The London School of Economics and Political Science

Ambisinisterity, Success Traps and the Base of the Pyramid

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Abstract

The failure to simultaneously explore and exploit (i.e. achieve ambidexterity) continues to present an ongoing challenge for Multinational Corporations (MNCs). Here, exploration involves "experimentation with new alternatives" and exploitation, "refinement and extension of existing competencies, technologies and paradigms". This problem is particularly acute for MNCs exploring disenfranchised/poverty prone segments (such as the Base of the Pyramid), whilst exploiting existing strongholds in wealthier segments of emerging market contexts. Yet there continues to be a dearth of academic scholarship on this phenomenon.

This thesis aims to address this gap. It comprises two sections - The first section presents a systematic review of ambidexterity failure literature (referred to as ambisinisterity), which is then paired with insights from institutional theory to examine factors that account for MNC failure, specifically within low munificence emerging market contexts. The second section investigates one theoretical perspective within the ambisinisterity tradition, viz. a success trap. Fundamentally, a success trap refers to the tendency of an organisation to overspecialise in exploitation at the expense of exploration. This thesis examines this theory from the countervailing perspective of exploration under-adaptation and draws on a longitudinal inductive qualitative single case study of XXX India's Healthcare Division to develop theoretical insights.

My findings illustrate that exploration under-adaptation in emerging markets results from the dynamic interplay of accelerated learning and divergence mechanisms. Should these processes not be constrained and monitored with like rigour, MNC failure to explore in resource-constrained environments will continue to confound Top Management Teams.

Acknowledgments

"If the poor [residing at the Base of the Pyramid] are to be given priority, then there has to be enough room for an ethical approach to economics on the part of those active in the international market... and an ethical approach to participation capable of harnessing the contributions of civil society at local and international levels" (Pope Benedict XVI, 2009).

This PhD was the result of tremendous sacrifice and a desire to understand why one of the most prolific contributions to contemporary management theory, from my perspective (the Base of the Pyramid postulate) continues to result in failure. From inception, this was an uphill battle as there have been few scholarly works in this area from a multinational (MNC) perspective. In this regard, I am thankful to Professor Harry Barkema, my supervisor, for his beautiful mind and for taking this leap of faith with me in the hope that this line of enquiry would result in something useful to say. It was a privilege to learn from you and I cannot think of a better, more inspiring completer-finisher! I am also thankful to my second supervisor, Professor Saul Estrin and Dr. Susan Hill, who started this journey with me and to the LSE ASIA Research Centre who funded my first exploratory trip to India.

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For my loving parents Henry Millington & June Millington and my angel / grandmother Geneva Adams for always seeing the surgeon in me!

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CHAPTER 1: Introduction

1.1. Background

The growth in scale and influence of large multinationals (MNCs) has been accompanied by a commensurate rise in FDI¹ in emerging markets, with the lion's share concentrated on Asia, Latin America and then Africa (See Figure 1). Yet despite its centrality to MNC strategy, a growing body of literature suggests that most MNCs find it challenging to explore and exploit in emerging markets. Prior studies such as Tushman & O'Reilly (1996), Benner & Tushman (2003) and He & Wong (2004), have explicitly embraced the idea that exploration involves the development of new products and services for emerging markets where experimentation, speed and flexibility are critical. On the other hand, exploitation involves meeting the needs of existing customers in mature markets, where cost efficiency and incremental innovation are critical. Extant literature also concedes that achieving both simultaneously (known as ambidexterity) proves challenging (Levinthal & March, 1993; Gibson & Birkinshaw, 2004; Gupta et al., 2006) due to a host of trade-offs that are difficult to reconcile, or alternatively, because exploration and exploitation exposes the firm to a host of paradoxes that frustrate the achievement of ambidexterity (Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2008). Regardless of the reason, the failure to achieve ambidexterity has been associated with negative survival consequences, as too little exploration beckons an inability to adapt to changing environments, and too little exploitation beckons an inability to capitalise on existing assets and capabilities (Siggelkow & Levinthal, 2003; Simsek, 2009). These negative survival consequences appear most severe for MNCs attempting to explore economically deprived segments of emerging markets (the BOP), despite significant experience and success in exploiting top tier segments (the TOP) within the same

¹ FDI – Foreign Direct Investment: An investment involving a long-term relationship and reflecting a lasting control of a resident entity in one economy ("parent enterprise") into an enterprise resident in another economy ("foreign enterprise").

country (Anderson & Markides, 2007; Markides et al., 2004; Prahalad & Hammond, 2002; Prahalad & Hart, 2002; Prahalad, 2005; London & Hart, 2004). As examples, HP (e-Inclusion initiative), Proctor and Gamble (Pur drinking water sachets) and GE (launch of a low-cost ultrasound), have all found success to be illusive, and at times even socially detrimental (Simanis et al., 2008) to indigenous populations. Yet academic scholarship continues to remain silent on the issue of ambidexterity failure in emerging market contexts, causing the drivers of the aforementioned phenomenon to be poorly understood.

Figure 1 – FDI in emerging markets

	1970-79	1980-89	1990-99	2000-2009	2010	2011
World	23969	92900	402598	1159556	1309001	1524422
Developing economies	5921	20599	118531	362561	616661	684399
Developing economies share (%)	24.7%	22.2%	29.4%	31.3%	47.1%	44.9%
Developing economies : Africa	1124	2202	6632	30906	43122	42652
Share in FDI to Developing Countries (%)	19.0%	10.7%	5.6%	8.5%	7.0%	6.2%
Developing economies: America	2818	6576	42015	108847	187401	216988
Share in FDI to Developing Countries (%)	47.6%	31.9%	35.4%	30.0%	30.4%	31.7%
Developing economies: Asia	1902	11646	69545	221987	384063	423157
Share in FDI to Developing Countries (%)	32.1%	56.5%	58.7%	61.2%	62.3%	61.8%

FDI to Whom: Inflows (1)

Source: UNCTAD.

