop a new Code of Practice and Guidance notes to introduce obligations for manufacturers and platforms. To do so, Ofcom has outlined its position, but in practice, it is unclear how their recommendations (Ofcom, 2019c) will translate into an actionable regime, and a number of questions remain unanswered: how far will prominence obligations be extended? Which providers will be included? What could 'appropriate prominence' look like on different UIs, catalogues, search functions and recommender systems? How could the impact of these regulations be measured in a hyper-personalised and dynamic environment? And ultimately, will structural problems outlined in Chapter 7 be addressed?

I suggest that a material scope limited to PSM combined with a narrow scope of application limited to connected TV devices as suggested by Ofcom, might gain a few more years of 'relevance' for the main UK PSMs, but it will not be sufficient to promote long-term change. This regime will have to be coordinated and aligned with other complementary interventions, which include, but are not limited to, a possible revision of the media plurality and media ownership rules (Ofcom, 2022a; Roeber, 2022), a robust framework to increase transparency and accountability of platform organisations and their intermediary services (*UK Public General Acts*, 2023), and new competition rules that are fit for today's digital markets (UK Government, 2022). At this moment of writing, these initiatives are being developed in silos, the proposed texts do not appear to be aligned, nor do they acknowledge that we are dealing with shared issues of platform governance where prioritisation and moderation are two sides of the same coin. [114]

First, the transparency and accountability requirements that the UK's Online Safety Bill intends to introduce will be primarily focused on content moderation practices and specific kinds of content, such as illegal content, and it will target a set of intermediary services such as social media and search engines (*UK Public General Acts*, 2023). As it stands, the regime does not seem to tackle the structural issues stemming from existing

[114] As outlined in Chapter 2, at the moment of writing all the legislations mentioned here - Online Safety Bill, Digital Markets Regime, and Media Bill - have not yet passed, thus, changes to the text and to tweaks to obligations that they might introduced on the different industry actors could still take place. This is why I am referring to these legislations in more hypothetical terms, as the objectives and intentions have been publicly stated, but only draft texts of government position papers have been made publicly available.

content prioritisation processes, including the challenges that gatekeeping power and data profiling techniques raise for media pluralism and diversity online (Chapter 7, sections 7.3.1-7.3.2).

Second, in the UK the Digital Markets Regime is expected to introduce new obligations for companies with 'strategic position' in the market (UK Government, 2022), which will have to behave according to a code of conduct to reduce harms and anti-competitive behaviours. While this regime alludes to issues of gatekeeping power, it does not directly address them in the media and news industry. This is partially related to the fact that this regime falls within the competencies of the Competition and Markets Authority, but it also reflects the limitations of competition law in tackling the fundamental rights and media pluralism concerns that are at stake when it comes to regulating platforms (Parcu et al., 2022: 39). Competition law is rooted in a definition of market power that is strongly connected to market concentration, but it does not explore whether a merger will reduce the offers of news and information that are available to the public, as seen for instance in the merger decisions concerning Facebook, WhatsApp, and Instagram (Lynskey, 2017).

A more public-interest oriented framework for competition in the media and communication sector can be found in Ofcom's competition instruments, namely the Media Ownership Rules (Ofcom, 2021b) and the Public Interest Test. However, these regulatory instruments are primarily focused on ownership questions, mergers and acquisitions, and even in those cases, the existing legislation is not fit for the digital and online world as it is limited to radio, TV broadcasting and newsprint, as emphasised by Ofcom (Ofcom, 2021b, 2022a). Even though Ofcom recognises some of the issues with content prioritisation online, especially when it comes to news access and diversity of exposure (Ofcom, 2022a), any changes require a government intervention, which is nowhere in sight and the regulatory gap persists.

Third, through the Media Bill (DCMS, 2022e), the Government intends to design a new prominence regime for PSM online services – on top of the existing EPG rules, but as discussed in Chapter 7, these rules have a narrow scope of application and material scope and therefore do not address issues of content prioritisation on other platforms, nor issues of competition and profiling techniques, which were beyond Ofcom's remit in this area. Alongside this proposal, Ofcom is looking into broader issues of media pluralism and diversity on intermediary services like social media, search engine and news aggregators with a new strand of work on 'Media plurality and online news'(Ofcom, 2022a; Roeber, 2022). The use of prominence and news standards like the Journalist Trust Initiative are flagged in this initiative as potential remedies (Ofcom, 2022a: 52–53), but this is just the beginning of the conversation as Ofcom has only recently acquired new powers to regulate such services.

Lastly, data profiling and targeting techniques could be addressed by a third entity, the Information Commissioner Office (ICO), which is the UK's independent body set up to uphold information rights. This body covers data legislation, including, but not limited to, ePrivacy and General Data Protection.

What emerges is not a cohesive governance system but a fragmented policy landscape: a patchwork of UK policy proposals, overseen by several regulators with different competencies and powers, and driven by a

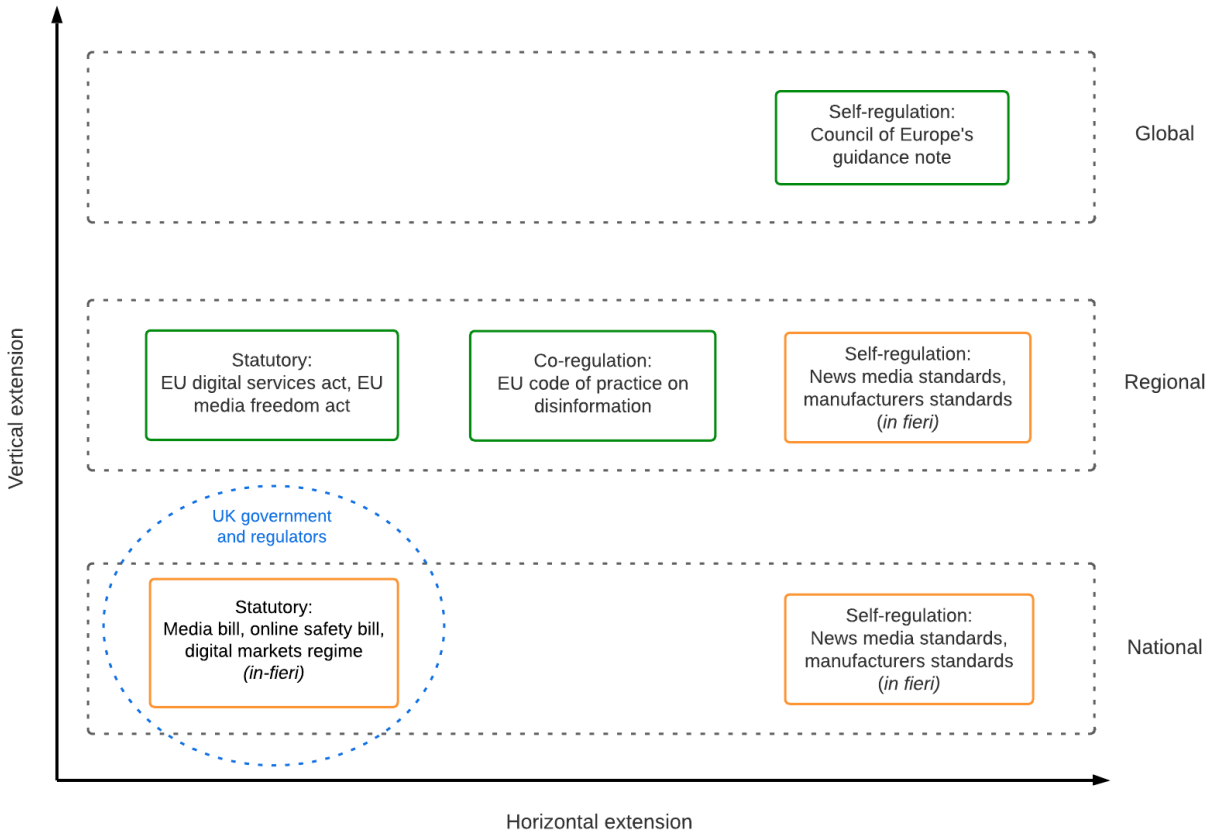
politically unstable Government. I suggest, that if positive content regulation such as prominence of *public interest services* is to foster media plurality goals, behavioural and structural remedies as appropriate are needed, together with the regulatory will and competencies to govern digital media platforms and their intermediary services (see also Parcu et al., 2022; Schlosberg, 2021).

Furthermore, this patchwork overlaps and clashes with the new package of legislation in the European Union, namely, the European Digital Services Act, the Digital Markets Act and the Media Freedom Act, and with existing European audiovisual and telecommunication regulations, such as the AVMSD and EECC (Chapter 2, section 2.2). Brexit has further exacerbated a fragmented policy framework, as UK and European policymakers strive to establish their jurisdictional authority and the legal obligations of companies that operate at global level. At the same time, the global and international levels in this area have started to develop, adding an extra layer to this emerging governance system.

The Council of Europe in particular has established high level principles for new prominence regimes, calling upon states to 'act to make public interest content more prominent, including by introducing new obligations for platforms and intermediaries, and also impose minimum standards such as transparency' (Council of Europe, 2021: 2). The goal of this Guidance ideally would be to promote the creation of global standards as a basis for the development of prominence regimes, similar to existing standards in the area of freedom of expression and information, media freedom and media pluralism, as well as the emerging framework of principles for AI.[115]

[115] Council of Europe standards relating to freedom of expression and information, media freedom and media pluralism are based on Article 10 of the Convention as interpreted by the European Court of Human Rights. Examples of these standards formulated in numerous Committee of Ministers' recommendations to member States include: CM/Rec(2007)15 on measures concerning media coverage of election campaigns; CM/Rec(2007)3 on the remit of public service media in the information society; CM/Rec(2011)7 on a new notion of media; CM/Rec(2016)1 on protecting and promoting the right to freedom of expression and the right to private life with regard to network neutrality; CM/Rec(2016)4 on the protection of journalism and safety of journalists and other actors; CM/Rec(2016)5 on Internet freedom; CM/Rec(2018)1 on media pluralism and transparency of media ownership; CM/Rec(2018)2 on the roles and responsibilities of internet intermediaries, and CM/Rec(2020)1 on the human rights impacts of algorithmic systems.

Fig. 8.1. Changing governance system of content prioritisation online[116]



Source: Author

In a nutshell, a changing governance system is extremely fragmented, where the battle for prominence that my thesis has examined is taken to a new level with multiple national regulators, European policymakers, and international bodies, all, trying to shape how content is distributed, curated, moderated and accessed online.

As my research addresses a new contemporary policy area in a moment of institutional change, these governance systems are unsettled, there is a space to contribute to this debate, theoretically and empirically. To conclude my analysis, I take a step back to reflect on what the elements of an ideal framework for new prominence regimes might be. To do so, I turn to the notion of public interest as a regulatory mandate and as an institutional imperative, informed by the work of Philip Napoli (2015, 2019) (Chapter 3, section 3.4).

[116] Informed by my conceptual framework (see Chapter 3), this figure is based on the work of Manuel Puppis and my interpretation of his definition of media governance (Puppis, 2007, 2010).
The boxes in green refer to statutory, co- or self-regulation that has been proposed and passed (with the exception of the EU media freedom act that has been proposed but the final text has not been approved at the moment of writing). The boxes in orange refer to statutory, co- or self-regulation that is being discussed but it has not been proposed or passed at the moment of writing.

8.3. Advancing a Public Interest Framework for Digital Media Platforms

Given the normative aspect of positive content regulation, a focus on online prominence regimes offers an instructive case through which we can examine broader governance and institutional developments and reflect on the feasibility of the creation of new public interest frameworks suitable for the online audiovisual media space. While the battle over gateways and the prominence of and access to content online takes place through hyper-nudges, lengthy commercial negotiations and continuing policy debates, my analysis suggests that there is potential for change.

This potential for change emerges exactly at the intersection between media and platform governance systems because the respective institutional arrangements are challenging each other, and their outcomes will impact on the future development of media and communication regulation (Chapter 2). My empirical analysis has illustrated how institutional changes are taking place in the vertical and horizontal extensions of these governance systems. Vertically, further regulatory interventions are expected to come for both media and platforms at the national level in the UK, but also on the European and international levels. Horizontally, new forms of public interest obligations are emerging through self and co-regulatory frameworks; however, these responses vary depending on national specificities as well as on specific organisations.

My research has shown how in the UK, pay-tv operators like Sky are shifting their discourses, re-appropriating terms like public value and public interest that were associated traditionally with PSM to describe their own services and content policies (Chapter 7). Relatively new actors like Netflix are changing their narratives, emphasising their contributions to society and to the national media sector by using, not only the notion of public value, but also notions of quality and diversity that are now part of their content policies and related socio-technical criteria (Chapter 5).

Broader efforts towards enhancing transparency and accountability of their recommender and ranking systems have emerged not only for Netflix's services, but for intermediary services that have been more widely targeted by public and political pressures - such as Google Alphabet and its YouTube and Google Search, or Meta and its Facebook (e.g. Google Search, 2019, 2021; Meta Transparency Center, 2022; Meta Transparency Centre, 2022). Even technology manufacturers that claim to be less eager to become involved in content-related matters, when necessary, seem to be willing to adapt their UIs to public value criteria (section 5.2.1.).

At the same time, my analysis suggests that some of these narrative shifts are akin to corporate responsibility and/or advocacy strategies that are used to diminish the scope and definition of public interest objectives and related public value criteria in content and editorial policies. In cases like Amazon Video Prime, for instance, an **individualist model of the public interest has been shown to have taken hold, with a stark emphasis on the individual value component of public value creation when they justify their curation and prioritisation strategies on the basis of a consumer-centric approach** (e.g. sections 5.2.1.2, 5.2.2.3, and 7.2.2.2). Under this

formulation, online AVM services primarily provide an enabling environment in which individuals can find and chose whatever content is 'relevant' for them.

Missing from my interviewees' discourses was an acknowledgement of the underlying choice architecture of the services and their hyper-nudges and a broader and more explicitly articulated set of institutional norms and values that might guide these organisations, such as those articulated by news media organisations. In cases like Sky or Netflix, instead, a narrow and instrumentalised model of the public interest seemed to prevail as companies highlighted a 'happy overlap between what is in their economic interests and what's in the public interest' (pay-tv operator 2, 2019), while defining public value as a by-product of economic value (platform 1, 2020) and omitting its societal component. Under this formulation, online AVM services were understood to be primarily driven by commercial and market imperatives, and public interest institutional norms and values emerged only when there was said to be a 'happy overlap' between their commercial and public interest objectives. These were not driving imperatives akin to those of PSM organisations and their public purposes.

> For a business like ours, our imperatives are largely commercial ones, but it happens that there is actually a happy marriage because what we find, as we grow, is that for us to generate the greatest commercial value, we actually need to produce some kind of public interest content or acquire programming that is in the broadest possible interest to our audiences. And by responding to those needs, you might argue that we are generating some public value, which is not dissimilar to what the PSM are doing, even though the underlying rationale is a little bit different. (Platform 1, 2020)

Based on my interpretation of Napoli's argument (2014), the individualistic notion of the public interest took hold in social media, and it is persisting in their governance systems through discourses of individual autonomy and choice, combined with the obscure nature of algorithmic editorial authority. My analysis demonstrates how similar patterns and discourses are slowly but steadily pervading the broader realm of media and platform governance systems as their institutional arrangements intersect and clash. This shift, combined with a tendency towards institutional isomorphism, might lead to an increasing loss of the public interest norms and public values that have characterised at least some news and media organisations in the audiovisual media industry. As PSMs and news providers increasingly imitate the content strategies of mainstream platform organisation and adapt themselves to the dominant market logics, not only can it be argued that they are losing their distinctiveness and market shaping potential, but the industry as a whole is losing viable public interest-driven alternatives.

To move beyond the discursive traps of individualistic and instrumentalised notions of public interest objectives and public value criteria, and to shape market developments towards new institutional arrangements, I suggest that mission-driven frameworks (Mazzucato, 2018; Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016) for online content standards are needed.

In alignment with my critical institutional theoretical lens (Chapter 2), I build on the work of Philip Napoli's discussion of social media and public interest (Napoli, 2019) to argue that a turn towards a mission-driven framework is needed to prompt changes in industry practices and to design regimes that could shape how content prioritisation processes currently work online. This framework builds on the notion of public interest as both an institutional imperative for media and platform organisations, and as a regulatory mandate for new digital media governance system and their online prominence regimes.

How can we move from a theorisation of public interest as institutional mandate and regulatory imperative towards its possible application in content prioritisation processes of media and digital platforms, and new prominence regimes? The first step is to develop public value criteria that define what *public interest services* should be prioritised online.

8.3.1. Developing Criteria to Define Public Interest Services

As anticipated in Chapter 2 (section 2.4), and confirmed in Chapter 7, defining which services should be prioritised to the final users is one of the main sources of tension and disagreement among industry actors. Content prioritisation processes online sit at the intersection of media and platform governance systems. These industry practices are clashing with normative definitions of the public interest and *public interest services* that are embedded in pre-existing regulatory frameworks that privilege specific types of AVM service providers.

In the UK tradition of positive content regulation, *public interest services* were mainly associated with PSM organisations and their content which, in exchange for their public service remit, would be granted regulatory benefits such as EPG Prominence and must-carry obligations (Chapter 2, section 2.2.1). This approach was viable in the UK, historically, with the EPG Prominence Rules granting prominence only to UK PSM channels and services – i.e. BBC, ITV, Channel 4 and Channel 5, and local PSM channels, made prominent by region, such as STV as discussed earlier (Chapter 2, section 2.2.1). Thus, PSMs were taken as a proxy for broader public interest services. This builds on European audiovisual media regulatory frameworks and on a normative understanding of PSM organisations, whose channels and services are deemed to be driven by a public interest mission and therefore should enhance and foster the creation of public value (Ofcom, 2010).

Even though regulated prominence for PSM has been widely accepted in media and communication governance systems and regulatory frameworks, the possible extension of such privileges to the online environment conflicts with platform governance structures and raises strong opposition and concerns among stakeholders. My research shows that as prominence regime discussions move to the online world, this narrow understanding of public interest service is being questioned, together with the recognition that a narrow understanding of EPG prominence is not suitable for the online space.

In particular, what emerged from my analysis is that a growing number of media industry representatives are calling for an expanded and more inclusive notion of public interest AVM providers, beyond PSM organisations, acknowledging that both private and public actors, operating at national or international levels, may serve public interest objectives (Cairncross, 2019; McDonald, 2018; Netflix, 2021; Ofcom, 2020c; Sky UK, 2018a; Sweney and Conlan, 2019).

Sky representatives have been particularly vocal about this, asking regulators and policymakers to agree that both PSM and wholly commercial and private media organisations can be driven by a public interest mission and actively contribute to the creation of public value on different levels (Pay-TV operator 1, 2019; Pay-TV operator 2, 2020). For instance, as highlighted in one of my interviews: 'From a benchmarking and comparative basis, it is undeniable that we both are delivering – have increased our delivery – of public value.' (Pay-TV operator 1, 2019)

Similarly, technology manufacturers and their trade associations have been vocal about the same issue in their responses to Ofcom's consultation, explicitly stating that they 'do not support the proposal that BBC channels should have guaranteed prominence on the basis that the BBC should automatically have prominence versus other content providers … as rather than subjectively choosing which services are considered to be 'of general interest' it would be more appropriate to apply objective and measurable criteria, such as actual viewing figures, that represent whether the service is valued by the viewer or not' (Voice of the Listener & Viewer, 2018: 3).

Furthermore, positive discrimination granted only to PSM channels and services has been criticised by other content providers, including community media and international news media organisations which are calling for a scope of application for prominence and discoverability privileges that goes beyond the current definition of public service broadcasting (External experts 3 and 7, 2020). Last but not least, as my analysis shows (Chapter 7), the application of a PSM-focused prominence regime is not suitable in contexts where PSM organisations are not independent from state or political interferences, as it would lead to an even stronger dominance of state-influenced.

Thus, in order to inform a framework that could promote media pluralism and diversity online not only in the UK but also in other national contexts, I suggest that we should not limit the definition of *public interest services* to PSMs. A viable alternative that emerges from both my desk research and interviews (e.g. External experts 3 and 7, 2020), is the use of a principles-based approach or a process-based approach (Chapter 2, section 2.4) built on professional standards and transparent criteria to establish which public and/or private content providers are creators of public value (External expert 7, 2020). This requires the assumption that public value has multiple facets and nuances which do not only pertain to PSM organisations, as I discussed in my conceptual framework (Chapter 3, section 3.3.3).

Examples of how public value can be operationalised based on different sets of criteria already exist in the industry, for instance for UK PSM, community media organisations, or news organisations. For instance, as explained by an external expert representing a local community media organisation, their editorial and content curation policies are based on 'a list of criteria that involves a diverse spectrum, from being something that audiences will want to watch, to something that is actually commercially viable, through to some social action side of it' (External expert 7, 2020).

Alongside these industry practices and as outlined in Chapter 3, there is also a rich body of literature that unpacks the notion of public value in PSM, advancing different typologies in the attempt to define and assess it more clearly (see for instance Chivers and Allan, 2022; Edelvold Berg et al., 2013; Lowe, 2016; Lowe and Martin, 2013). However, it is beyond the scope of this work to review such literature, since the interest of my analysis was in answering this question through the lens of the interviewees in order to understand how they understand these notions, and how they can then be transposed in the organisations' content policies and industry practices.

Determining such principles and criteria requires an in-depth discussion of the normative values and interests that an organisation is striving to achieve in line with these claims, some of which could be genuinely driven by a public interest mission, while others might be driven by a notion of corporate social responsibility aimed at avoiding further regulation. In both cases, what emerged in my research is that a public interest mission can be broken down into different public value criteria that AVM service providers can be measured against in order to determine which are eligible to benefit from a new prominence regime. Informed by my analysis and theoretical framework (Chapter 3, section 3.3.3), I have grouped these criteria into three main categories that reflect three key components of public value, namely societal, economic and individual value (Chapter 3, Fig. 3.3).

These three public value components and the respective criteria are not mutually exclusive. The assumption is that they can coexist, and they can all contribute to the overall creation of public value that characterises a public interest-driven organisation. In this sense, economic value is not necessarily opposed to societal or individual value, but, in certain cases, public interest-driven activities can bring commercial revenue to the organisation and/or contribute to the wider economy of the sector (PSM 4, 2019). Similarly, there can be an overlap between what is in the economic interests of media and platform organisations and what is in the public interest (Pay-TV operator 1, 2019). There are differences, however, between organisations that prioritise their economic and corporate interests, and those that are driven primarily by a public interest mission:

> Public value is about ensuring that there continues to be a flourishing national market for TV content and particularly from the public service broadcasters, supporting UK democracy, culture, and to some extent the economy. (PSM 4, 2019)

Informed by this tripartite typology of public value criteria, I advance a list of process/principles-based criteria that regulators and policymakers could use when developing new prominence regimes online (summarised in Table 8.3 below). This list should not be considered exhaustive or as mutually agreed by all stakeholders, but it provides a starting point for the further development of qualitative and quantitative criteria to discern which AVM service providers should be granted prominence within existing industry practices or by regulation.

Table 8.1. Overview of the three value components and the criteria in which they can be operationalised.[117]

Public value Components	Criteria	
Societal value (delivering value to society as a whole, beyond each individual user's interest)	Free-to-air and universally accessible	
	High quality	
	Trustworthiness	
	Internally pluralistic offer	Diversity in content genres (incl. news and current affairs)
		Diversity in representation
		Diversity in views and opinions
Economic value (delivering value to AVM organisations and the broader sector)	Contribution to the national and local media industry	
Individual value (delivering value to each individual user personally)	Relevance	
	Information benefits	

Source: interviews and grey literature

[117] The table provides an overview of the public value criteria that emerged from my interviews and document analysis, categorised under the three grouping of societal, economic and individual value.

8.3.1.1. Criteria for Societal Value

In this first category, I include those criteria mentioned by the interviewees that most directly related to the societal benefits traditionally associated with media organisations, as they relate to characteristics such as universality, accessibility, accountability, transparency, quality, trustworthiness and diversity.

Free-to-air and universally accessible services

In an increasingly saturated VOD market, making free-to-air and universally accessible[118] services more prominent and easily discoverable is a way to create wider benefits for the whole society, rather than providing content just for those individuals who can afford to pay, whether by SVOD, pay per view or another paid-business model. PSM organisations (e.g. PSM 2, 3 and 6 2019) and policymakers support this idea and have repeatedly highlighted that 'free content should be prioritised over pay-content' (PSM 3, 2019). In their views, the 'right thing for users would be to get free things first' (PSM 6 2019) since privileging and making more prominent free content – or content that was already paid for via the license fee, such as BBC - would be fairer to a wider segment of the population who cannot always afford to pay for multiple SVOD services.

However, this criterion was not fully supported by pay-TV operators. As claimed by two interviewees representing pay-TV operators, 'public value is not only delivered by a licence fee model' (Pay-TV operator 1, 2019), and not all free content should be automatically considered of public value:

> If public value services are only free-to-air ones, you [user] end up with the absurdity that *Love Island* is public value and *Chernobyl*, which won 10 Emmys and was an amazing domestic piece of international drama, is not public value: that just can't be right. Probably value is a more complicated category than free content (pay-tv operator 2, 2020).

However, this criterion does not exclude the fact that also pay-TV operators or SVOD services can deliver public value with their content, but it highlights that prioritising free-to-air and universally accessible services over pay-for services could overall contribute to creation of societal value. Indeed, the former ones are by definition more inclusive and can carry significant social benefits, since their provision and distribution are driven by a public interest mission that goes beyond the corporate interests of maximising profits and subscription revenue.

Thus, even if universality and free-to-air are characteristics often linked to PSM services in Europe (e.g. European Broadcasting Union, 2012, 2017; InnoPSM, 2020; Lowe, 2016) and the UK (e.g. BBC, 2016a, 2016b),

[118] By free-to-air (FTA) I refer to audio and AVM services broadcast in unencrypted form, allowing any person with the appropriate receiving equipment to receive the signal and view or listen to the content without requiring a subscription, other ongoing cost, or one-off fee (e.g. pay-per-view).

by universally accessible services I refer to those AVM services that respect high standards of accessibility[119] and are widely available throughout the national territory. Thus, prominence could serve as a regulatory benefit for those AVM services that provide broader social benefits by making their content available and accessible to everyone (PSM 8, 2019).

High quality services

Ofcom recognises the production of 'high quality television' as a 'public benefit' that PSM AVM providers offer, and for which they should be rewarded with prominence and easier discovery (Ofcom, 2018a: 1). PSM themselves have repeatedly highlighted that what should be rewarded is 'quality' and AVM providers that privilege 'quality content' (PSM 6, 2019).

However, representatives from other industry actors, such as pay-TV operators and VOD services, highlight that 'high quality' is 'the most important thing for your consumers' (Platform 2, 2020), and they actively produce and distribute 'high quality' content as much as PSM organisations do. So, while I have included this criterion as part of societal value, it is one of the most difficult to evaluate and operationalise. As discussed in Chapter 5, some commercial VODs identify high quality with positive external reviews and internationally recognised awards (section 5.2.2.2), while the PSM refer to quality as an intrinsic characteristic of their services without actually defining it (section 5.2.2.2).

Internally pluralistic services

Interviewees representing different industry actors – PSM, platform organisations and pay-TV operators – also emphasised the importance of pluralistic AVM services, defined as AVM providers that present an internally pluralistic offer in terms of diversity of content genres, representation and in viewpoints and opinions. Making prominent and more easily discoverable those services that are internally pluralistic could be a means also to support external pluralism and diversity. As outlined by an interviewee, one of the best possible outcomes of a prominence regime would be diversity not only in terms of the availability of different providers, but also diversity of genres and content:

> Diversity in terms of the viewpoints, especially in the provision of news, but then also just more broadly, having a number of different outlets producing and making available high quality content reflecting multiple viewpoints, and creating competition in types of genres: this would be the highest quality of output possible, and it helps the overall creative ecosystem to grow. So that is how I think about public interest objectives. (Platform 1, 2020)

[119] Accessibility here refers to the provision of services that can be accessed by people with sensory impairment or intellectual disabilities, dyslexia or language difficulties; it includes the provision of subtitling, signed programmes, audio description and audio subtitling.

Diversity of viewpoints and genres refers to the internal diversity offered by an AVM provider. A particularly important aspect related to the content diversity criterion is the production and distribution of news and current affairs programmes that represent diverse views and opinions (e.g. Pay-TV operator 2, 2020; Platform 1, 2020; PSM 4, 2019). In addition, other genres that interviewees mentioned as important fall within the category traditionally described as 'niche market failure genres' (Chapter 2, section 2.2.1), which include, but are not limited to, arts, cultural, educational and children programming, documentaries, etc. (Pay-TV operators 1 and 2, 2019; Platform 1, 2019; PSM 1 and 4, 2019, 8 and 9 2020).

While this internal diversity is often associated with PSM, as highlighted by commercial providers and pay-TV operators, UK PSM are not the only internally pluralistic providers (see also Parcu et al., 2022). Thus, this criterion could be applied to other commercial and private corporate organisations that produce and distribute a wide range of genres, including news and current affairs, and represent a diverse set of viewpoints and opinions, as these two pay-TV operator representatives suggest:

> The most obvious place to start with that is news. … I would think that any definition and any measure of public value that represents a significant contribution by our organisation in terms of informing democratic debate and allowing civic participation in society starts with news. (Pay-TV operator 1, 2019)

> From a citizen's point of view … news, current affairs, all of those sorts of things have huge citizens value. What you also do is cross-fertilisation of all audiences, from large-scale entertainment and drama and sports to the rest of it, like for instance news, which helps to deliver all the rest. … So, there is a huge citizens benefit as well as consumers benefit. (PSM 4, 2019)

The second aspect of internally pluralistic AVM providers concerns their efforts to expose their users to such diversity. Diversity of exposure is not necessarily a legal requirement for PSM, but it can be part of their broader public interest purposes. As emphasised by an Ofcom representative, UK PSM 'have a clear obligation to try and let people be surprised, be introduced to a whole range of content and to get snaps of news here and there and everywhere' (Policymaker 1, 2019).

PSM have been experimenting new ways of delivering their own online services, including through prioritisation processes and recommendation systems. Indeed, new approaches to recommendations are emerging through initiatives like PEACH-personalisation and diversified algorithms. Plus, as discussed in Chapter 5 (section 5.2.2.1) and Chapter 6 (section 6.3.2.1.), one of the criteria used to prioritise content in PSM online offers is diversity and the aim is to 'broaden people's outlook' in a dialogical and positive way that creates broader societal value:

> Within BBC iPlayer, the BBC is able to generate significant uplift in viewing to lesser known programming through its inclusion in prominent areas of the user interface – in a recent sample the average uplift was 95%. (BBC, 2018c: 11)

Thus, what emerges from the interviewees' accounts of the criterion of internally pluralistic services is that granting prominence to such providers (i.e. those producing and distributing a diverse range of genres, representing and giving voice to a wide range of views and opinions, etc.) could in turn help people to access and be exposed to a more diverse range of content (e.g., different genres, including information that is personally relevant, promoting national and local content, and different viewpoints). Thus, in this case, introducing a prominence regime online could support broader public interest objectives of media pluralism and diversity.

Trustworthiness

Trustworthiness emerged as rather vaguely defined, yet important, criterion used to describe AVM services that are authoritative sources of fact-checked and credible information. The notion of trustworthiness emerged especially in the context of news providers and social media platforms. At the same time, it is a difficult notion to define and there was no consensus among industry stakeholders, unless it concerned specific areas or topics, such the Covid-19 pandemic:

> The pandemic is actually a really good example of how internet companies have really stepped up their games [sic] and engaged with governments and health authorities to surface reliable information. This case is slightly simpler, because it is quite clear what the credible information is and there are fewer debates around what is right and not. … Covid has shown that in scenarios where there are very clear definitions of what the right information is, it is easier to surface that, but that is very limited actually, and there is less of a consensus around how you do that on other areas in internet platforms. (Platform 2, 2020)

Thus, while all stakeholders broadly agreed that AVM services that produce and disseminate disinformation and fake news should not be granted prominent places, nor recommended – on the contrary, they should be moderated away, if not actually removed – establishing a definition of what makes an AVM service trustworthy is harder when there is no clear-cut consensus.

To clarify what is meant by 'trustworthy' providers, a host of news- and civil society-driven initiatives have been set up to develop 'trust' indicators and a set of technical industry standards – the Journalism Trust Initiative, for example – which may help in defining, not only trustworthiness, but more broadly, public interest-driven journalism (EDMO, 2021; Journalism Trust Initiative, 2019; Mazzoli, 2022; NewsGuard, 2022; The Trust Project, n.d.). Trustworthiness in these contexts encompasses numerous criteria, including transparency, accountability, accuracy, etc., even though each initiative uses slightly different indicators and

standards (EDMO, 2021). Such indicators are increasingly being used by advertisers and platform organisations to support those news providers that are evaluated and certified as 'trusted' in order to counter the spread of disinformation by increasing their prominence and discoverability (Parcu et al., 2022)

8.3.1.2. Criteria for Economic Value

Several interviewees mentioned the importance of having commercially viable services that could contribute to their organisations' financial sustainability as well as to the broader AVM industry. My analysis shows that there are differences between an organisation whose driving imperative is public interest rather than increasing revenue. For instance, for platform organisations and pay-TV operators, public value is a 'by-product' of their main commercial activities (Pay-TV operator 1, 2019; platform 1, 2020); for PSM, the opposite may be the case as economic value is sometimes a by-product of their public interest-driven activities.