Measure: US Dollars at current prices and current exchange rates in millions

This thesis therefore focuses on the much neglected research domain of ambidexterity failure or ambisinisterity. A key reason for this paucity of knowledge is that much of the literature is preoccupied with a success orientation, due to a bias in the sampling frame that focuses on successful ventures, or a research orientation that focuses on solutions that alleviate, rather than factors that exacerbate the tensions in the pursuit of ambidexterity. Raisch et al. (2009) state that much of the literature has been dedicated to the use of structural configurations (spatial separation² and parallel structures³) that essentially separate exploration from exploitation into loosely coupled organisational architectures (O'Reilly & Tushman, 2004; Tushman & Anderson, 1986; Ambos et al, 2008) as a means of achieving ambidexterity⁴. By contrast, a smaller subset of the literature explores non-structural solutions. The first, contextual ambidexterity, assumes that "a 'supportive organisation context' (characterised by stretch, discipline, support and trust) encourages and facilitates the behavioural capacity [of employees] to simultaneously demonstrate alignment and adaptability" (Gibson & Birkinshaw, 2004:209). Scholars who share this view (see Adler et al., 1999) assert that ambidexterity can be achieved at the individual and team level and under certain conditions exploration and exploitation can interact synergistically rather than competitively, a radical departure from the structural perspective. In reality however, Ambos et al. (2008:1429) in their study of ambidexterity in an academic setting states that: "While not impossible, Adler et al. (1999) and Gibson & Birkinshaw (2004) both acknowledge that [contextual ambidexterity] may be very difficult to achieve on a consistent basis."

The second non-structural solution, coined strategic ambidexterity (Aulakh & Sarkar, 2005 in Prange & Verdier, 2011:131) addresses the organisation's "ability to combine exploration and exploitation strategies across product, market, and resource domains." Han (2005) and Han & Celly (2008) define strategic ambidexterity as the ability to execute paradoxical strategies of pro-profit and

² Spatial separation/structural separation/organisational ambidexterity refers to establishment of standalone autonomous units for exploration and exploitation (O'Reilly & Tushman, 2004; Raisch, 2008).

³ Parallel structures refers to the establishment of a matrix organisation by the introduction of task forces, communities of practice or working groups, as a means of achieving ambidexterity (Raisch, 2008).

⁴ A corollary is that the firm must also effect integration mechanisms at the team (e.g. contingency rewards and social integration), organisational (e.g. cross-functional interfaces) and leadership (behavioural integration) levels (O'Reilly & Tushman, 2004/2008), in order to capitalise on the dispersed contradictory efforts across differentiated exploratory and exploitative units in order to be successful.

pro-growth, whilst Markides & Charitou (2004) and Markides & Oyon (2010) operationalise the concept by proposing the use of dual business models as a means of pursuing conflicting strategies.

In addition to the abovementioned ambidexterity typologies, drivers of ambidexterity success take expression in literature on the environmental factors and other moderators that affect the relationship between the antecedents, elements of ambidexterity, and firm performance. Jansen et al. (2008) show that senior team attributes of shared vision and contingency rewards in a large Dutch financial institution help to achieve organisational ambidexterity. Gulati & Puranam (2009), in the case study of CISCO, show that informal organisational operation can complement the formal structure, causing 'compensatory fit' that can aid ambidexterity. Furthermore, Revilla & Rodriguez's (2011) study of seventy-eight (78) new product developments in Spain, illustrated that ambidexterity is associated with having a strong team vision, and higher levels of strategic fit.

In sum, it is proposed that *such emphasis on* improving performance across the literature sheds little light on failure, or performance deterioration, associated with the simultaneous pursuit of exploration and exploitation, because **conditions that promote ambidexterity are not necessarily the direct reverse of the conditions that inhibit it**. This makes research on failure particularly interesting and necessary, especially in environments where more organisations fail to meet aspirations than succeed, or where, despite employing a range of success prescriptions, failure still occurred.

Furthermore, concerns over sampling biases aside, there are unexplored domains as the current stock of ambidexterity knowledge is adduced in the developed world contexts where institutions are assumed to work. Thus there are likely to be bounds on the applicability of existing theory when considering the most deviant conditions in emerging markets like the BOP, where there are high levels of institutional dysfunction characterised by voids⁵, fragmentation, conflicts and other complexities (Pache & Santos, 2010; Greenwood et al., 2011). At their best therefore, the present theories are likely to under-specify the dynamics in emerging markets, and at their worst, a whole new set of dynamics may emerge that invalidate current propositions.

In the light of the aforementioned gaps, this thesis examines the under researched domain of ambisinisterity, which grows increasingly central to the contemporary operations of the modern day MNCs. The remainder of this chapter provides an outline of my thesis: an overview of the structure, research questions, principle arguments, literatures, research methods and theoretical contribution.

1.2. Research Overview

The prior section acknowledges that open questions continue to abound with respect to the specific mechanisms associated with failure of firms to achieve ambidexterity⁶ in emerging market settings. Conceptually, to the best of my knowledge, this area of research has not been treated as a coherent whole, with insufficient scrutiny afforded to its precepts, antecedents and theoretical perspectives. Even amidst several systematic reviews of the longstanding, but frequently non-cumulative/fragmented ambidexterity research (see Lavie et al., 2010; Raisch et al., 2009; Raisch & Birkinshaw, 2008; Gibson & Birkinshaw, 2004), little attention has been specifically afforded to failure.

⁵ Whilst I acknowledge the theoretical concept of institutional voids in emerging markets, it warrants mentioning that this concept has been criticised as being 'western-biased'; i.e., it assumes that in Asia, because there are no (western-type) institutions that characterises a void. With the same logic, theory emerging from China would probably argue that 'guanxi' (relational networks) are underdeveloped in the West, and that this 'void' may explain all kinds of 'dysfunctional' results.

⁶ By this statement I refer to the mechanisms specific to ambidexterity failure, as distinct from quantitative research, that identifies factors influencing success and failure and attribute failure to, for example, lack of vision of the Top Management Team, because it was not present in the data examined.

<u>The first section of this thesis (Chapter 1)</u> aims to formalise and acknowledge the importance of the concept of ambidexterity failure by undertaking a review of the corpus of published scholarly articles, in order to answer the research question: What mechanisms influence failure to explore and exploit? How can this concept be extended to low munificence emerging market contexts?