However, in certain cases there could be 'a happy overlap' (pay-tv operator 1, 2019) or a 'happy marriage' (platform 1, 2020) between public and economic value, since they are not always antonyms, but could be present in the same activity. As shown in the quotes below, this was particularly emphasised by interviewees representing pay-TV operators and platform organisations who argued that despite the difference in business models and organisational objectives, in certain cases public and private economic interests could be aligned:

> All of us do things of public value that we are not obliged to do at all. We do it because there is a happy overlap between what is in our economic interests and what is in the public interest, and that goes for actually the vast majority of what we do. (Pay-TV operator 1, 2019)

> I think one difference between how a commercial player might think about it [i.e. public interest content] and how a PSM should be thinking about is that public value is a by-product of what we do. … For a business like ours, our imperatives are largely commercial ones, but it happens that there is actually a happy marriage because what we find, as we grow, is that for us to generate the greatest commercial value, we actually need to produce some kind of public interest content or acquire programming that is in the broadest possible interest to our audiences. And by responding to those needs, you might argue that we are generating some public value, which is not dissimilar to what the PSM are doing, even though the underlying rationale is a little bit different. (Platform 1, 2020)

When interviewees were questioned about this 'happy overlap', only one main example emerged that could be translated into a criteria used to grant prominence to both public and private AVM providers: contribution to the growth and sustainability of the local and national AVM industry.

Contribution to national and local media industry

All the interviewees highlighted the importance of regulatory benefits for AVM services that support and contribute to the national and local media industry. PSM organisations contribute significantly to this creative sector through investment in UK-originated distinctive programming, as required by their public service remits. Both Ofcom in its recommendation for the PSB review (Ofcom, 2020c), and the UK Government in its plans for a new Media Bill, have highlighted the importance of continuing investment in local and national programming, to be achieved through stronger PSM requirements for producing 'distinctively British content', combined with prominence obligations for technology manufacturers, platform organisations and pay-TV operators to carry PSM services and content (DCMS, 2021b, 2022a).

PSM interviewees repeatedly highlighted their economic contributions and support to the national and local industry as a way to deliver broader public value and therefore as one of the reasons why they should be granted prominence benefits in return (e.g. PSM 4 and 7, 2019).

> Government needs to create more space for national broadcasters - and I use the term national loosely as it might be Wales, might be the UK as whole – but there needs to be created a safe space because our ability to create that space ourselves on global platforms is, if it ever existed, fading fast. (PSM 7, 2019)

> Without prominence consumers might wake in 5 or 10 years' time and say "it is a pity that we do not have much English content anymore, we used to have loads. Well hang on, how did that happen?" So from a consumer's point of view and interests that is a market failure, because a global market crashing into the national market, and the global market is going to under supply content for the national market, it is not the economics of these companies as they are making content for every single market in the world. (PSM 4, 2019)

At the same time, interviewees from pay-TV operators and platform organisations highlighted that, despite the lack of legal requirements, they actively contribute to the UK's national and local media industry through investments in production and the distribution of national and local content (pay-TV operators 1, 2019; and 2, 2020; Platform 2, 2020), and through the creation of new jobs (Platform 2, 2020). In particular, the representatives of platform organisations sought to shift the narrative in this debate to emphasise the role they play within the UK's creative ecosystem and to refute accusations of being global companies that only produce US content, without considering other national and local specificities (Platform 2, 2020):

> Investment in original British content is a broad way of defining public value. But it is not just a public service type of output, which is a proxy that Ofcom will tend to use to define public value. We are in a situation where we have committed to doubling our investment in original British UK [sic] content by 2024 and that will continue. (Pay-TV operator 2, 2020)

> Our intentions here as a business in the UK and all the money that we are investing and spending, we think that they will help the creative ecosystem overall and not be disruptive or make it harder for the incumbent … PSBs to compete, but to collaborate to [sic] this economy overall. For example we are doing productions all over the UK, we made over fifty different shows here last year not just in and around London … but literally from the south-west coast to the east, including Scotland and Wales. This is really exciting from an economic perspective because we are spending money in regions where the creative economy has been struggling, creating 25,000 jobs in our shows last year. (Platform 2, 2020)

Investment in 'original British content' therefore emerges as a component of public value creation that applies to both public and private corporate organisations. I categorise it as an economic component since it refers to economic and commercial activities which have public value as a by-product of their outputs. The public value aspect of these activities lies not only in contributing to a flourishing national media and creative market, but in safeguarding the UK 'mixed media ecology' and the sense of 'common culture' that comes with it (PSM 1, 2019). From this perspective, prominence for all AVM services that comply with this criterion is perceived as a means to support the national and local media industry and ensure its economic sustainability. This criterion could be operationalised using qualitative and quantitative quotas following the example of existing PSM requirements as was done in Germany with the Public Value Statutes in their new prominence regimes (Die Medienanstalten, 2020)

8.3.1.3. Criteria for Individual Value

This component refers to the value that individual users personally obtain from the curation and prioritisation of content. It could be operationalised according to two main criteria: relevance and information benefits for each individual user.

Relevance

I have criticised the discursive instrumentalisation of the 'relevance criteria,' which uses a vague notion of customer interest to justify organisational content policies and related user monitoring and profiling techniques (Chapter 5, section 5.3), but my empirical analysis suggests that there is a form of personal and individual value that 'relevance' can bring to users. The means of curation and prioritisation are pivotal to users as they navigate today's content and information abundance. In other words, the means of curation and prioritisation are 'the secret ingredient' of most online AVM services, from BVOD such as BBC iPlayer, to SVOD and hybrid VOD services such Netflix and Amazon Video Prime: they all claim the need to curate and organise content in a way that is ultimately relevant and beneficial for the users:

> We found that our members love being given some guidance … and it has not meant that everyone ended up watching the same ten things, but people are less overwhelmed by the volume of content that it is available, because that is really the biggest challenge. When you have thousands of titles on the service, how do you help people to find what they want to watch? … Because if they just feel that they cannot find anything to watch, they get frustrated, they spent hours on our service scrolling through without finding something that excites them. So the really big challenge and the secret ingredient of the business is how you connect the right people with the right titles. (Platform 1, 2020)

This is particularly important for active searches. In this regard, interviewees highlighted that both Google Search and Netflix in their respective market segments have set high expectations for users and high standards for other organisations for prioritisation by means of their search results and recommendation systems. A smooth user experience is valuable from an individual and personal perspective, and as technology develops, users expect an ever-higher level of service:

> Netflix has driven such a higher bar of these experiences [sic]: people come to expect that level [and] more. … There is no doubt there that they are very good at it, and they are driving the market in a lot of ways, as user experience does count, it counts a lot. (PSM 5, 2019).

> The other thing that a lot of people are actually not aware of … is the search function on the service, where you can type all kinds of things – like British, or BBC or something like that – and it will surface content that is relevant to those search terms. (Platform 1, 2020).

At the same time, there are also ways for users to shape relevance more actively themselves, enhancing their agency through, for instance, opt-in and opt-out solutions and more active personalisation based on user inputs rather than passively relying on the AVM service provider's profiling and targeting techniques. These types of solution should be among the key principles of a new prominence regime according to Ofcom (Ofcom, 2019c: 4), but were not explicitly addressed by industry representatives in my interviews.

Information benefits

This criterion is closely related to the importance that interviewees gave to the provision of news and current affairs on both societal and individual levels. Thus, while the provision of news and information formed part of the diversity criterion (section 7.3.1), this criterion specifically refers to the benefits that each individual – not as a collective, but as a single user – can get by having the possibility and freedom to access quality news content online.

This possibility was highlighted by representatives from PSM, pay-TV operators and platform organisations alike. The production and distribution of news emerged as a key component to establish priority among

different AVM services in a new prominence regime. It was described as the 'most obvious place to start' (Pay-TV operator 2, 2020), a means to create 'huge value' for users (PSM 4, 2019), to inform them and build their knowledge and understanding of 'stories and facts that should be in the public interest, defined as those the public should have knowledge about' (Platform 1, 2020). On the individual level, information benefits are therefore crucial, and they are closely related to the provision of news and current affairs which, at societal level, can help to 'preserve a news information culture in individual countries' (PSM 4, 2019).

To conclude, this list of criteria could constitute a baseline to develop public value criteria that could be applicable to public and private media organisations. It avoids creating labelling systems for individual articles or pieces of content that could interfere with the editorial and content choices of these organisation. Examples of criteria for societal value include high quality, trustworthiness, and internally pluralistic offers; criteria for economic value refer to characteristics that deliver industry value to the broader audiovisual media sector such as investment or other kinds of contributions to national and local content; and finally, criteria for individual value consist of ways to deliver individual value such as information benefits and consumers benefits (Fig. 8.2 and Table 8.3).

By highlighting public value in these three different components – societal, economic and individual – I aim to expand this notion beyond the PSM discourses. However, this list is based on industry discourses in the UK, where the notion of public value is deeply rooted in public service broadcasting and its regulation (BBC, 2004; Collins, 2007; Coyle and Woolard, 2010; Gavyn, 2004; Knoll, 2012; Mazzucato et al., 2020). Public value in the UK has been used to justify numerous public service broadcasting provisions. Not only is it used discursively, but it is also presented as a performance assessment and accountability tool to transpose the public interest mission of the BBC, for instance, into operational criteria that inform and assess decisions on the provision of new and significantly changed services, thorough the Public Value Test, later renamed as Public Interest Test (Knoll, 2012).

As regulators move into uncharted territories of new prominence regimes, the notions of public interest and public value criteria that I present here could be useful tools to establish what services could be prioritised online with a more normative lens. However, due to the choice of my case study and the underlying advocacy strategies of my interviewees aimed at influencing the policy debate, this should be seen as a first baseline that could be further integrated with other kinds of criteria. Inspiration could be drawn from the German example of public value criteria in their new prominence regime (Die Medienanstalten, 2020), but also from the detailed list of technical standards advanced by the Journalism Trust Initiative for news media (Journalism Trust Initiative, 2019). For instance, this could allow the addition of other important criteria that have not emerged from my empirical analysis, such as independence and transparency, which are, instead, key aspects of the definition of public interest news providers under the Journalism Trust Initiative standards.

8.3.2. Public Interest as Regulatory Mandate and Institutional Imperative

Establishing criteria to define the vague notion of *public interest services* is just the first step. To ensure that such services are accessible and easy to discover, these criteria should be used by technology manufacturers and platforms organisation in their prioritisation processes and a system of incentives should be put in place to promote that. Indeed, as my analysis demonstrates, with current industry dynamics, commercial and private interests often prevail over public interest considerations (Chapters 5 and 6), and the latter are mainly used in empty advocacy discourses to influence the policy debate (Chapter 7).

A system of incentives could be created by understanding the public interest as both a regulatory mandate and an institutional imperative for governing digital media platforms.

As Napoli outlines (Napoli, 2019: 141), **theoretically, the public interest as a regulatory mandate could help governments and regulators in transposing high level principles of a public interest mission and a commitment to the democratic process into regulatory policies and legal requirements**. Historically, there has not been a consensus in the regulatory realm as to how to operationalise or apply these principles and, similarly, there is no consensus regarding a new prominence regime in the UK. But attempts have been made in the past in different areas of media and communication regulation and could be made when it comes to digital platforms and their intermediary services.

But what are those key areas of digital media platform governance that could benefit from such framework?

This research started by looking at content processes and at the challenges that arise when regulating them. However, my analysis of each dimension of content prioritisation processes – technical, business and commercial, policy and regulatory ones – revealed that the problems with prominence and discoverability are tightly linked to structural issues of competition and data practices in digital media markets. As I highlighted earlier (section 8.2), the UK has a fragmented regulatory framework where governments, multiple regulators and bodies have different powers of intervention. The challenges posed by content prioritisation processes sit at the intersection of media and platform governance systems and these require a more concerted and coordinated approach.

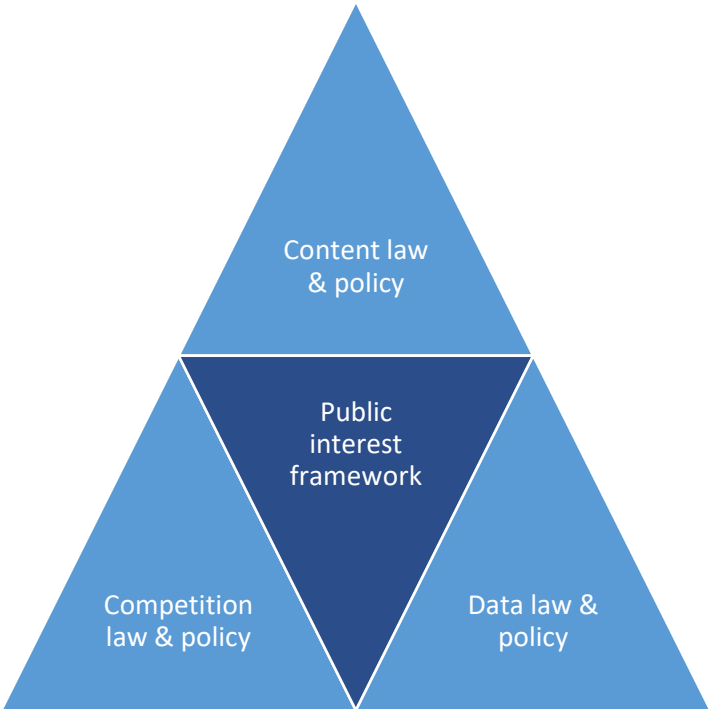
When it comes to content regulation, by adopting a holistic perspective on public value that encompasses its societal, economic and individual components, I suggest that the set of criteria advanced here could constitute a way to develop a more inclusive definition of *public interest services* that could benefit from new prominence regimes.

An example of how this could be done in the television space comes from Germany (Chapter 2, section 2.2). The new Interstate Media Treaty (Die Medienanstalten, 2020) has introduced a list of public value criteria for audiovisual media services that could be granted prominence. The prominence obligation was introduced

through a primary statutory intervention, with the criteria developed through secondary legislation. Similar to the UK, the Treaty introduced new rules for a limited set of TV-like devices and services, and, for any other intermediary-like social media or search engine, it introduced non-discriminatory clauses (Die Medienanstalten, 2020). The few online prominence regimes introduced so far do not expand beyond this, and the conversation about how to regulate prioritisation on other intermediary-like social media has only just begun.

However, as I have discussed in this thesis and as suggested in related research (Mazzoli, 2021; Mazzoli and Tambini, 2020; Parcu et al., 2022), prominence regimes could have unintended consequences for competition, media pluralism, diversity and freedom of choice if they are not developed and implemented through fair, transparent and accountable frameworks. For instance, they may raise barriers to entry, favour technology and media organisations that can leverage their pre-existing digital dominance or facilitate increased state control of media. Thus, as this policy area evolves, a public interest framework is needed to inform future online prominence regimes that are linked to and align with data and competition laws (see Fig. 8.2).

Fig. 8.2. A public interest framework linking content, competition and data[120]



[120] This schematic visualisation is meant to represent how a public interest framework should be at the centre of these three interconnected law and policy areas – content, data and competition.

A second step would be to transpose this framework into what Napoli describes as 'an institutional imperative' for both media and digital media platforms to incentivise long term change in industry practices. A successful mission-driven framework could result in organisations for whom public interest is a driving institutional imperative, not just a 'by-product' of their commercial and private imperatives, as some interviewees described it (pay-tv operator 1, 2019; platform 1, 2020).

The public interest as an institutional imperative has been used traditionally to introduce self-regulatory standards and guiding principles for the operation of news media and broader AVM media organisations (Napoli, 2019: 134). As I have argued (chapter 2 and 3), the institution of media has been infused historically with ethical obligations to serve the public interest. Consequently, the various sectors developed and maintained self-design and self-imposed behavioural codes that embody their definition of public interest. More or less explicit in these self-regulatory public interest codes is a set of values (i.e. the operational level) that media organisations should uphold in their operations. These codes can be found at the national, European and international levels.

In the UK, for instance, news media organisations are bound by self-regulatory codes of conduct established by two independent self-regulatory bodies, IPSO and IMPRESS. On the European level, the Journalism Trust Initiative has developed technical standards and related indicators for news media providers (Journalism Trust Initiative, 2019) that could be applicable to news media providers around the world (Chapter 2). UK PSMs do not only have a self-designed institutional imperative since their public interest mission is shaped by their legal remits and obligations as set out by Ofcom. At the moment of writing, the main self-regulatory code of practice to which platform organisations could comply is the European Code of Practice on Disinformation, but the implementation of the DSA and DMA, as well as the emerging news media bargaining codes (see Chapter 2) could possibly change this.

There are opportunities for change in the UK and on the European level as legislation evolves. For instance, the implementation of the Digital Services Act and Digital Markets Act in European Members States, could lead to the creation of positive and negative objectives for digital media platforms and their intermediary services (see for instance Parcu et al., 2022: 165–166). This will require regulators and policymakers to look at the negative side of online content governance – 'keeping bad content off platforms' (platform 3, 2020) – and its positive side - 'encouraging good content' online (platform 3, 2020). Positive objectives of new prominence regimes do not have to be necessarily limited to a regulatory leg-up for a category of services, and they could focus on positive nudges and choice with incentives to promote media pluralism and diversity on different levels.

To address growing concerns around gatekeeping power and data-driven nudges and their implications for media pluralism and freedom of choice, statutory obligations for actors including digital media platforms could be complemented with Guidance Notes or a Code of Practice that prompts these organisations to act in the

public interest, rather than simply using this notion as an empty advocacy strategies or to discursively justify their commercial decisions. While at the moment of writing in the UK, Ofcom is developing new Codes of Practices under the Online Safety Bill, a broader reflection on the role of positive principles in guiding these policy reforms is absent, or at least limited to a narrow revision of the EPG Prominence Rules as indicated in my research (Chapter 7).

In a moment of institutional and regulatory change, developing a public interest framework linked to certain regulatory benefits could, in turn, help to incentivize a change in the industry practices of media and platform organisations, fostering a longer-term solution that might positively shape our online media environments. This would involve the development of more explicitly articulated institutional norms and values that could guide public and private organisations, including platforms and their intermediary services.

The existing institutional contrast between news media and PSM, on the one hand, and platform organisations, on the other, reflects the way these different actors operate. By intervening in the incentive structure and through process-based standards, the public interest vacuum on the institutional level of platform organisations might be filled and the institutional isomorphism tendency discussed above might be reversed or stemmed. Rather than PSM implementing similar strategies and means to curate and prioritise content based on those of the dominant commercial platforms, an opposite market shaping incentive is needed to develop and scale up alternative models of content prioritisation.

As argued in my analysis (Chapter 5, sections 5.2 and 5.4), despite the vaguely defined public interest considerations of platforms organisations, commercial interests often prevail in their curation and prioritisation processes. At the same time, PSMs do not have distinctive 'public service' approaches to prioritisation in their own UIs. We are far from being able to break their self-referential filter bubbles to ensure diverse and pluralist media environments since prioritisation is used in similar ways by both commercial and public services organisations. However, small scale alternatives, focused on mission-driven recommender systems do exist. Examples can be found in UK and European PSM organisations, such as the EBU PEACH project (European Broadcasting Union, 2020a, 2020b) and PSM R&D experiments (e.g. BBC, 2018b; Sveriges Radio, 2020; VRT, 2020) and academic research is paving the way to mission driven innovations in this space (Ada Lovelace Institute, 2021; Helberger, 2019; Vrijenhoek et al., 2021) (Chapter 7, section 7.3.2)

Since prominence in an audiovisual media space involves a spectrum of possibilities (Chapter 5, section 5.2), interventions can occur through different prioritisation means, including the homepage design, recommender systems, catalogue collections, search functions, channel listings, user lists and other disaggregated discovery areas (see Figures 8.4-5 and table 5.1). We could imagine different solutions driven by an institutional imperative for both content providers and distributors to act in the public interest, such as:

a) Prominence of public interest services by default: A landing home page that showcases a plurality of audiovisual media services, with designated *public interest servicers* more prominent than others as default settings.

b) Diversity of exposure by design: Search functions and recommender systems of the digital media platform - whether Google TV, Apple TV, Samsung TV or LG - that by default optimise for diversity of exposure rather than engagement or past consumption habits. Similarly, within the apps environment, default settings could focus on personalisation strategies that expand users' choices and expose them to a variety of content, especially news and current affairs where available. Discovery areas could also be a suitable place to grasp users' attention and nudge them towards programmes that they would not usually watch or would not be aware of.

c) User choice and control: the two previous examples constitute default options. Users should also be allowed to opt-out from default options and select alternative prioritisation models. This could give users the choice to exercise more control and agency over the ways in which content is personalised and presented to them. If users were to choose to deinstall a public interest service app or preferred having their UIs personalised based on their input preferences and past consumption behaviours rather than diversity, they should be able to do so.

d) Transparency: meaningful user-facing transparency, and not simply transparency reporting towards regulators that often become checkbox compliance exercise. Rather than hiding information into help pages or long terms of services, all industry actors should provide clear explanations on their UI design choices, on the optimisation criteria and profiling techniques that influence what is prioritised to the users.

Fig.8.3. Prioritisation means at manufacturers level: an example from Apple TV

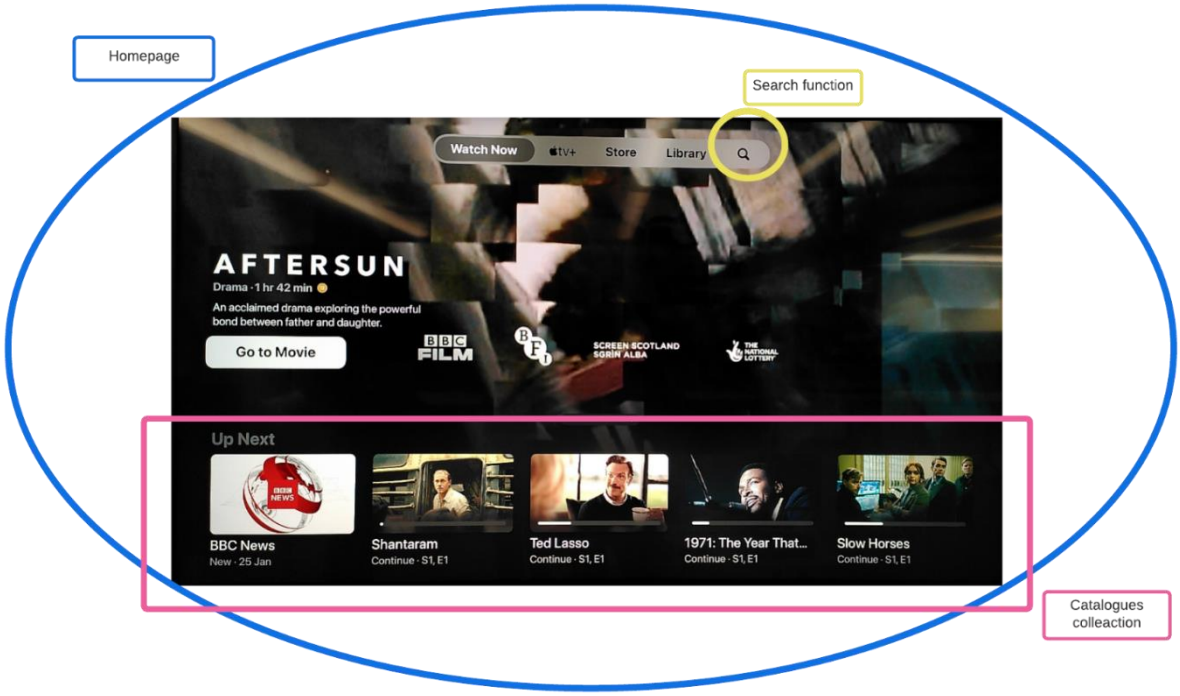
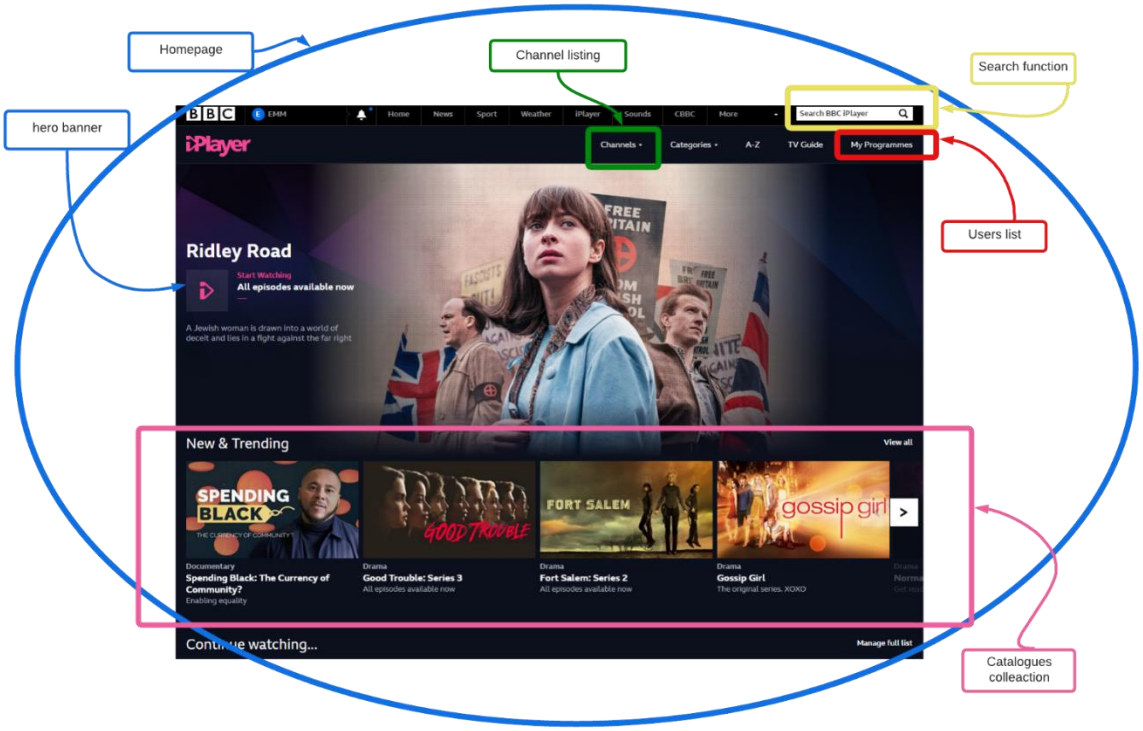


Fig. 8.4. Prioritisation means at the audiovisual media services level: an example from BBC



Source: Author

8.3. Concluding remarks

In this chapter, my arguments have been elaborated to foreground how the empirical findings elucidate the issues and problems I set out to investigate and the overarching theoretical questions posed in Chapter 3:

RQ1: How is content prioritisation governed on digital media platforms?

RQ2: Inspired by the UK case, what would be the elements of a public interest framework for new prominence regimes?

A key challenge was to investigate how the governance system works at a moment of institutional and policy change and to highlight core issues emerging from these developments that demand attention. As the results of politics influence both industry dynamics and users' access to content, it is crucial to understand what the roles of industry and policy actors are, what the institutional arrangements influencing these processes are, and what their implications are for media pluralism, diversity and freedom of choice online.

This chapter has shown that there is a movement from an industry-led governance system, where content prioritisation on digital media platforms is influenced mainly by technical means and business relations among industry actors, towards a more institutionalised form of governance with horizontal and vertical extension. Overall, my empirical analysis has revealed how, until recently, content prioritisation online was primarily governed and negotiated in relation to two dimensions:

- A technical dimension where prioritisation is established by software and hardware solutions, and related socio-technical criteria that organisations use to nudge users (Chapter 5);
- A market dimension where prioritisation is shaped by market dynamics and commercial deals over prominence and discoverability and the economic drivers behind them (Chapter 6);

As regulation is pending in the UK and in other jurisdictions, the third dimension of my analysis - the policy and regulatory dimension - is gaining more traction and importance. In this dimension, the governance of content prioritisation is influenced on the one hand, by lobbying and advocacy strategies used to influence the revision of PSM Prominence Rules in the UK (Chapter 7), and, on the other, by the changing governance system at national, European and international levels (Chapter 8).

While this changing governance system has the potential to address some key concerns around the implications of gatekeeping power and hyper-nudging techniques for media pluralism and diversity online, I have argued that it has substantial limitations. Indeed, what emerged is not a cohesive governance system but a patchwork of policy proposals, overseen by several regulators with different competencies and powers, and guided by a politically unstable Government. This fragmented landscape overlaps and clashes with new European digital services legislation, further exacerbating differences and a lack of coordination between the UK and other European countries as governments and regulators strive to exercise their powers in a global digital media system.

Despite these limitations and the fact that digital media platforms are here to stay, this does not mean that they cannot change. On the contrary, I suggest that these services have the potential to work within a public interest-driven framework that privileges public value criteria such as pluralism and diversity in their

prioritisation and curation practices, while working in a more transparent and accountable way that is not substantially based on the exploitation of user data for private interest. A new prominence regime could contribute to such a change. However, for positive content regulation such as prominence of public interest services to foster media plurality goals, behavioural and structural remedies are also needed, together with the will and competencies to regulate digital media platforms and their intermediary services.

I have suggested a framework that could be built on the notion of public interest as an institutional imperative for media and platform organisations and as a regulatory mandate for online content standards, including a new prominence regime. In practice, there is a need for a more holistic approach that combines statutory interventions with soft law that could nudge companies into changing their prioritisation processes in the longer term. I suggest that this could fosters the development of alternatives to existing choice architectures and content prioritisation processes and complement industry practices with content standards that can promote and support alternatives and contribute to positively shaping the markets.

One place to start this process is the development of a set of public value criteria that define the public interest services which should be prioritised. I categorised these under three main groups corresponding to the three-pronged understanding of public value that informs my thesis: societal, economic and individual value (Chapter 3, section 3.3). Examples of criteria for societal value include high quality, trustworthiness, and an internally pluralistic offer; criteria for economic value refer to characteristics that deliver industry value to the broader audiovisual media sector such as investment or other kinds of contributions to national and local content; and, finally, criteria for individual value consist of ways to deliver individual value such as information benefits and consumer benefits (Fig. 8.2 and Table 8.3).

These criteria should not be considered exhaustive or as commonly agreed by all stakeholders, but they could be used as a baseline to develop a public interest framework based upon qualitative and quantitative criteria to discern which audiovisual media services providers should be granted prominence through existing industry practices or through regulation.

Finally, I discussed examples of interventions that would be driven by an institutional imperative for both content providers and distributors to act in the public interest: prominence of public interest services by default, diversity of exposure by design, user choice and control with opt-in and opt-out functionalities, and increased transparency over these processes. These changes could be achieved if government and regulators were to recognise that content prioritisation and moderation processes are two sides of the same coin and introduce a coordinated regulatory framework that looks at questions of content, data and competition holistically.

Chapter 9

Conclusions

9.1. An Institutional Lens on Online Prominence Regimes

So, what in the end influences what services and content are prioritised on our screens?

In this thesis I started with the assumption that neither neoclassical nor critical political economy perspectives are sufficient to fully explain how content prioritisation processes work and what the implications for media and communication policy are.

From a political economy perspective, we might say that these processes are determined by asymmetrical power relations that are contextualised in the longer term history of the media industries. This is, for instance, how Hesmondhalgh and Lotz interpret prominence, by theorizing screen interfaces as new sites of 'media circulation power', which they see as just one category of power in the media and cultural industries that is negotiated among other power relationships, including data power and infrastructural power (Hesmondhalgh and Lotz, 2020: 405). The emphasis of political economy analysis is mainly on processes of datafication and power imbalances in the commercial relationships between industry actors, where platform organisations like Amazon and Apple can unilaterally benefit from their reach, ability to cross-subsidize and share data across their enterprises (see Chapter 3 for discussion).

Using a neoclassical economic approach instead, content prioritisation processes would be understood as the outcome of the interplay of the rational self-interest of industry actors and users. For instance, Ofcom's commissioned reports (Mediatique, 2020; MTM and Ofcom, 2019), start from the assumption that prioritisation processes are primarily based on the commercial negotiations between profit-maximising actors that trade off content and data to pursue their self-interests. Thus, while, on the one hand, media and platform organisations are assumed to negotiate in order to maximise their respective profits, increase audience share and viewing figures; on the other hand, consumers are assumed to maximise their utility and make rational choices about their media diets. Increasingly automated and data-driven prioritisation processes are seen as results of the exogenous arrival of new technologies which offer potential efficiency gains, although they have not been confirmed as directly cause changes in users behaviour and consumption choices. The lack of evidence of such causal relationship is used as a rationale against new prominence rules online, especially on intermediary services like social media or search engines (see also Ofcom, 2022a).

My thesis demonstrates that these two theoretical lenses do not show the whole picture.

In particular, I argue that the expanding body of research on prioritisation, prominence and discoverability lacks an in-depth understanding of the organisational strategies and industry practices that takes into account the broader institutional arrangements and governance systems. This approach is needed as governments and regulators start to create new prominence regimes for digital media platforms and their intermediary services.

By conducting an analysis at the organisational level through a critical institutional lens, my research has unpacked the complexity of content prioritisation processes, and shed light on how the institutional arrangements within which the organisations at the centre of my analysis operate are changing. My conceptual framework (Chapter 3, sections 3.3-4) provided the lens through which I was able to examine the UK EPG Prominence review to bring to the forefront the importance of normative frameworks and to stress the role of norms and ideas in shaping both industry and policy practices. I have shown how a combination of legacy telecommunication and broadcasting rules, PSM policy frameworks, and clashing notions of public interest services and public value criteria are at the centre of content prioritisation processes.

My analysis has shown how prioritisation is never neutral or static; rather, it is dynamically shaped by the institutional environment and by clashes between existing media governance systems and those emerging for platform governance. **I have revealed how prioritisation is influenced by the interplay of technical means, market relations, and regulatory interventions which, in turn, is conditioned by the normative values and frameworks of the industry and policy actors involved.** My interdisciplinary conceptual framework enabled me, not only to advance insights into how decisions about content prioritisation operate on the conceptual level and to confirm these insights using a rich empirical corpus, but also to open up avenues for potentially realistic reforms in a moment of institutional change in media and communications regulation.