Within this literature stream, the dominant failure/ambisinisterity theories accord with one of two perspectives – the traps and the embeddedness/inertia nexus. The traps associate ambisinisterity with a myopia of learning (Levinthal & March, 1993). This theory emphasises that specialising in either exploration/exploitation is self-reinforcing and constrains the organisation's ability to adapt to environmental changes (competency trap) with adverse survival consequences. Whilst it is true that the scholarly works underpinning this theoretical stream provide a certain level of consistency in terms of analytic foci, empirical research on the traps (although widely cited) remain relatively rare (Walrave et al., 2011) and limited to developed world contexts, resulting in little scrutiny of its established precepts within emerging market contexts. These gaps duly acknowledge the potential of further empirical research to facilitate theoretical advancement.

The second dominant theoretical tradition is referred to as the embeddedness/inertia nexus. This attributes ambidexterity failure to an increasing entrenchment of mindsets, capabilities and routines over time (Leonard-Barton, 1992; Nelson & Winter, 1982; Tripsas & Gavetti, 2000). These obstacles constrain management's attention/beliefs and channels search activities, or directs resource allocation, away from exploration towards existing capabilities. This precipitates inertia, which is defined as the inability to enact internal change in the face of significant external change (Miller & Friesen, 1980; Tushman & Romanelli, 1985). In the end, the incumbent firm fails to explore and misses out on opportunities offered by disruptive technologies, impelling ambisinisterity.

Beyond these two dominant theories, the first chapter also highlights a limited number of moderators/antecedents/determinants of failure. I append this with institutional theory, extending analysis beyond market and intra-firm forces (typically associated with ambidexterity literature), drawing attention to the impact of institutional factors. The purpose of this was three-fold. Firstly, joint consideration of both theoretical traditions, is not only novel, but allows for a more comprehensive analysis, illustrating how ambisinisterity can be applied to emerging market contexts, which is often characterised by tenuous institutional arrangements. Secondly, I address a key criticism of institutional theory that organisations are treated as unitary and tightly integrated entities making univocal decisions (Kim, Shin, Oh & Jeong, 2007; Selznick, 1996), passively conforming to institutional pressures. Instead, I provide support that a firm's proclivity towards ambidexterity failure is rarely a direct expression of its institutional environment. Although there is some degree of determinism, institutional demands do not dictate firm action, but are subject to reflexive interpretation, and as such MNCs and their actors have a role in filtering and resolving institutional pressures (Greenwood & Hinings, 1996). Thirdly, and perhaps most importantly, whilst it is interesting to examine and assimilate the field's current state of knowledge, to truly establish ambisinisterity as a useful distinctive domain, this chapter seeks to illustrate that considerable scope exists for exploring new research avenues concerning this challenging and strategically important phenomenon. In so doing, formalising this line of research can help to provide fresh insight into areas where there has been a dearth of academic scholarship. This includes helping to respond to calls for "far greater efforts to understand the interconnection between poverty and business" in emerging market contexts (Bruton, 2010:9).

Having established ambisinisterity as an important and valuable theoretical domain, the second section of this thesis (Chapters 3 to 6) aims to empirically examine one of its dominant theories, the success trap. To reiterate, a success trap results when the short-term positive feedback from exploitation "drives out exploration due to self reinforcing dynamics of learning" (Levinthal & March, 1993:106). Notably, Levinthal & March's (1993) conception of the success trap focuses on the over-specialisation of exploitation but does not consider the reverse, which is the under-adaptation of exploration, thereby treating the success trap in a largely undifferentiated manner (Sato, 2012). Furthermore, Sato (2012) suggests that the processes that suppress exploration are distinct from the processes that over emphasise exploitation. Accordingly, the mechanisms would naturally differ between an over-specialised exploitation view and an under-adapted exploration view of the success trap.

The difference here is not merely taxonomical, as the traditional success trap does not directly address the mechanisms associated with the development, implementation and performance of exploration, but rather infers that it plays a role in perpetuating a company's continued focus on exploitation. Practitioner accounts (Semanis & Milstein, 2012; Semanis, 2012) of MNC exploration of disenfranchised segments (such as the BOP) in emerging market contexts beg to differ. Semanis (2012) in his article 'Reality check at the Bottom of the Pyramid' cites many examples of MNCs which traditionally engaged in exploitation of the top tier segments of emerging markets that failed to explore at the BOP.⁷ The MNC's seeming preoccupation with the single trajectory of exploitation could not be solely attributed to over-adaptation in its top tier segment. Very importantly, exploration failed to mature due to challenges in understanding the needs of the BOP market, or innovating solutions to overcome debilitating costs of village scale high-touch product distribution models. These examples aptly describe the centrality of exploration mechanisms having a directive influence on how exploration-oriented activities are paired with the existing exploitation-oriented activities within the firm, and by extension how

⁷ As an example, Procter & Gamble (P&G) could not generate a competitive return on its Pur waterpurification powder after launching the product on a large scale in 2001 at the Base of the Pyramid. P&G gave up on Pur as a business in 2005 and announced that the sachets would be sold only to humanitarian organisations.

the success trap evolves. These very specific conditions of MNC exploration at the BOP in emerging markets therefore appear to highlight the conceptual limitations of the success trap, prompting the following research questions, which guide the empirical part of this study: **How and why does exploration under-adaptation evolve in resource-constrained emerging market contexts from a learning and risk perspective? What are the mechanisms by which it occurs?**

1.2.1. An Outline of the Empirical Chapters

In order to investigate the research question above, this section provides a brief overview of each of the chapters that follow, which form part of the empirical study, as well as the concluding chapter. A visual representation of the structure of this thesis is provided in Figure 2.