This concluding chapter summarises my theoretical contributions building on the insights arising from the application of my conceptual framework and empirical findings, reflects on the limitations of this research and points to potential future avenues for research.

9.1.1. Advancing Media and Platform Governance Literature

As outlined in Chapter 3, in recent years, concepts of content curation, prioritisation and discoverability online have entered numerous strands of research in the field of media and communications. In particular, within the field of media and platform governance, these concepts have been elaborated indirectly in research on content moderation practices (see also Gillespie, 2010, 2017, 2018; Gorwa et al., 2020; Klonick, 2018) and on the regulation of algorithmic-driven recommender systems for media and news (see also Helberger, 2015; Helberger et al., 2018; Helberger and Moeller, 2018; Napoli, 2014a; Van Drunen et al., 2019).

In addition, recent critical media scholarship on online prominence and discoverability has started to shed light on the distribution of power and its effects on today's media industry with works focusing on set-top-boxes

(Hesmondhalgh and Lobato, 2019), screen interfaces (Hesmondhalgh and Lotz, 2020), and TV apps (Johnson, 2020b). While these works in critical media studies have paved the way for theorisations of prominence (Hesmondhalgh and Lobato, 2019; Hesmondhalgh and Lotz, 2020; Johnson, 2020b; Lobato, 2018; McKelvey and Hunt, 2019), I began my research with the suggestion that this literature lacked an in-depth understanding of organisational strategies and practices from a governance perspective.

My aim was therefore to address this lacuna between critical media studies on media content curation, prioritisation and discoverability, on the one hand, and law and policy research on prominence rules in audiovisual media regulation and platform regulation, on the other. This required an interdisciplinary approach.

To do so, I theoretically framed my research in the media governance studies tradition and, specifically, I took a critical institutionalist approach to my core research questions. My interpretation of Philip Napoli's work led me to propose that given the political and cultural impacts of various forms of media content, it is crucial to understand the institutional forces that affect content outputs, especially in the context of today's automated and complex media systems (Napoli, 2014a). I developed a combined institutionalist and organisational conceptual framework, drawing upon conceptual tools from media governance (Puppis, 2007, 2010), theories on behavioural nudging and algorithmic regulation (Yeung, 2016; Yeung and Lodge, 2019), and the market shaping innovation literature in the media sector (Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016).

This framework allowed me to examine the complexities of content prioritisation processes and to investigate them on digital media platforms, raising questions about how the public interest is perceived in these new forms of intermediation. I positioned these processes as being deeply embedded in and influenced by the institutional arrangements of the organisations that control them. Gaining control over a choice architecture was proposed as allowing industry actors to strengthen their algorithmic gatekeeping power (Napoli, 2019) over how content is distributed and accessed online. Thus, the politics of prioritisation online was investigated as a battle ground among governments, regulators and industry actors to establish who should have the power to decide what content is deemed to be in the public interest and is to be made prominent to users.

Hypothetically, in today's online media environment we are free to search, access and consume whatever content we like, whenever we want, and on a myriad of services. However, in practice, each individual click through behaviour is subject to the 'priming' effect of the range of designed and algorithmic configurations of her/his informational choice architecture which seeks to nudge her/his click through behaviour in specific directions (Yeung, 2016: 4). So even if we are free to review all the potentially relevant pages on a site, in practice, each individual user is influenced by subtle and yet powerful digital guidance processes that constitute algorithmic regulation by design (Yeung, 2016; Yeung and Lodge, 2019) which influences users' choices and behaviours online.

These processes are understood in my conceptual framework to be influenced by the institutional arrangements of the organisations that control them. In this scenario, the question is: how are the outcomes of the battle for content prioritisation established? As my analysis shows, a battle takes place in three key dimensions: a technical (Chapter 5), a market (Chapter 6), and a regulatory dimension (Chapter 7). Normative and institutional frameworks cut across each of these dimensions since the main source of contestation in the creation of a new prominence regime concerns (a) the definition of public interest services that should be granted prominence and discoverability benefits, and (b) how to achieve fair and appropriate prominence on different digital media platforms.

To investigate this empirically, I took the UK and its ongoing revision of the EPG Prominence Rules for PSM as my primary case study and investigated prominence decisions across and within these three key dimensions (see Fig. 4.5).

9.1.2. Unpacking Prioritisation

Informed by my interdisciplinary theoretical approach, the objective of this research was to uncover how content prioritisation is governed on digital media platforms, and what might be the elements of a public interest framework for new prominence regimes that could be developed in the future.

9.1.2.1. Organisational Norms and Interests Behind Choice Architectures

The first step to open up the 'black box' of prioritisation was to investigate its technical means and the socio-technical criteria used by organisations in prioritising content on their devices and services. To do so, Chapter 5 explored how content prioritisation processes work as a form of digital decision guidance process (Sellinger and Seager 2012, Yeung 2016) that takes place in a carefully curated technological environment, also described as a choice architecture (Chapters 3, section 3.3.1, and Chapter 5, section 5.3).

My analysis confirmed that organisations use different prioritisation means at hardware and software level (Chapter 5, section 5.2) to direct or guide peoples' access to and consumption of content online. However, my analysis also demonstrated that control over these technical means does not lie solely with platform organisations; rather it is fragmented among different industry actors and significantly depends upon the technical limitations of the hardware and software architectures of devices and services, and on levels of access to user data and content metadata.

For instance, at the hardware level, manufacturers like Samsung or LG primarily control the UI, unless they do not use proprietary OS systems. In the latter cases, their control is shared with OS providers, which are often the same platform companies that are expanding into this segment of the value chain, such as Google Alphabet and Apple. Within the walled garden environments of TV apps, the situation is the opposite: technology

manufacturers cannot influence prominence and discoverability and have no insight into such journeys. Instead, AVM services can use a combination of technical means - recommender systems, search and browsing functions, editorially curated and algorithmically driven catalogues collections, etc. (Chapter 5, Table 5.1) – as far more sophisticated and subtler digital guidance systems to nudge user choices. Their profiling and targeting techniques are more precise and effective than those used by technology manufacturers thanks to a greater availability and richness of user data and content metadata.

By further investigating the criteria that drive such processes, my analysis revealed which organisations are nudging users to pursue their own private interest and how limited is the scope for pursuing public interest objectives, such as fostering diversity of exposure. For instance, despite the appropriation of notions like public value and quality by technology manufacturers and platforms, the most commonly used criteria among these organisations were popularity, relevance and recency (Tables 5.2 and 5.3). These criteria were discursively associated with the intent to respond to customer demand and interests by surfacing, prioritising and recommending content that they claim their users/audiences/customers 'want'. However, my analysis shows that behind these discourses lies a market-driven logic where content prioritisation measures are one of the means used by these companies to maintain and, ideally increase, their subscription numbers and revenues, making their services and devices more appealing to a greater number of users across multiple markets, and justifying the constant monitoring, profiling, and targeting techniques used to refine these processes.

In the case of PSM, the situation was found to be more nuanced, but also contradictory. While research participants stressed the distinctiveness of their services and criteria compared to those of their private competitors; in practice, prioritisation measures and UI features of the BBC iPlayer, ITV Hub and All4 did not appear to be very distinctive as compared to others such as Netflix's UI. Thus, while interviewees emphasised the importance of using technical solutions to expose users to a diverse range of content and views, and to privilege public value criteria such as diversity and quality, over more commercially driven criteria such as popularity and relevance, in practice, the latter criteria also were shown to play an important role in influencing what content is made most prominent to the final users.

Furthermore, the use of vaguely defined criteria such as 'relevance' or 'public value' also appeared to be an attempt to justify the use of recommender systems and personalisation strategies by referring to their public service principles of universality and diversity (see also Sørensen, 2019a; Sørensen and Schmidt, 2016; Van Den Bulck and Moe, 2018). For the BBC, for instance, 'relevance' seemed to be understood as something in between what is 'relevant' for the individual users, but also what should be relevant to all their audiences collectively, thus, implicitly highlighting the fundamental tension that a PSM confronts in meeting its public interest objectives of universality and diversity, while adapting its offer to the increasingly personalised and narrowcasting viewing experiences that characterise online media consumption. In the case of ITV, it was unclear how the combination of a narrow understanding of public service-value content is combined with a

potentially broader definition of the same category that includes popular entertainment programmes. This combination was presented as a solution that better serves UK citizens and their interests and does not instrumentalise a fake notion of 'relevance' or a masked understanding of 'customers' interests' which was attributed to the platform organisations.

However, despite some public interest criteria being present in their prioritisation processes, my analysis showed that PSMs still do not have truly distinctive 'public service' approaches to prioritisation in their own UIs. I suggested that this form of institutional isomorphism (Chapter 7, section 7.3.2) is limiting the development and scaling up of alternative prioritisation models. My assessment was that we are therefore far from being able to break self-referential filter bubbles and ensure diverse and pluralist media environments insofar as prioritisation is used in similar ways by both commercial and public services organisations. However, this research also highlighted that BBC R&D along with other European PSMs are experimenting alternative approaches to recommendation systems that appear to be closer to their public interest mission (Chapters 5, section 5.2.2.2, Chapter 7, section 7.3.2, Chapter 8, section 8.3.2): this is the beginning of the conversation, and we have yet to see how it will unfold.

9.1.2.2. Organisational Norms and Interests Behind Market Dynamics and Policy Debates

Building on my evidence that choice architectures are not neutral but are influenced by the norms and ideas of the organisations behind them, my empirical analysis in Chapter 6 further investigated the market dimension that was proposed to also shape content prioritisation processes online. This part of my analysis shed light on prominence as a site of contested and strategic negotiations: a game tightly tied to market structures, industry competitive dynamics, and an uneven distribution of bargaining power among the different actors. However, while interviewees repeatedly described this as a 'zero sum game', where if one actor buys off a prominent position for its app, the others lose, my analysis revealed a much more complex picture.

On the one hand, business strategies such as vertical integration and expansion strategies are often being exercised in asymmetric ways, which – as I was able to demonstrate - tend to disadvantage national and local AVM providers like PSMs, and to favour SVOD service offers by platform organisations. Thus, what emerged from my research is that not all apps or services are equal; on the contrary, 'some are more equal than others' and prominence can help to achieve a particular advantage (Chapter 6, section 6.2). As a form of positive content discrimination, successfully negotiating prominence and discoverability online can provide a competitive advantage and allow an organisation to acquire strength by gaining bits of power and control over key gateways to content. Indeed, gaining gatekeeping power in an increasingly fragmented value chain appeared as one of the key drivers shared by all the organisations I examined.

On the other hand, such power did not derive solely from the platforms' vertical integration or expansion strategies, nor could it be reduced to a static 'zero sum game', which is how it might be interpretated in a neoclassical economic approach to these issues. My analysis suggests that commercial negotiations over prominence cannot be reduced to a battle between PSMs, national and local AVM services versus global technology manufacturers and platform organisations: the distribution of control over content prioritisation measures is not binary, but complex and fragmented (Chapter 6, section 6.3).

There is a moving environment where different interests and kinds of value are traded off to gain more prominence and discoverability. UK PSMs such as the BBC or ITV, for instance, tend to rely on soft power and their distinctiveness to strike prominence deals on connected devices and UIs with varying degree of success. To do so, my research showed that they rely on the fact that without their content, technology manufacturers and platforms would ultimately lose some of their user base too. PSM described the possibility of withholding content and services as a desperate move, the last resort in this battle, and yet, it would be a highly powerful move if the UK Government was to extend the existing must carry/must offer regime online (Chapter 6, section 6.4).

These two dimensions – the technical and market ones – have been governing content prioritisation processes online until recently, as my analysis confirmed. Although, as this policy area is developing at national and international levels, the regulatory dimension is starting to become increasingly important (Chapter 7). Regulation in the UK is pending, and by selecting the revision EPG prominence rules for PSM as my empirical focus, I was able to uncover the advocacy strategies and narratives that are shaping this policy debate.

My interpretation of the stakeholders' advocacy narratives pointed to a lack of consensus among industry actors on whether a regulatory intervention is needed in the first place, and disagreement about the perceived advantages and disadvantages of new prominence rules online (Chapter 7, section 7.2). Issues of competition, media pluralism, diversity, freedom of choice and consumer interests appeared to be instrumentalised by each stakeholder coalition to support opposing public policy aims. Ultimately, the discursive contradictions of these advocacy strategies have been shown to be concealing self-interested objectives.

The UK PSMs are going through a profound crisis, with decreasing audiences, funding instability and political uncertainty about their future (Chapter 2, section 2.5). Achieving prominence appeared for them a mean to survive in a highly competitive environment without having to go through difficult commercial negotiations or complex technical solutions. It is also a way to rebalance one aspect of the power asymmetries between content providers and gatekeepers such as manufacturers and platforms. Platforms, technology manufacturers and pay-tv operators, instead, were trying to maintain and strengthen their control over access and distribution of content online. They did not appear to be willing to lose such control or to give away a valuable asset such as prominence.

As the policy debate evolves and regulation is pending, it is important for governments and regulators like Ofcom to move beyond the advocacy discourses of these stakeholder coalitions to identify the core challenges of today's content prioritisation processes that regulation could address. Based on my analysis, I have suggested that at the crux of the problem of content prioritisation there are two main challenges that demand attention.

First, I suggested that **there is a pressing need to curb growing digital dominance and the algorithmic gatekeeping power of technology manufacturers and platform organisations** (Chapter 7, section 7.3.1). This gatekeeping power was shown to be exacerbating existing inequalities in the market where smaller local and national players are disadvantaged, if not actively discriminated against, while popular global players seek to win the battle for prominence. Only by exercising the soft power of established media institutions, like the BBC, with the possibility to withhold content have PSMs been able so far to secure a prominent location of their services and content. However, as one of my participants put it, without an intervention that can safeguard other types of public interest services, most of them are likely to 'fall off the screen' (PSM 12, 2020), with negative long-term impacts on media pluralism and diversity online.

Second, **a tendency towards an institutional isomorphism has been shown to raise concern about both user freedom of choice and media pluralism and diversity online** (Chapter 7, section 7.3.2). To comply with the dominant market logics, private and public organisations were shown to tend to optimise content prioritisation processes based on similar criteria that are mostly influenced by private and commercial interests rather than by public interest considerations. This, in turn, arguably is compromising the emergence of alternative models, apart from small-scale examples or PSM R&D experiments, which do not (yet) have the potential to bring about structural changes in the market. Moreover, this tendency is also strengthening the already problematic profiling and data mining techniques that are increasingly used by public and private organisations to shape the choice architectures of their online services and related digital guidance processes that nudge user choice and behaviours. It is on this basis that I suggested that a new regulatory regime could be a way to address these problems.

9.1.2.3. A Framework for New Prominence Regimes

As legislation in the UK and in other national and regional contexts is evolving, it is important to think about new governance systems that might be driven by a public interest framework, where public interest services could potentially be granted prominence in a transparent and accountable way that is at least relatively independent of market and political interference. However, concerted and coordinated efforts at national, regional and international levels would be needed to achieve this.

As discussed in Chapter 8 (section 8.2, Fig. 8.1), the proposed PSM prominence rules in the UK are framed within a broader and evolving regulatory framework which other individual countries, European policymakers

and international bodies such as the Council of Europe are also trying to influence. Based on my analysis, I have suggested that a material scope limited to PSM, combined with a narrow scope of application limited to connected TV devices as suggested by Ofcom, might gain a few more years of 'relevance' for the main UK PSMs, but it is unlikely to be sufficient to promote long-term change or to address the structural issues discussed in this thesis.

I have proposed that any new regime should be coordinated and aligned with complementary interventions, which include, but are not limited to, a possible revision of media plurality and media ownership rules (Ofcom, 2022a; Roeber, 2022), a robust framework to increase the transparency and accountability of platform organisations and their intermediary services (*UK Public General Acts*, 2023), and new competition rules that are fit for today's digital markets (UK Government, 2022). Some of these issues go beyond the scope of my research, but it was apparent that these kinds of initiatives are being developed in silos, the proposed texts do not appear to be aligned, and nor do they acknowledge shared issues of platform governance are involved where prioritisation and moderation are two sides of the same coin.

Given the normative aspect of positive content regulation, my focus on online prominence regimes provided an instructive case through which to examine broader governance and institutional developments and reflect on the feasibility of the creation of new public interest frameworks suitable for the online audiovisual media space. While the battle over gateways and the prominence of and access to content online takes place through hyper-nudges, lengthy commercial negotiations and continuing policy debates, my analysis suggests that there is potential for change.

To move beyond the discursive traps of individualistic and instrumentalised notions of public interest objectives and public value criteria, and to shape market developments towards new institutional arrangements, I introduced the notion of mission-driven frameworks (Mazzucato, 2018; Mazzucato et al., 2020; Mazzucato and O'Donovan, 2016) for developing online content standards. In alignment with my critical institutional theoretical lens (Chapter 3), I suggested that a turn towards a mission-driven framework is needed to prompt changes in industry practices and to design regimes that could shape how content prioritisation processes currently work online. This approach builds on the notion of public interest (Napoli, 2019) as both an institutional imperative for media and platform organisations, and as a regulatory mandate for new digital media governance system and their online prominence regimes (Chapter 8, section 8.3.2).

First, I suggest that the public interest as a regulatory mandate could help governments and regulators in transposing high level principles of a public interest mission and a commitment to the democratic process into regulatory policies and legal requirements. My analysis of each dimension of content prioritisation processes has revealed that the problems with prominence and discoverability are tightly linked to structural issues of competition and data practices in digital media markets. For this reason, content, data and competition issues should be treated holistically when developing new prominence regimes online.

In the case of content regulation, my holistic perspective on public value that encompasses societal, economic and individual components, provided a foundation for my suggestion that the set of criteria I have advanced (Chapter 8, section 8.3.1) might constitute a way to develop a more inclusive definition of *public interest services* that could benefit from new prominence regimes. For instance, by prioritising *public interest services* that are independent, internally pluralistic, trustworthy, and respect high standards of transparency and accountability, a new regime might foster a richer, more diverse media diet online. The list of criteria I proposed are applicable to both private and public media organisations and should be seen as a starting point rather than an exhaustive list.

Second, the high level public interest framework that I have outlined, could be transposed into what Napoli calls 'an institutional imperative' for media and digital media platforms with the aim of incentivising long term change in industry practices. Knowing that the new regulatory system aims to reward respect for public value criteria using benefits such as prominence, private and public media organisations could be incentivised to use alternative prioritisation models. I have suggested that a successful mission-driven framework could result in organisations for whom the public interest becomes a driving institutional imperative, not just a 'by-product' of commercial and private imperatives, as some interviewees described it (pay-tv operator 1, 2019; platform 1, 2020).

I therefore argue that by intervening in the incentive structure and through process/principles-based standards, the public interest vacuum of platform organisations and technology manufacturers might be filled and the tendency towards institutional isomorphism that I identified might be reversed or stemmed. Rather than PSM implementing similar strategies and means to curate and prioritise content as those employed by the dominant commercial platforms, I suggest that an opposite market shaping incentive is needed to develop and scale up alternative models of content prioritisation that optimise for diversity, rather than for popularity.

Finally, my research has shown that the ongoing struggle over prominence and discoverability at technical, market and regulatory levels can be fully exposed when looking at the contested understandings of what services should be granted prioritised placement, on the basis of which criteria, and who should have the power to make such decisions on different digital media platforms: private industry actors? PSM? Governments? Independent regulators? Users? My analysis confirms that a combination is needed if change is to happen.

My empirical focus was the United Kingdom, but the analysis of this case has been informed by developments in European Union and Council of Europe which bear on the future discoverability of public interest media services and related prominence regimes. My case offered a prism through which I was able to look at broader governance systems of digital media platforms and consider how the public interest can be interpreted in these new forms of intermediation.

9.2. Reflections on the Research Project and Its Limitations

An institutional analysis of complex and 'messy' processes has limitations insofar as my analysis of my participants' narratives may appear to be more straightforward than they are likely to unfold in practice. While the previous sections provided a summary of my empirical findings, in this section I reflect on how these points of arrival of my research relate to my points of departure, discuss the study's limitations and comment on adjustments that occurred during this project.

First, it is important to consider the lack of any assessment of how much choice users believe they have or actually have in practice. As explained in Chapter 1 and justified in Chapter 3, such an assessment was beyond the scope of this research, and it would have required a different research design and approach. Nevertheless, I acknowledged that the role of users and their agency is an important aspect of content prioritisation processes. My work has shown how much effort each organisation puts into exploiting technical solutions, market strategies and regulatory developments that might shape the prominence and discoverability of AVM services and content online. Yet, the biggest variable in these ongoing battles is the user: will she/he actually access and watch what is prioritised and recommender to her/him? In my study, I have been able to reveal in considerable detail how my participants claimed to understand their users' beliefs and behaviours.

It is also crucial to reflect on the accessibility of information concerning industry actors' perceptions and practices. Much data on the effectiveness of prioritisation processes and prominence and discoverability is not accessible by researchers, nor by governments or the regulators. As my research has shown, even content providers themselves have limited understanding as data is often guarded by platforms and manufacturers that want to monetise the value of prominence and sell prioritised placement to the highest bidder (Chapter 6, section 6.2.4). Some data at least provide a sense of aggregate prominence, but there is a lack of transparency, and this limits what a researcher can uncover.

Ever-more customised choice architectures and the personalisation issue raise questions about whether prominence could be measured reliably or be transparent to users and content providers and whether there is a workable solution to governing prominence through a public interest framework. If it is argued that the impact of personalised prioritisation measures is fundamentally unknowable because of the dynamic nature of these environments, how could governments, regulators or industry actors assess whether alternative models are achieving public interest objectives such as diversity of exposure? These questions were beyond the scope of my study, but new methods and metrics are beginning to be developed to assess the impact of recommender systems designed to optimise for diversity of exposure (e.g. Helberger, 2015; Moeller et al., 2018; Vrijenhoek et al., 2021).

Furthermore, while the interdisciplinary nature of my project is a strength and provided a basis for novel empirical insight, but it also presented limitations. My initial conceptual framework allowed me to investigate

how organisational strategies and the formal and informal constraints of the institutional environment feed into content prioritisation governing processes in today's internet-distributed audiovisual media sector. This framework was helpful in addressing issues of gatekeeping power and the perceived positive and negative implications that private- or state-driven prominence regimes have for media pluralism, diversity and freedom of choice online.

However, my initial framework did not signal the importance of soft power that emerged as a significant feature in the case of PSMs, especially the BBC. Thus, I amplified my framework by developing and applying the notion of soft power in my discussion of how content providers such as the BBC use their soft power and influence in securing a prominent location for their services and apps on a limited sets of devices (Chapter 6). As the role of soft power came to light during my data collection phase and I was only able to interview the three main UK PSM organisations and their main commercial competitors, I was unable to fully comprehend how the soft power of actors like the BBC operates to influence the prominence and discoverability of the content offered by smaller local actors.

It is also important to highlight that my study has not attempted to examine the cultural-cognitive dimension of institutions which is often consider in the organisational and institutional research tradition (Scott, 2014: 76) (Chapter 3, section 3.2.1). Nevertheless, my conceptual framework helped to draw attention to two means by which institutions guide the social and economic actions of policy and market actors, namely, the (a) regulative, defined as rules, laws, and formal governance frameworks, and (b) the normative, described as values and norms, providing more informal governance frameworks and constraints (Scott, 2014: 76) (Chapter 3, section 3.2.1). As a result my research design focused on formal and informal governance frameworks, rather than on symbolic and cultural aspects of institutions.

In Chapter 4 I outlined the advantages and drawbacks of my research design and methodology. By way of summary, due to the Covid-19 pandemic, my data collection methods were adjusted to integrate interviews with document analysis, also modifying my sampling strategy (section 4.2.1). Given the constraints of the pandemic, the final sample is illustrative of major players in the market but does not reflect as many players as I initially hoped to include.

Finally, during my research, new prominence regimes started to develop at European and international levels, and some of my interviewees were drawn into my research through the European Commission and Council of Europe (sections 4.2.1, 4.2.2) and this potentially affected their positionality towards me. Throughout my analysis I sought to achieve a critical distance from my data so as far as possible to detect whether my participants were seeking to present their arguments in a particular light that might aid them in evading future regulation. My aim was to check any potential biases throughout my analysis (Chapter 4, section 4.6).

9.3. Looking Ahead

My research confirms the value of opening the 'black box' of digital innovation and technological development. The objective was to address a weakness in the literature on content prioritisation processes online with a view to prompting a reflection on how realistic reforms might be advanced in this policy area. I have provided insight into how change might be enacted in the context of existing institutional arrangements through the application of a public interest framework for digital media platforms that might also be implemented for other intermediary services and as institutional arrangements change. My analysis paves the way for future research and discussion. This is the beginning, not the end, of this conversation: more can be done.

In the short term, there are at least two research areas that could contribute to understanding of the prominence and discoverability challenges: user and audience research; institutional and organisational analysis of content prioritisation processes on other kinds of intermediary services.

User and audience research is still underdeveloped in this area, but it is rapidly developing. Catherine Johnson has been leading in this space, investigating the 'routes to content' that users take to access TV content, examining the changing viewing habits and questioning different kinds of engagement and content discovery both pre and post Covid-19 pandemic in the UK (Johnson, 2020a; Johnson et al., 2022; Johnson, Dempsey, et al., 2020; Johnson, Sandvoss, et al., 2020). While these works have greatly advanced our knowledge of users and audience habits, there is still more to uncovered.

For instance, further research is needed into how personalised prominence can impact access and consumption of content, and the extent to which it may, or may not, reduce the diversity of people's media consumption. As hinted in my analysis (Chapters 7 and 8), PSM (BBC, 2021; European Broadcasting Union, 2020a, 2020b; Sveriges Radio, 2020) and researchers (Burri, 2016; Helberger et al., 2018, 2020; Vrijenhoek et al., 2021) are experimenting with recommender systems that optimise for more public interest metrics, such as diversity, but this is still the beginning of the conversation and there is still a limited understanding on how these alternative could affect users.

Continuing this work and bringing an institutional lens on personalised prominence on specific gateways - such as smart speakers and voice assistance devices – and on other types of intermediary services - such as search engines and news aggregators - can shed light on the broader users' implications of these developments.

Lastly, the politics of content prioritisation online that my research investigates through an organisational and institutional framework, did not extend to the wider political system. I have noted the political uncertainty that the UK Government has been going through during my research – Brexit negotiations, political instability, government encroachments on the BBC's independence and funding, and proposals for Channel 4 privatisation. However, the way these wider politics condition the ongoing creation of a new prominence

regime in the UK were not at the centre of my analysis. Further research is needed to investigate how these politics influence the governance systems of content prioritisation online in the UK and in other countries.

I finally conclude this thesis by reiterating a call for action. My study has highlighted the importance of addressing questions of public interest in online content prioritisation processes and relative prominence and discoverability. Even if it is not possible to forecast the future, I believe that a failure to address the issues discussed in this thesis may lead to the slow disappearance of public interest AVM services, especially local and national ones, to a lack of truly alternative models to the dominant ones from platforms organisations, and to a loss of users' conscious choice and control over access to content. I therefore believe that change is needed to reverse or at least stem these developments of our modern media systems.

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Appendix I – Methods

Interviews Materials

Informed Consent Form

Below the template that I used for my interviews, containing an information sheet that outlines the project and consent form aligned with the Research Privacy Policy of the London School of Economic and Political Science.

Information for participants

Thank you for considering participating in this study with an interview, which will take place DD/MM/YYYY. This information sheet outlines the purpose of the study and provides a description of your involvement and rights as a participant, if you agree to take part.

1. What is the research about?

The rise of streaming services, the transition to IP-delivery and cloud systems, and the evolution of media convergence are shifting the ability to control content discovery away from audiences and traditional content providers, while moving towards a much more layered and networked system, where content curation strategies, such as search and discoverability functions, have great influence on what content can be found and accessed online. This research aims to investigate how media organisations find their way through this system. The study is centred on the United Kingdom (UK), focusing on some of the key actors of the Internet-distributed television industry, from Internet platform organisations to pay-TV operators, smart-TVs manufacturers and content providers, like public service media organisations.

This PhD project is supported by the Economics and Social Research Council (ESRC).

2. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, the researcher will ask you to sign a consent form, which you can sign and return in advance of the interview or sign at the meeting.

3. What will my involvement be?

In the interview you will be asked about your experience and knowledge of the online audiovisual media system, and in particular of your organisation's content and distribution strategies, on technical, business and policy strategies used for Internet-distributed content. The interview will take approximately one hour and will be recorded, unless you request otherwise.

4. How do I withdraw from the study?

You can withdraw at any point of the study, without having to give a reason. If any questions during the interview make you feel uncomfortable, you do not have to answer them.

5. What will my information be used for?

The researcher will use the relevant and any other information for her PhD research thesis and related publications.

6. Will my taking part and my data be kept confidential? Will it be anonymised?

The records from this study will be kept as confidential as possible. Only the researcher can access such records and transcripts. Upon request, data might be looked at by the researcher's supervisors. If you wish so, your data will be anonymised – your name will not be used in any reports or publications resulting from the study. All digital files, transcripts and summaries will be coded and stored separately from any identifiable information.

Limits to confidentiality: confidentiality will be maintained as far as it is possible, unless you tell us something which implies that you or someone you mention might be in significant danger of harm and unable to act for themselves; in this case, we may have to inform the relevant agencies of this, but we would discuss this with you first.

7. Data Protection Privacy Notice

The LSE Research Privacy Policy can be found at: https://info.lse.ac.uk/staff/divisions/Secretarys-Division/Assets/Documents/Information-Records-Management/Privacy-Notice-for-Research-v1.1.pdf

The legal basis used to process your personal data will be legitimate interests. The legal basis used to process special category personal data (e.g. data that reveals racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, health, sex life or sexual orientation, genetic or biometric data) will be for scientific and historical research or statistical purposes.

To request a copy of the data held about you please contact: glpd.info.rights@lse.ac.uk

8. What if I have a question or complaint?

If you have any questions regarding this study please contact the researcher, Eleonora Maria Mazzoli, via email (e.mazzoli@lse.ac.uk), or via phone (+44 7732 936948).

If you have any concerns or complaints regarding the conduct of this research, please contact the LSE Research Governance Manager via research.ethics@lse.ac.uk.

If you are happy to take part in this study, please sign the consent sheet attached.

Consent Form

Title of Research Study	Content Discoverability on Internet Platforms
Name of researcher	Eleonora Maria Mazzoli
Contact details	e.mazzoli@lse.ac.uk

PARTICIPATION IN THIS RESEARCH STUDY IS VOLUNTARY

1) I have read and understood the study information dated DD/MM/YYYY, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	YES / NO
2) I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	YES / NO
3) I understand that research data collected during the study may be accessed by the PhD researcher's supervisors. I give permission for these individuals to access my data.	YES / NO
4) I understand how to raise a concern or make a complaint.	YES / NO
5) I agree to the interview being audio recorded.	YES / NO
6) I understand that this research will be written up and that the information I provide will be used for this PhD research thesis and related publications.	YES / NO
7) I give permission to:	
be quoted directly in research outputs and for my name to accompany any quotation OR	YES / NO
be quoted directly in research outputs against a pseudonym OR	YES / NO
be quoted directly in research outputs but only fully anonymously OR	YES / NO
I do not wish to be directly quoted.	YES / NO
8) I understand that any personal information that can identify me – such as my name, address, will be kept confidential and not shared with anyone other than the researcher and her supervisors	YES / NO
9) I give permission for the (fully anonymised) information I provide to be deposited in a data archive so that it may be used for future research.	YES / NO
10) I agree to take part in the study.	YES / NO

Participant name:

Signature: _____ Date _____

Interviewer name:

Signature:_____ Date _____

Topic Guide

The table below presents the topic guide that I used for my interviewees. Being semi-structured interviews, the table below provides only examples of questions that were asked to the interviewees. Overall, each interview started with warm up questions and ended with cooling questions. The main interview body consisted in a combination of general questions for all interviewees (section 1), followed by more targeted questions (sections 2, 3 and 4) adapted to the expertise and role of each interviewees as indicated in the table. For example, the focus of an interview with PSM's and platforms' representative working in the distribution strategies was on the questions in section 2, whereas the focus of an interview with representative working in the legal and policy department was on the questions in section 4.

Table. 1. Interviews' topic guide

INTRODUCTORY SECTION	
Brief introduction by the interviewer on the topic of the research	
Warm up questions	– Could you elaborate on the main characteristics and functions of your current role/position in the organisation? – What are the main challenges that your organisation is facing in today's online media system? And what are its priorities in this context?
MAIN INTERVIEW BODY	
Section 1	Examples of questions for all industry interviewees: – How do you think that online access and consumption of your content differ from offline? By what logics do you think they are driven? – When you hear the notion of "content discoverability", what comes up to your mind and how do you understand it in relation to your company? – What type of content do you think is currently benefitting from preferential treatments (if any) on Internet platforms, and why? – What type of content and/or content providers do you think should benefit from discovery functions and the related preferential treatments? Why and through which measures?
	Examples of questions for Ofcom's representatives:

	– What are the current priorities and objectives for policymakers when it comes to today's online AV system? – When you hear the notion of "content discoverability", what comes up to your mind and how do you understand it? – What do you think are the impacts of discoverability on users and on AV organisations? Is there an even distribution of content in the AV industry, or are there any perceived issues, for instance with regard to media pluralism or media freedom, or others?
Section 2	Examples of questions for interviewees working in distribution strategies and content policies: – How would you position your organisation in relation to other competitors/actors in the market? – Is there something that your organisation is doing differently/better, or that other organisations are doing differently/better? Why is that the case? – How evenly do you think that business and commercial negotiation are taking place? Who do you think is in a stronger or weaker position, and does this have an impact on your independence? – What are the means and strategies at the disposal of your organisation that can be used in response to previously discussed changes in online AV industry? – How effective/successful do you think they are, and why? – What are the guidelines and priorities in terms of distribution strategies and content policy? – How are your business strategies in this area aligned with the broader mission of your company, and with the work of other departments (e.g. R&D, policy)? – Are there specific technologies, devices and/or providers of such devices that provide challenges (or opportunities) to your distribution strategies?
Section 3	Examples of questions for interviewees working in R&D/technology & innovation departments: – What role do curation and moderation play on access, discovery and consumption of your content? – Could you share more specific measures taken for instance with regard to search, recommendation systems? How effective do you think they are and why?