Chapter 3 examines more closely the literature of the success traps theory as a first step to migrating from the more holistic concept of ambisinisterity developed in chapter 2, to a scope that can be fruitfully examined within the confines of a thesis. Consistent with the theoretical direction advocated by Levinthal & March (1993) and Levitt & March (1988), this chapter outlines briefly the two complementary dimensions of success traps: the learning and risk-taking perspectives, which are used to sensitise the empirical research. However, as stated above, I address a success trap from the vantage point of exploration under-adaptation because, arguably, the true black box in success trap theory depends ultimately on answering questions surrounding what is happening with exploration to allow exploitation to prosper. Another notable departure from typical success trap theory is the definition of risk-taking. I coin and introduce the term intra-operative to define the process of risk-taking in situations where there is a high threat of morbidity/hazards to the exploration initiative in the context of an over-specialised history of exploitation (success trap). Arguably, introducing this concept enables a far more comprehensive picture to be built up as the ultimate aim of intra-operative risk-taking is to allow exploration room to grow and become consequential, and as such can be considered a balancing force to the learning view, which, according to Levinthal & March (1993), will always pre-select exploitation at the expense of exploration. Thus, a learning combined with an intra-operative risk-taking perspective, allows for the recognition of the web of conflicting interests, which surround exploration and exploitation. Combined, they provide coherent constructs for the analysis of the process of exploration under-adaptation.

Chapter 4 provides an outline of the methodology. Given the relatively underexplored nature of the process of exploration under-adaptation in resourceconstrained emerging market contexts, a longitudinal, inductive qualitative approach was deemed an effective methodology for theory building (Eisenhardt, 1989; Yin, 1994). I utilised a multi-phase field research design to investigate the single case study of XXX Healthcare in India. First, in-depth exploratory interviews and participant observations were conducted prior to the commencement of the formal research, in order to understand current practices and eschew egregious misconceptions about MNC operations in resourceconstrained environments. Then longitudinal data was collected via semi structured interviews, participant observation and archival data in relation to an exploratory initiative, from its inception to its subsequent retraction. Four rounds of data collected over an eighteen-month period were analysed, primarily by thematic analysis (Flick, 2009). An overview of the results is briefly outlined in chapters 5 and 6 that follow.

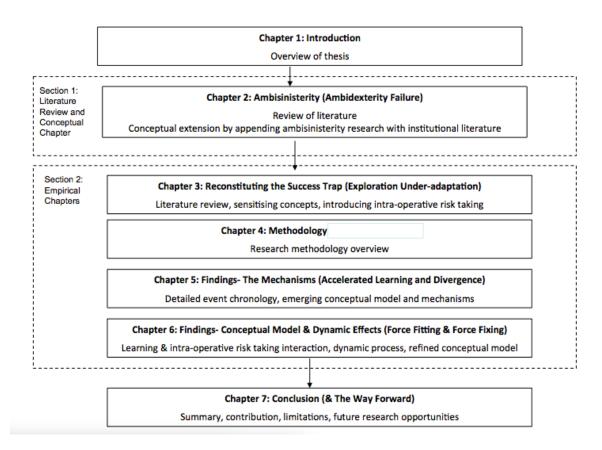
<u>Chapter 5 presents the findings</u> – It is the first of two findings chapters, and starts with an outline of the chronology of key events leading up to exploration under-adaptation and then suggests an emerging (but not finalised) conceptual model. The vast majority of the chapter however, is devoted to the results of the thematic analysis. This chapter proposes that the primary reasons for exploration under-adaptation is due to the maladaptive consequences of accelerated learning (which aim to facilitate faster entry and knowledge accumulation

related to exploration) and divergence mechanisms (which aim to evade or defer scrutiny to allow the exploration initiative space to become consequential). Paradoxically, it appeared that efforts aiming to perpetuate exploration led to its eventual demise.

Chapter 6, the second of the findings chapters, presents the refined conceptual model and insights related to a dynamic assessment of the exploration underadaptation process. Drawing on the mechanisms from the previous chapter, a few key insights emerged. Firstly, accelerated learning and divergence interacted (triggered by threats). This interaction took two forms, either force fitting or force fixing. The former forces a fit, and the latter prioritises a fix for exploration when there are incompatibilities between the exploitation and exploration. By examining the patterns amongst these interactions, as well as the dynamic changes, this chapter proposed new insights about exploration under-adaptation and also presents a revised conceptual model, thereby answering the question, How and why does exploration under-adaptation evolve?

<u>Chapter 7 presents my theoretical contributions, conclusions, limitations and</u> <u>recommendations for future research.</u> In particular, it lays out my contribution to ambisinisterity, success traps and the BOP literature streams, which are the foci of my research. It also suggests a host of practical applications and calls for more qualitative, as well as multi-case studies, in order to advance the theoretical propositions herein.

Figure 2 – Overview of Thesis Structure



1.3. The BOP Postulate

Frequent mention is made in this thesis about the BOP. It therefore warrants brief explanation with respect to its significance to this research. The Base of the Pyramid refers to approximately 4 billion people worldwide, earning an annual purchasing power parity of US\$1500 or less (Prahalad & Hart, 2002). In 2004, Prahalad propelled the BOP to the forefront of business discourse: *"If we stop thinking about the poor as victims, or as a burden, and start recognising them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up"* (Prahalad, 2005:1) where both companies and society can benefit. This proposition saw MNCs move from absent or underdeveloped actors in this arena (Hammond et al., 2007) to pivotal players in

bringing market mechanisms to bear on poverty alleviation. However, in reality, the postulate of the BOP has been falsified thus far.

The BOP postulate is based on the logic that the poor live in very high-cost subeconomies (Banerjee & Duflo, 2007) that are unorganized and full of intermediaries who exploit inefficiencies (Banerjee & Duflo, 2007). MNCs can create value by establishing real markets amongst the poor, with adequate information and competition. MNCs can also generate employment opportunities, incorporate previously marginalised members of society (Hart & Sharma, 2004), build local capacity, increase standards of employment and provide a wider range of choices for the impoverished (Karnani, 2007). Of particular importance, is MNC's munificence, which can be used to foster increased access to basic necessities (e.g. sanitation, hygiene) at a scale that is unrivalled by most NGOs or Social entrepreneurs (Prahalad & Hart, 2002). In the long run, the BOP postulate assumes that the cumulative effective of multiple MNC pro-poor initiatives could potentially minimise the poverty penalty⁸ (Hammond et al., 2007), making markets work for, rather than against, the poor.