	– Does your organisation provide guidelines on what content should be made more prominent on different platforms and how? How are such guidelines aligned with broader organisational objectives and mission in this area? – How would you position your organisation in relation to other competitors/actors in the market? OR is there something that your organisation is doing differently/better, or that other organisations are doing differently/better? Why is that the case?
Section 4	Examples of questions for interviewees working in policy and advocacy strategies: – To what extent is the current regulatory framework for audiovisual service fit for the online environment? Is it sufficient/effective, and why/why not? – What regulatory measures/interventions do you think currently contribute to ensuring the discoverability of your content? If none, what can be improve, and why should certain policy solutions should be put forward (compared to alternative ones)? – What impacts would the aforementioned policy proposals have for your organisations and for your competitors?
	Examples of questions for Ofcom's representatives: – What regulatory measures/interventions do you think currently contribute to ensuring the discoverability of content online? – Do you think that there are issues in the current online AV environment that need any sort of interventions in this area? Why/why not? – What objectives should they achieve? – What impacts would the aforementioned policy proposals have for AV organisations and for users?
CONCLUDING SECTION	
Concluding the interviews with summation, checking and final considerations	
Cooling down questions	– Is there anything that you would like to say that we have not discussed? – Do you have any specific questions about this project?
contextual information	Gender, title, position, organisation, location of each interviewee
ADDITIONAL PROBING OR OMITTED QUESTIONS	
For superficial/broad/unclear answers	

– Could you elaborate more on this? Can you give me an example? – Can you describe a case in which this has happened?
For unanticipated/contradictory topics
– Can you tell me more about it? – How do you see this in relation to what we were discussing? – How would you compare XYZ with the other example XYZ that you mentioned before?
For omitted/ missing information
– I noticed you didn't mention XYZ – why is that? – Can you think of anything else? What about XYZ?

Codebook

As outlined in my methodology (Chapter 4, section 4.4), my two driving organising themes are: (1) organisational content prioritisation's strategies and their influencing factors; (2) definition and criteria of AVM services that are and should be prioritised. Within these themes, I investigated the three analytical dimensions, which were broken down into sub-themes, and then into individual codes. The final coding structure with the overarching themes and sub-themes is summarised in Tables 4.3–4.4 (Chapter 4, section 4.4), while the table below presents the codebook iteratively developed on the NVivo Software to conduct my thematic analysis.

Table 2. Codebook

Sub-Themes	Codes
Technical means used to prioritise at hardware and software level	EPG
	Remote controls
	UI design
	Recommendation systems
	Search (text and voice)
	Apps menu

	Personalisation strategies
	Technical standards
Socio-technical criteria used to prioritise AVM services	Popularity
	Relevance
	Recency
	Quality
	Public value
Sub-components of the public value criteria	
Societal value	Ensuring access and consumption of free-to-air and universally available providers
	Ensuring access and consumption of publicly funded providers
	Ensuring access and consumption of producers of niche market failure genres
	Ensuring access and consumption of providers with high level of accountability and transparency
	Ensuring access and consumption of quality and trustworthy content
Economic value	Ensuring access and consumption of providers of local, national and regional content
Individual value	Benefitting individuals
	Benefitting citizens
Business strategies used to influence prioritisation processes	Distribution deals
	Marketing and promotional agreements
	Partnerships and collaborations

	Vertical integration strategies
	Trading users' data
	Trading metadata
	Other trade-offs
Organisational objectives driving prioritisation	Increasing bargaining power
	Establishing a distinctive and competitive offer
	Corporate social responsibility
	Increasing access to data
	Increasing breadth and diversity of access
	Increasing value for shareholders
	Maximising revenues
	Retaining and increasing audiences
	Retaining or increasing subscriptions
	Securing unmediated control over access to content
	Creating higher value for users
Advocacy positions in the policy debate	
Against a new prominence regime for PSM	Threats to freedom of choice for users
	Risks of soft forms of propaganda and censorship
	PSM soft power
	Threats to competition
	Threats to innovation/freedom to innovate

In favour of a new prominence regime for PSM	Support for PSM
	Unfair competition
	Support for local and national services
	Support for media plurality and diversity

Document Analysis

As outlined in my Methodology (Chapter 4, section 4.2.4), the use of secondary industry and policy data gathered through desk research helped me in reaching a fuller understanding of the UK market dynamics and the policy debate around prominence of public service broadcasters. The material collected was used to prepare and complement the expert qualitative interviewing, but also as part of the thematic analysis to triangulate the information gathered through the interviews and to complement the lack of balance between the interviewee coverage of different organisations.

The grey literature selected and analysed comprised of the following 28 documents published between 2018 and 2022 (in alphabetical order):

- Amazon (2019) The history of Amazon's recommendation algorithm. Collaborative filtering and beyond. Edited by Hardesty L. Available at: https://www.amazon.science/the-history-of-amazons-recommendation-algorithm (accessed 22 November 2021).
- BBC (2018) *Consultation on proposed changes to the linear EPG Code and future of the regime: BBC response*. London. Available at: https://www.ofcom.org.uk/consultations-and-statements/category-1/epg-code-prominence-regime.
- BBC (2018) *The BBC's Distribution Strategy*. London. Available at: http://downloads.bbc.co.uk/aboutthebbc/insidethebbc/howwework/accountability/consultations/bbc_distribution_strategy.pdf.
- BBC, ITV, STV, Channel 4, S4C, Channel 5 (2018) *Consultation on proposed changes to the linear EPG Code and future of the regime: Joint PSB position paper*. London. Available at: https://www.ofcom.org.uk/consultations-and-statements/category-1/epg-code-prominence-regime.
- Channel 4 (2018) *Consultation on proposed changes to the linear EPG Code and future of the regime: Channel 4 response*. London. Available at: https://www.ofcom.org.uk/consultations-and-statements/category-1/epg-code-prominence-regime.
- Digital UK (2018) *Consultation on proposed changes to the linear EPG Code and future of the regime: Digital UK response*. London. Available at: https://www.ofcom.org.uk/research.

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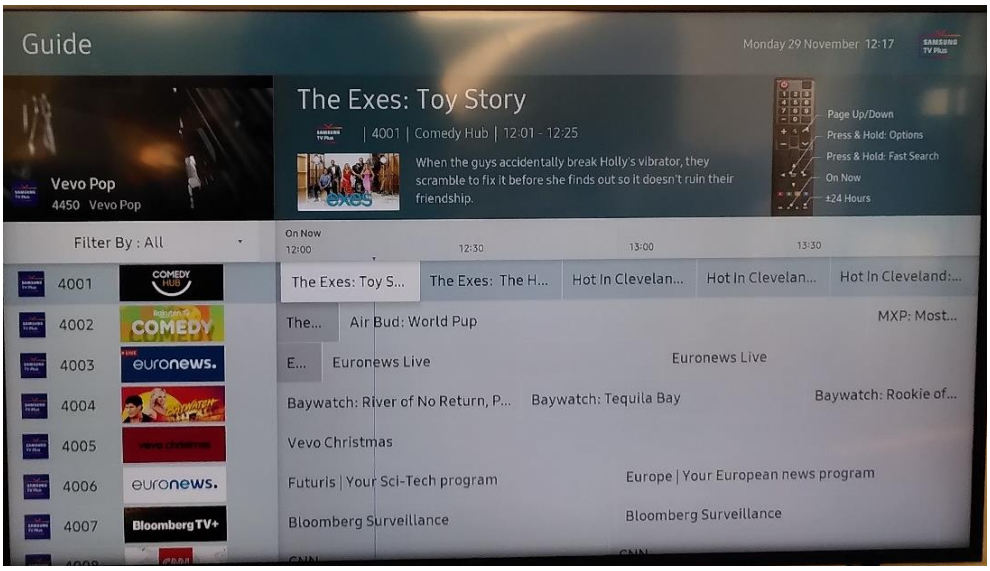
Appendix II – Illustrative Examples of Content Prioritisation Means

The following images are used as illustrative examples of the prioritisation measures discussed in Chapter 5, sections 5.2, and summarised in the Figure 5.2 and Table 5.1. They are listed in the same order as they appear in Chapter 5.

EPGs

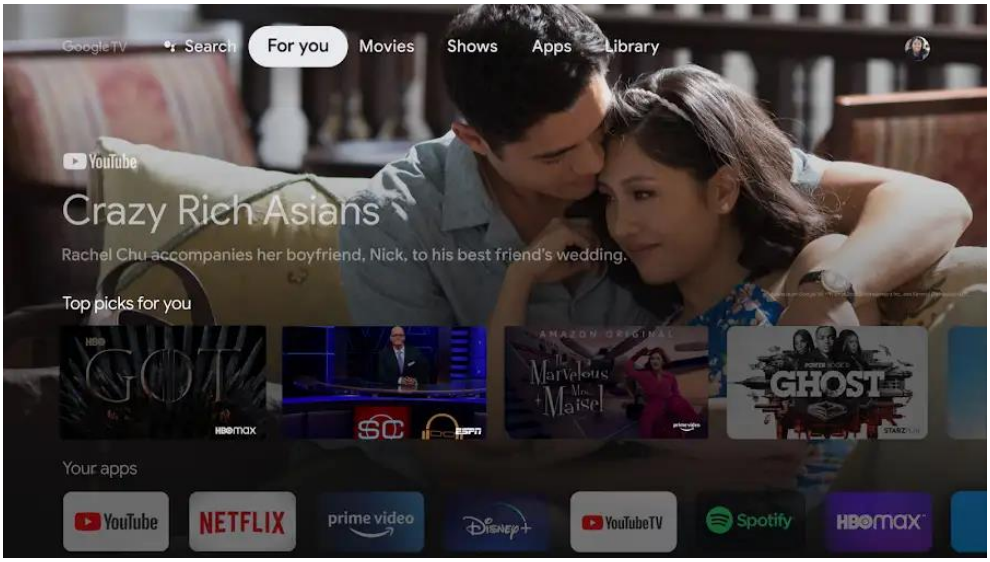
Fig. 1. Example of Samsung smart-TV's EPG



Source: Author

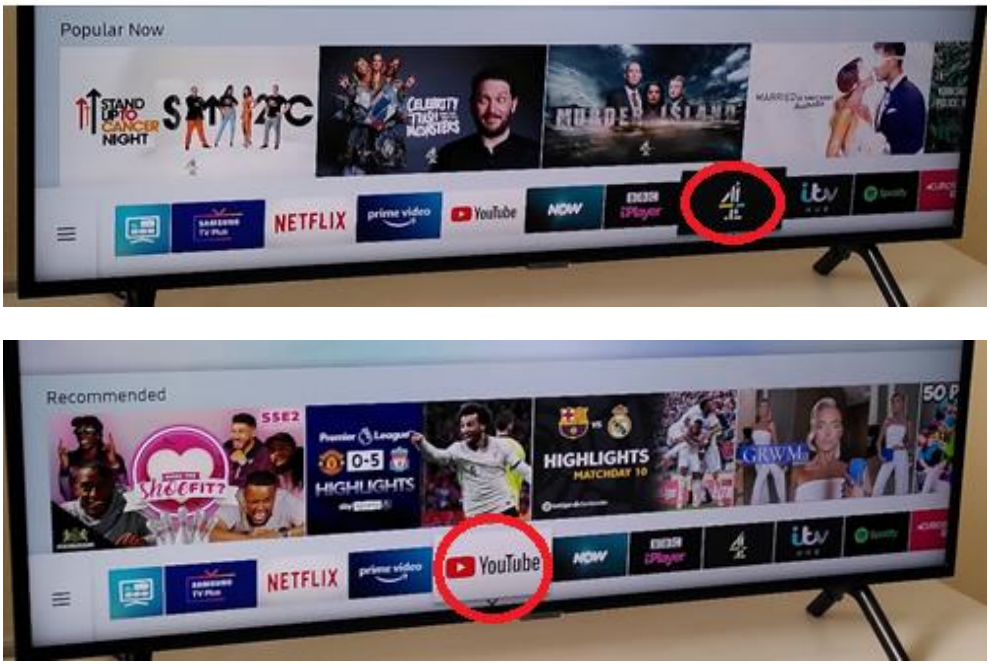
Manufacturers' and Platforms' Homepage Design

Fig. 2. Examples of Google TV's homepage



Source: manufacturer's website

Fig. 3-6. Examples of different curated selections of Samsung's app menu.[121]



Source: Author

Fig. 7. Example of Apple TV's apps menu

Source: Author

[121] The image shows what kinds of content is automatically prioritised to the user when scrolling through different apps (each app is circled in red to signal when the users was clicking on it).

Remote Controls' Dedicated Buttons

Fig. 8. Remote controls with examples of dedicated 'red buttons' and integrated voice assistance[122]

Source: manufacturers' websites

AVM Services' Homepage Design

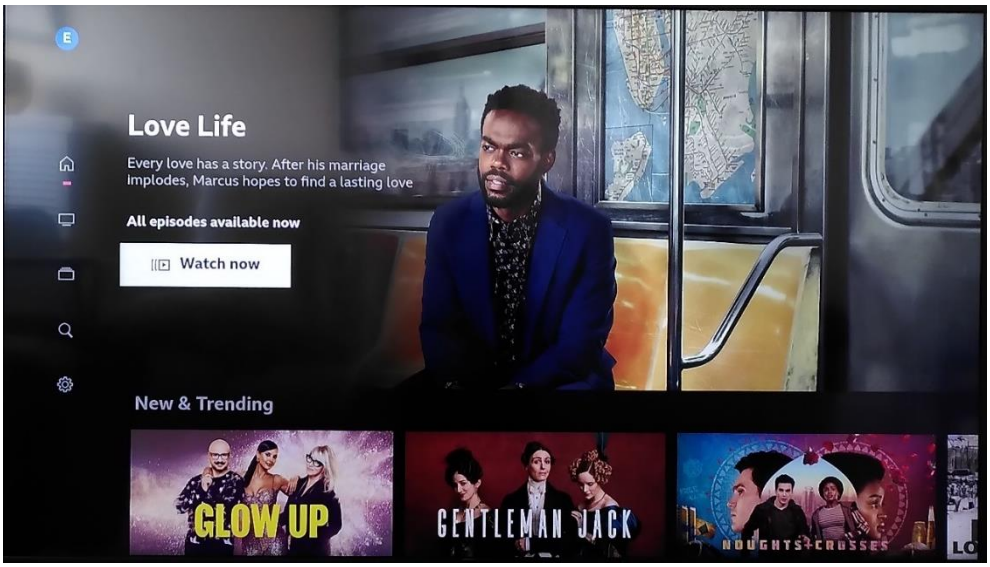
Fig. 9. Example of BBC iPlayer homepage[123]

Source: Author

[122] From left to right: LG's, Google TV's and Fire TV's remote controls. Dedicated buttons and voice assistance control are circled in red. LG has dedicated buttons for Netflix and Amazon Video Prime, Amazon Fire TV has dedicated buttons for Amazon Video Prime, Netflix, Disney+ and Amazon Music, Google TV has dedicated buttons for YouTube and Netflix, and an integrated voice assistance command.

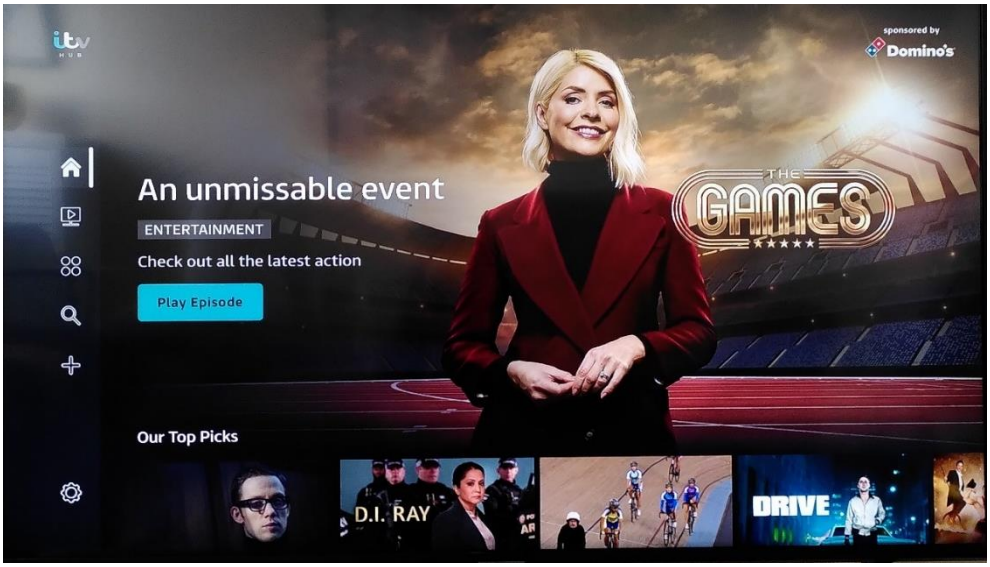
[123] Personal account's homepage before the 2022 update of the UI

Fig. 10. Example of BBC iPlayer homepage with hero banner[124]



Source: Author

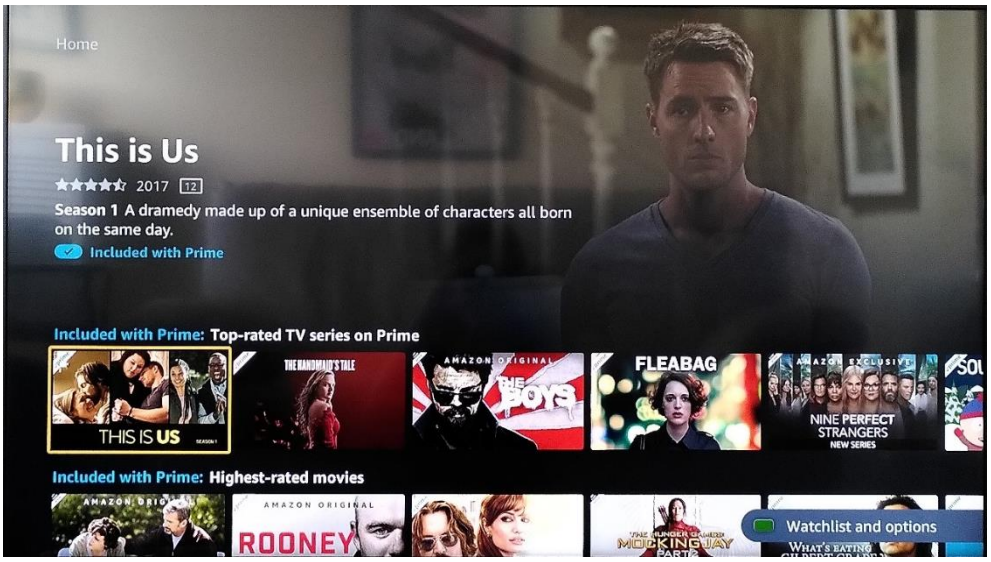
Fig. 11. Example of ITV Hub's Homepage with hero banner[125]



Source: Author

[124] Personal account's homepage after the 2022 update of the UI.
[125] Personal account's homepage before the 2022 rebranding of ITV Hub into ITVX.

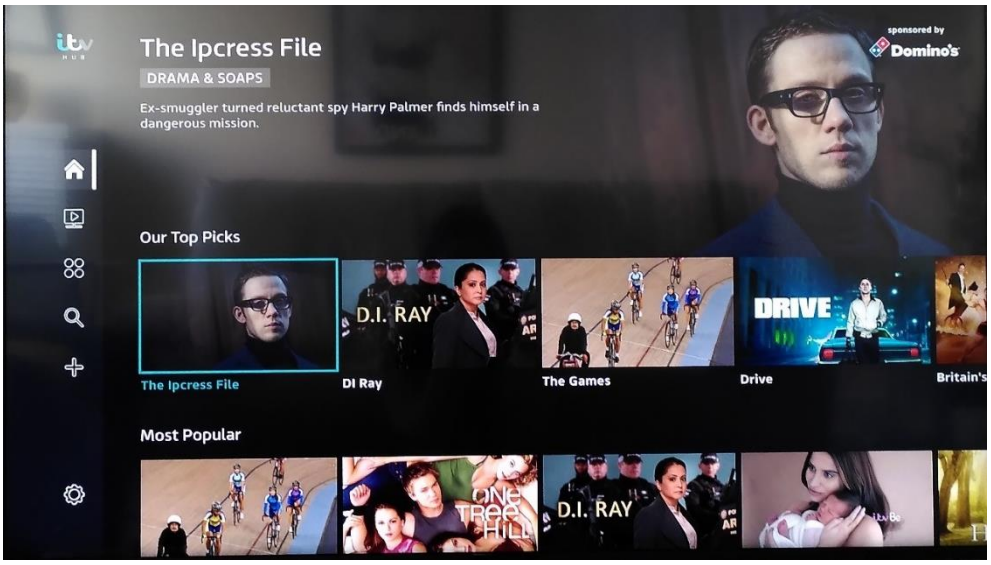
Fig. 12. Example of Amazon Video Prime's homepage with hero banner



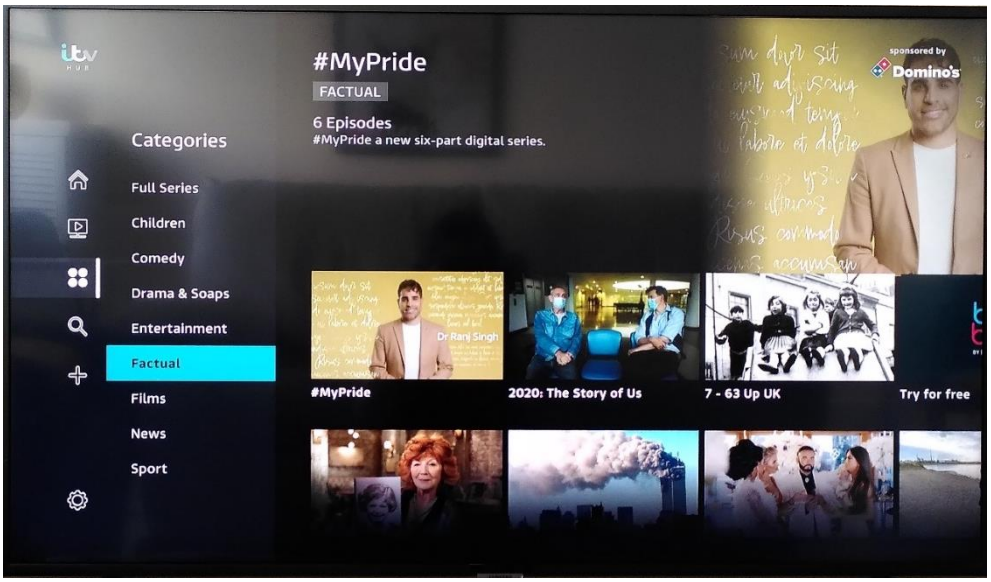
Source: Author

AVM Services' Catalogue Collection

Fig. 13-14. Examples of thematic collections of ITV Hub[126]

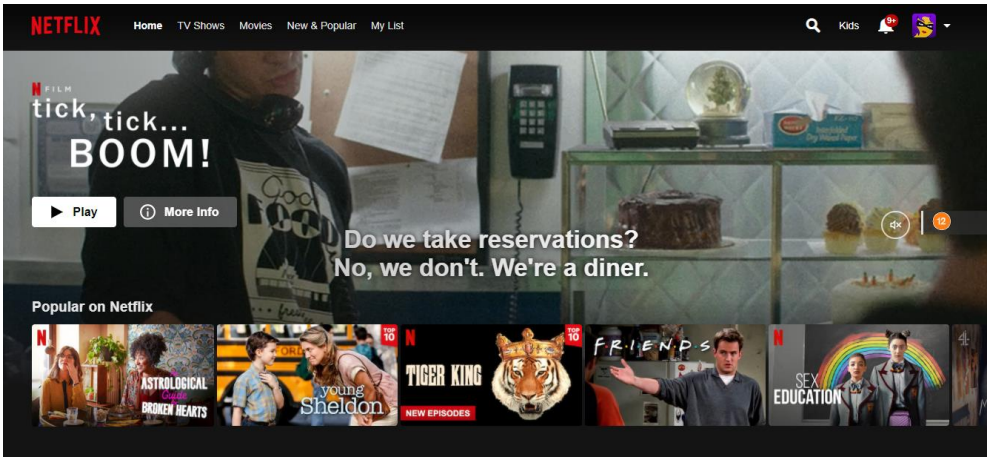


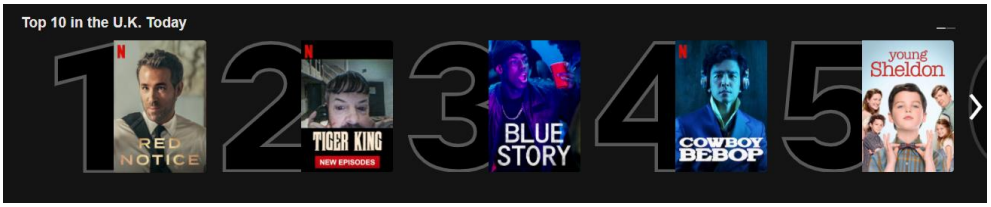
[126] Personal account's homepage before the 2022 rebranding of ITV Hub into ITVX. Fig. 13 presents examples of catalogues' collections based on popularity, while Fig. 14 shows examples of thematic collections curated for factual programmes.



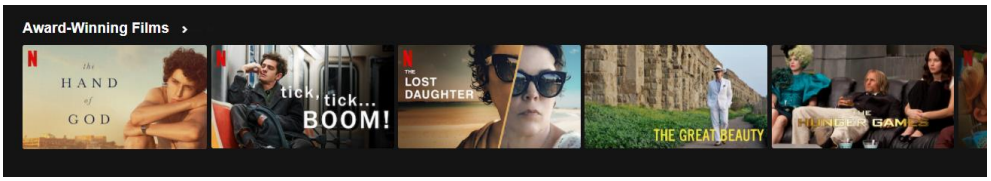
Source: Author

Fig. 15-18. Examples of thematic collections in Netflix's catalogue[127]



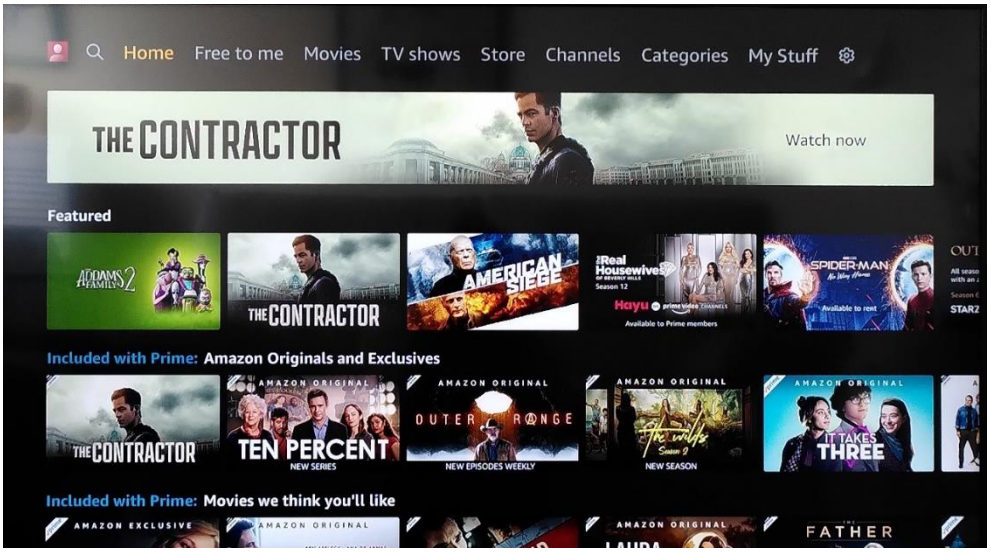


[127] In order of appearance, the images shows Netflix's homepage and hero banner with the catalogue's row showing 'Popular on Netflix', which prioritised based on the popularity criterion (Fig. 15), 'Top 10 in the UK Today', which prioritised also based on the popularity criterion but with geolocated recommendations (Fig. 16), 'Award-winning TV shows' (Fig. 17) and 'Award-winning films' (Fig 18), which prioritise based on the quality criterion.



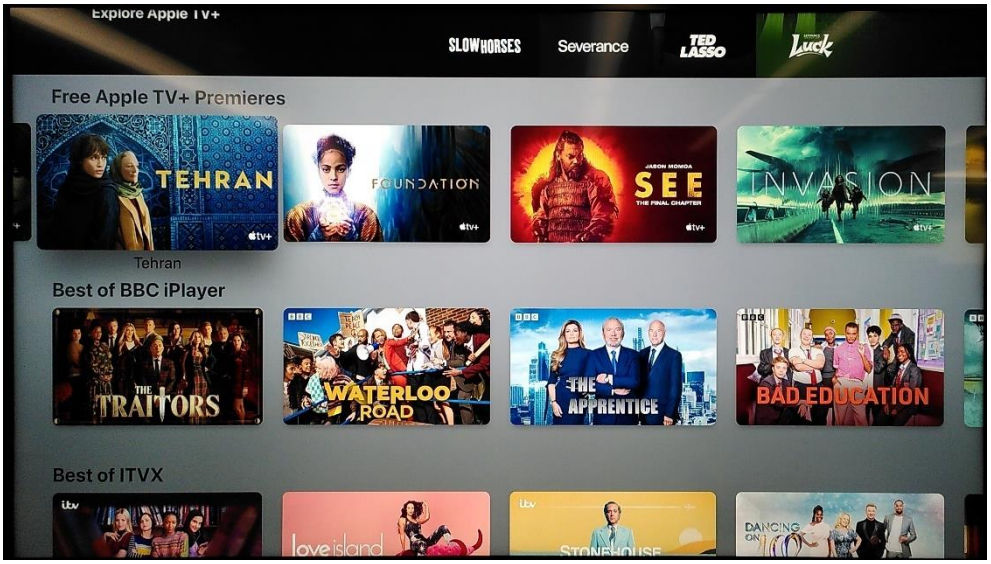
Source:Author

Fig. 19. Examples of thematic collections in Amazon Video Prime's homepage[128]



Source: Author

Fig. 20. Example of thematic collections of Apple TV[129]



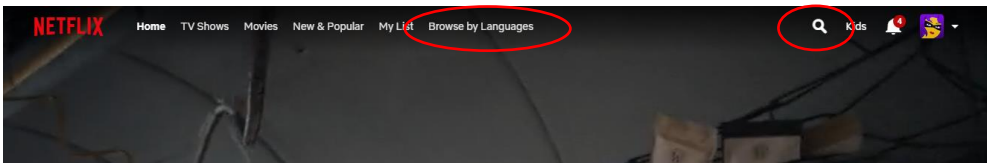
Source: Author

[128] The image shows example of catalogues collections driven by self-prioritisation of Amazon's original and exclusive content, and profiling techniques based on the 'relevance' criterion ('movies we think you'll like').

[129] The image shows examples of catalogues collections self-promoting Apple TV+ exclusive content and prioritising dedicated collection of UK PSM's content from BBC and ITV (after the rebranding into ITVX)

AVM Services' Search Functions

Fig. 21. Examples of search and browsing function on Netflix



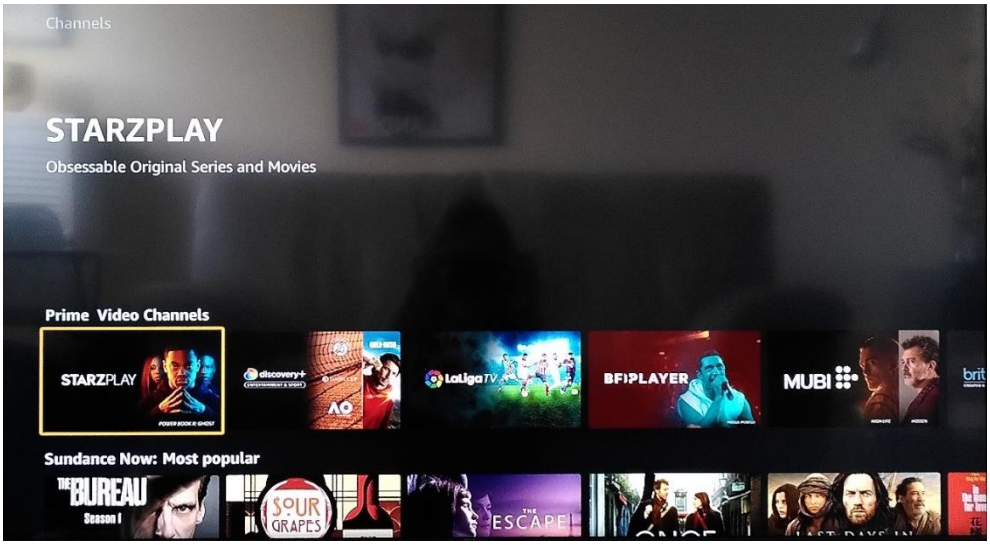
Source: Author

AVM Services' Channel Listing

Fig. 22. Example of live channels listing in ITV Hub[130]

Source: Author

Fig. 23. Example of Amazon's Channel's page.



[130] Personal account's homepage before the 2022 rebranding of ITV Hub into ITVX.