At the same time, Hammond et al. (2007) proposed that the BOP offers MNCs access to an estimated US\$5 trillion per year of unmet/untapped market needs. Furthermore, the combined lack of legacy infrastructure and 'institutional voids' make the BOP catalytic hotbeds for innovation, technology leapfrogging (Mukasa, 1990) and reverse innovation⁹ (Hart & Christensen, 2002; Hart & London, 2005), affording MNCs additional opportunities for sustainable benefits.

⁸ Poverty penalty - "The poor pay higher prices for basic goods and services than do wealthier consumers either in cash, or in the effort they must expend to obtain them—and they often receive lower quality as well" (Hammond et al., 2007:5).

⁹ Technology leapfrogging – Skipping a generation of technology; e.g., parts of the BOP have skipped the fixed-line technology of the twentieth century and moved straight to the mobile technology of the twenty-first. Reverse innovation – Trickle up innovation that migrates from the BOP to the TOP, or alternatively developing ideas in an emerging market and adapting them to fit developed markets.

In reality, with the exception of a few cases, MNC performance within this environment has been lacklustre (Hart & London, 2005, London & Rondinelli, 2003). This is because differences in not only customer profiles, but also in local institutions and partnering requirements (see Table 1 below) mean that BOP markets are unfamiliar and intractable business environments for most MNCs, even those with significant international experience (Anderson & Markides, 2007; Markides et al., 2004; Prahalad & Hammond, 2002; Prahalad & Hart, 2002; Prahalad, 2005; London & Hart, 2004). (See Table 1 below for differences between the BOP and the TOP). Furthermore, the proposition of the US\$5 trillion in market potential for MNCs has since been criticised. Beyond questions of the accuracy (the more relevant figure for MNCs is US\$1.3 trillion, assuming it is not corrected for purchasing power parity), it represents the total spending power, which would not be available to MNCs without the destruction of employment and jobs within the informal economy which sustains people living in poverty. And finally, there is increasing evidence of negative externalities associated with some MNCs' attempts to explore the BOP (e.g., low safety records at Rana Plaza where 1,000 plus people died). Thus, the BOP's dualistic postulate that benefits MNCs and the poor, has so far failed to materialise.

However, with top tier markets becoming more saturated, the greatest growth potential in many emerging markets is coming from the lower income tiers, including the BOP. Take for example the Indian Healthcare Industry, in which the case of XXX Healthcare is situated. It was valued at Rs.2.8 lakh crores in FY'11, and expected to double up to Rs.5 lakh crores in another five years at the present growth rate of 13.1% per annum (CARE India Annual Report 2013), with the majority of the growth in healthcare spending shifting significantly to smaller towns and low income categories. This appears to make the exploration of the BOP an economic compulsion for many MNCs, despite its marred history and select success stories. A review of several of the top 500 MNCs' websites highlights the pervasiveness of the concept, whether its XXX India's Tier B/C strategy, GE's Healthymagination or HP's e-inclusion, the BOP or quasi-BOP

strategy continues to thrive. Yet despite the growth in interest, from an academic perspective, little is known about MNC operations at the BOP, as practitioner literature continues to dominate this field with prescriptive untested, 'positive' assumptions about the BOP, that – if they remain untested – may do more damage than good to the poor. As Barkema et al. (2015:464) state "far too limited a repertoire of solutions and empirical evidence [exists] to aid practitioners and policymakers in these economically disadvantaged regions of the East (George, McGahan & Prabhu, 2012)". A central ambition of this thesis therefore is to extend beyond the theoretical in order to bear additional practical benefits, helping to uncover 'what is really happening' as a means of providing more robust insight into MNC failure in low munificence emerging market environments.

With this as a backdrop, I now examine the state of the literature on ambidexterity failure as a precursor to focusing on one of its theories, which in turn will inform the empirical chapters within this thesis.

Dimension	TOP paradigm	BOP paradigm
Focus	Creation of new solutions	Creation of new customers
	Firm is the centre of analysis Profit oriented	The ecosystem is the centre of analysis (Fiorina, 2000) Triple bottom line oriented
Market structure	Competitive mature markets Institutions supporting market exchange, such as property rights or specialist intermediaries are present	Less of a market, more of a constellation of geographically dispersed groups (Khanna & Palepu, 1997) Institutions supporting market exchange are weak or absent, huge information asymmetries
Revenue model	Large scale production, economies of scale, global supply chains, marketing	High-turnover, low-value transactions that topple existing price-performance ratios

Table 1 - The Top of the Pyramid versus the Bottom of the Pyramid

	driven differentiation that increases the price performance ratio of products and services	(Anderson & Markides, 2007)
Resources/ capabilities	Available or can easily be bought or transferred	Lack of availability of strategic resources and capabilities (Denrell et al 2003)
		Where they exist, it is difficult to understand how to configure/mix capabilities for value- creation (Sirmon et al., 2007)

SECTION I: AMBISINISTERITY

LITERATURE REVIEW AND CONCEPTUAL CHAPTER

CHAPTER 2: Ambisinisterity (Ambidexterity Failure)

2.1. Chapter Overview

The aim of this chapter is to formalise and acknowledge the importance of the concept of ambidexterity failure (ambisinisterity) by undertaking a review of the corpus of published scholarly articles. Whilst it is interesting to examine and assimilate the field's current state of knowledge, to truly establish ambisinisterity as a useful distinctive domain, this chapter also seeks to illustrate that considerable scope exists for exploring new research avenues by appending insights from institutional theory. In so doing, formalising this line of research can help to provide fresh insight into areas where there has been a dearth of academic scholarship, such as helping to respond to calls for "far greater efforts to understand the interconnection between poverty and business" in emerging market contexts (Burton, 2010:9). In the end, this provides the broader context and serves as a backdrop to the empirical chapters that follow, which focus on and examine one of its dominant theories, success traps.

2.2. Defining the Problem

Building a theory of ambidexterity failure/ambisinisterity is a daunting task (Mellahi & Wilkinson, 2004), but is increasingly more interesting. Whether it is the prevalence of large-scale failures during the recent global financial crisis, or the recurrent smaller scale failures associated with MNC's inability to penetrate non-traditional segments of emerging markets, such as the Base of the Pyramid, scholarly enquiry appears both urgent and necessary. However, Whetten (1980, in Schmitt et al., 2010:134) emphasises "failure was long considered a social taboo, which led to a 'failure paranoia' with managers, often refusing to admit that their organization was in trouble" resulting in a lack of focus on this domain. It therefore follows that within the vast and ever increasing literature on ambidexterity, only a relatively small subset has focused on either defining failure, or explicating the mechanisms of failure. To be clear, as the

ambidexterity literature matured, quantitative studies hypothesised the presence of positive attributes (e.g., vision of management) that promote ambidexterity success, and therefore find empirical support for the factors that contribute to failure (less success). This is not the type of failure that is the **primary** focus of this paper. The focus of this type of failure implies the **presence** of mechanisms (e.g., escalation of commitment to exploitation) specific to failure.

I therefore start by defining ambidexterity failure, and introduce the term ambisinisterity¹⁰ to describe the phenomenon. I then systematically review key studies on the subject between 1962 and 2014 that have been published or referenced in leading management journals¹¹, as well as select discussion papers yet to be published. In line with Gibson & Birkinshaw's (2004) comprehensive review of ambidexterity literature, these papers were drawn from vast literature streams, including organisational learning, technological innovation, organisational adaptation, strategic management, and organisational design. Furthermore, these papers specifically focused on studies using labels, inter alia: induced and autonomous strategy processes, incremental and discontinuous innovation, search and stability, alignment and adaptability, as they tend to refer to the same underlying construct as *exploitation and exploration*. Then, based on institutional theory, I integrate additional antecedents and moderators of ambidexterity failure. The aim here is to answer the research question: What mechanisms influence failure to explore and exploit? How can this concept be extended to low munificence emerging market contexts?, where the BOP refers to the poorest and most disenfranchised segments in emerging markets earning an annual purchasing power parity of US\$1,500 or less (Prahalad & Hart, 2002).

¹⁰ Oxford dictionary meaning: Awkward or clumsy with both, or either hand.

¹¹ Such as Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, Journal of Management, Journal of Management Studies, Organization Science, and Strategic Management Journal.

2.3. Defining Ambisinisterity

Ambidexterity, defined as being equally expert or adept with both hands, is a loosely adapted metaphor, initially utilised by Duncan (1976) to describe a central dilemma facing organisations in reconciling exploration and exploitation. Increasingly, ambidexterity is defined as the simultaneous achievement of exploration and exploitation (Benner & Tushman, 2003; Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2008). It is therefore logical to purport that ambidexterity failure, or ambisinisterity (its antonym), is the inability to pursue both exploitation and exploration simultaneously. However, an emerging body of research (He & Wong, 2004; Cao et al., 2009) advocates differing conceptions of simultaneity across ambidexterity scholarship. He & Wong's (2004) seminal paper, which surveyed 206 manufacturing firms in Singapore and Malaysia, illustrated that ambidexterity, measured as a high score on both exploration and exploitation, was positively related to sales growth. Similarly, a lack of ambidexterity, due to a relative imbalance between exploration and exploitation, was negatively related to sales growth. Whilst acknowledging limitations in their research methodology¹², this paper postulates that both the relative magnitude (henceforth referred to as balance) and the combined magnitude (henceforth referred to as synergy) of a firm's exploration and exploitation initiatives are important and distinct elements of ambidexterity. Cao et al. (2009) later nested the balanced view within the 'trade-off' tradition, and the synergistic view within the orthogonal tradition.

¹² The limitations: Eight (8) survey items capture only limited aspects of ambidexterity, three years may be insufficient to establish long-term performance, sales growth may be a limited construct in determining performance and ideally outcome measures should seek to identify more dimensions on which to assess superior results.

2.3.1. The Balance versus the Synergistic Perspective

The balance perspective can be grounded in the theories of March (1991) and others following in his wake. They see exploration and exploitation as two ends of a single continuum in opposition to each other, insofar as they compete for resources and orient the organization in the pursuit of different goals. In March's view, exploration requires "experimentation with new alternatives" and hinges on organisational adaptability, and exploitation requires the "refinement and extension of existing competencies, technologies and paradigms" and is dependent on organisational alignment (March, 1991:85). Trade-offs between exploration and exploitation are seen as unavoidable due to conflicting goals (innovation versus efficiency), competition over scarce resources (March, 1991), contradictory knowledge processes (Floyd & Lane, 2000) and the prioritisation of different administrative routines (Lubatkin et al., 2006). Ambidexterity therefore largely involves the management of these trade-offs to find the appropriate balance between the two (Adler et al., 1999; Brown & Duguid, 2001; Katila & Ahuja, 2002; Benner & Tushman, 2003; Burgelman, 1991; Eisenhardt & Martin, 2000; Gupta et al, 2006; Tushman & O'Reilly, 1996).

Whereas the 'balance' argument focuses on the relative distribution of exploration and exploitation, the synergistic view focuses on the absolute magnitude of a firm's combined exploratory and exploitative activities (He and Wong, 2004; Cao et al., 2009). It addresses the sufficiency anomaly in the balance perspective, recognising that safeguarding both exploitative and explorative activities present in the firm's agenda may simply equate to substandard performance in both areas. What also matters to the realisation of ambidexterity is the interactive effect of the two. Hence, the synergistic approach characterises exploration and exploitation as independent activities, orthogonal to each other, that may take place in complementary domains (e.g., technologies and markets), not necessarily competing for the same resources (Gibson & Birkinshaw, 2004). Cao et al. (2009:784) illustrate the positive

interactive effects of exploitation on exploration as a "high degree of exploitative effort can often improve a firm's effectiveness in exploring new knowledge and in developing resources that support new products and markets". Lavie et al. (2010) further illustrate this principle in terms of knowledge application, where the newly acquired knowledge (exploration) becomes exploited in the firm's main operations.

Given that both conceptualisations of ambidexterity bear prominence in the literature, ambisinisterity is defined as the failure of the firm to balance and/or synergistically reconcile the tensions between exploration and exploitation. A corollary is that failure to balance implies the number of successful initiatives, which are harnessed and scaled in one orientation (exploration or exploitation), is continually higher than the prevailing rate in the other orientation. Whilst failure to synergise implies that the firm is unable to develop supportive environmental contexts that foster contextual ambidexterity, effective dual business models that foster strategic ambidexterity, or productive integration mechanisms that capitalises on structural ambidexterity (or a combination of these factors).

At its worst, by introducing and defining the term ambisinisterity, this chapter shines a light on the concept of ambidexterity failure, a widespread, yet poorly explained phenomenon. At its best, the abovementioned definition begins to remove some ambiguity surrounding the concept, whilst recognising that more work remains to be done before extensive scholarly discourse can develop.

2.4. A Review of the Research on Ambisinisterity

Dating back to neoclassical economic theory, there was an indirect reference to ambisinisterity in the form of explanations about firms' failure to pursue exploration and prioritise exploitation, specifically under conditions of discontinuous change. Arrow (1962) claimed that firms with an existing strong market position have low incentives to invest in innovation/exploration initiatives. Later, Cooper & Schendel (1976) observed that established firms facing a new technology often intensified investment in traditional technical approaches, and that those that did make initial investments in new technology rarely maintained adequate resource commitments to exploration. Despite the clear link to exploration and exploitation, these and other scholars presenting similar logic, focused more on why firms chose to be monodextrous¹³ (Güttel & Konlechner, 2009), rather than why firms fail to balance or synergise the two constructs, the topic of this article. It was not until the late 1980s and early 1990s, through the works of Tushman & Anderson (1986), Leonard-Barton (1992) and Levinthal & March (1993) that research on failure to achieve balance between exploration and exploitation was addressed.

Grounded in an organisational learning perspective, early theorists purported that the imbalance in exploration and exploitations occurs due to a series of path dependent traps (failure traps, success traps and competency traps), which result in negative performance consequences for the firm. The failure trap results when a firm persistently overspecialises in exploration initiatives, despite recurrent past failures. Levinthal & March (1993) argue that the firm is made vulnerable by its own persistence, as each successive failure heightens riskseeking behaviour due to insufficient adjustment in aspirations and desperation for future exploratory success. Levinthal & March (1993:105-106) postulate that "Failure [in exploration] leads to search and change, which leads to failure, which leads to more search, and so on". In contrast, the success trap results when a firm overspecialises in exploitation activities/initiatives. As the firm achieves success, the positive feedback mobilises/impels the business entity to further refine and improve current technologies, allowing for a virtuous circle of exploitation. Adopting a trade-off perspective, Levinthal & March (1993) state that over specialising in one mode (exploration or exploitation) crowds out the

¹³ Focus exclusively on either exploratory or exploitative activities.

other. This in turn diminishes the long-term viability of a business entity when conditions that warrant variation emerge. This perspective is associated with a competency trap where the specialist competencies associated with the dominant mode of operation (exploitation) develop into trajectories that limit the firm's possible deviations, impeding learning and renewal.

The elegance and simplicity of the 'traps' associated with imbalances in exploration and exploitation resulted in a wide body of research in the ambidexterity tradition drawing on these few classic works, irrespective of the fact that most of the propositions remain largely untested¹⁴. The analytic concerns underlying the failure trap/investment in exploration at the expense of exploration has been associated with an endless cycle of search, unrewarding change (Volberda & Lewin, 2003) and organisational chaos, if continuity is not taken into account (Huy, 2002; Levinthal & March, 1993). The logic underpinning the success trap/investment in exploitation at the expense of exploration strongly resonates with the capability–rigidity paradox, risk obsolescence and co-evolutionary lock-in concepts. Less focus has been afforded to the traps associated with a lack of synergy between exploration and exploitation (which have been included in **Table 2** below for completeness), perhaps reflective of the fact that the synergistic perspective is often underrepresented in general accounts.

¹⁴ To date there is only one study (Walrave et al., 2011) in a peer-reviewed journal, to the best of my knowledge, using a simulation approach. More details are provided in subsequent chapters.

Table 2 – Proximal theories with similar logics as the traps

Types of ambidexterity failure	Similar logics				
Exploitation imbalance- Success trap due to over-	Leonard-Barton (1992) describes a capability–rigidity paradox in product innovation, where exploiting existing product innovation capabilities may have restrictive rigidity affects that crowd out exploration of new competencies.				
specialisation of exploitation	Tushman & Anderson (1986) illustrate that where the magnitude of exploitation far exceeds that of exploration, there exists a propensity for risk of obsolescence , where firms may enjoy short-term success from exploiting existing products and markets. However, this success may be ephemeral—unsustainable when the firm is faced with significant market and technological change.				
	Christensen & Overdorf (2000) state that existing competencies can rapidly become out-dated (lacking relevance), leading to path dependencies or core rigidities (Leonard-Barton 1992) that impede the firm's learning and renewal.				
	(Burgelman, 2002:326) describe Co-evolutionary lock-in as "a positive feedback process that increasingly ties the previous success of a company's strategy to that of its existing product-market environment, thereby making it difficult to change strategic direction."				
Exploration imbalance- failure trap due to over- specialisation of exploration	Volberda & Lewin (2003) illustrated that whilst a one-sided focus on exploration may enhance a firm's ability to renew its knowledge base, it can also trap organizations in an endless cycle of unrewarding change and search. Stated differently, when a firm overemphasizes exploration at the expense of exploitation, it decreases its ability to appropriate returns from its costly search and experimentation activities.				
	Levinthal & March (1993) illustrate that too many radical changes and initiatives can result in organisational chaos if continuity is ignored.				
	Teece's (1986) example of EMI's experience with the CT scanner illustrates that investment in innovation without a plan to develop the complimentary processes to exploit the benefits of such exploration is futile.				
	Gibson & Birkinshaw (2004) state that future opportunities are sought at				

	the expense of today's operations.
Lack of synergy between exploration and exploitation	Gibson & Birkinshaw (2004) highlight the isolation and lack of coordination between activities, where two separate cultures arise and there is little communication and coordination among them, which limits the impact. Gibson & Birkinshaw (2004) reference the erosion effect, that occurs when top management's ambidexterity fails to reach middle and lower levels of the organization, thus "eroding" ambidexterity implementation efforts down the organisational hierarchy (in Karrer & Fleck, 2013).

Regardless, the traps and its offshoots emphasise reinforcing loops in organisational learning as the cause of ambisinisterity, where positive, or potential for positive feedback spurs an organisation to myopically concentrate on either exploration or exploitation. A corollary is that the deviation from the dominant mode must be constrained by some sort of opportunity cost (so that the imbalance would continue to persist), although the analysis does not directly address the issue, but rather infers it. In this sense, the traps more aptly focus on explaining the persistence of ambisinisterity, rather than the determinants of ambisinisterity, which largely remain a black box.

Beyond the traps, significant insights into ambisinisterity took a major step forward with the single firm/industry case study, which acquiesce with a theory I refer to as the embeddedness/inertia nexus. These case studies marked the beginning of a period in which the work on antecedents of failure would mature, albeit in cycles of surging, then waning interest. Like the 'traps', these papers emphasise negative performance effects for incumbent firms. However, they differ in one important respect: the richness and detail of the qualitative inductive cases prove more robust in delineating key constructs and mechanisms (beyond learning constructs), including those countervailing the impetus towards ambisinisterity. At a macro level, the case studies appear to adhere to a consistent line of reasoning – they identify an incumbent firm/an industry facing radical technological discontinuities, and then attribute incumbent firm failure to one or more forms of embeddedness (e.g., within existing cognitions, capabilities, dominant logic ¹⁵ and/or customer value networks). These constrain management's attention/beliefs, channel search activities and direct resource allocation towards existing capabilities causing organisational inertia or active inertia¹⁶ to set in. This precipitates a form of ambisinisterity, necessitating a crisis. In the end, the incumbent firm fails to synergise or balance its exploration/exploitation agenda and misses out on opportunities offered by disruptive technologies, despite often having the technical competence/the foresight to address these. For example, Tripsas & Gavetti's (2000:1158) seminal paper illustrates Polaroid's failure to explore its early knowledge of digital camera technology - "In short, if on one hand Polaroid's beliefs allowed the company to develop the necessary technological knowledge for competing in digital media, they became a powerful source of inertia when decisions were taken on how to further develop such knowledge in specific products and activities". In a similar vein, Christensen & Bower (1996) illustrated that a firm's embeddedness in certain value and customer networks drove resource allocation processes and created an impetus towards sustaining innovations/exploitation in incumbent firms in the disk drive industry.

Further examination of these cases (See table 3 below) also indicates, with peculiar consistency, that the firms were initially compelled towards simultaneous pursuit of exploration and exploitation in the short-term (during the variation phase). This arose out of a need to manage the contrarian position

¹⁵ The dominant logic among the dominant coalition of organisational members in the firm will determine the firm's inclination towards explorative or exploitative learning modes. This is because the dominant logic acts a selection mechanism filtering out ideas and behaviours that are not congruent with existing beliefs.

¹⁶ Inertia: Little change in response to environmental shifts. Active inertia: frenzied activities that fail to define new and effective business models.

of leveraging its current capability, whilst finding new market solutions in response to the market discontinuities they faced. However, as internal organisational challenges arose in the **selection** and **retention** phases, and solutions became less anchored in its existing experience, knowledge and capabilities, ambisinisterity, or the tendency to retreat to one dominant mode, set in. This raises a provocative point, as to whether an organisation is skewed towards over-specialisation in exploitation and exploration as outlined by the traps (and other path dependent theories like dominant logic), or whether firms tend to pursue a more balanced orientation, until a tipping point prompts a singular focus. If both propositions are empirically sound, it would imply that firms follow dissimilar trajectories of ambisinisterity development, some unfolding in a cumulative manner, while others may display considerable discontinuity. Within the current literature, the relative **conditions** (environmental and organisational) favouring the various patterns remain unknown.

Having outlined the areas of convergence across the cases, there is also significant divergence. More specifically, a firm's proclivity towards ambisinisterity appears to emerge as a result of a heterogeneous mix of theories and mechanisms. Tripsas & Gavetti's (2000:1157) case illustrates that ambisinisterity is strongly influenced by problemistic (Cyert & March, 1963) search, and purports that "search processes [related to exploration] in a new learning environment are deeply interconnected to the way managers model the new problem space and develop strategic prescriptions premised on this view of the world" causing management to favour exploitation (in this case) over exploration. In contrast, Daneel's (2011) paper focused on leadership dynamics and purported that a lack of constructive conflict in the leadership team allowed inaccurate resource cognitions to go unquestioned and unexamined, resulting in the inability of Smith Carona to explore new options, in spite of mounting disconfirming evidence that it will fail if it continues to focus on exploitation. This high level of heterogeneity within the cases makes it difficult to disentangle

causal relationships between the decisions, or actions taken and the performance outcomes obtained, in order to develop a parsimonious theory of ambisinisterity. Thus, despite the richness, depth, and typical benefits associated with the case approach, its value tends to lie in post-hoc explanation, rather than prediction of success of failure. So, as similar empirical evidence continues to abound – such as the Blackberry RIM – the theory of ambisinisterity, which might fully explain it, does not.

Studies / year	Exploration failure	Type of embeddedness/Inertia
1.Trying to become a different type of company: Dynamic capabilities at Smith Corona. Danneels, E. (2011).	Smith Corona failed to successfully explore substitutes for typewriters.	Embeddedness in managerial cognitions about two key market-related assets, brand and customer understandings created inertia in the organisation's exploration capability precipitating exploration failure.
 2. (De-)institutionalizing organisational competence: Olivetti's transition from mechanical to electronic technology. Danneels, E., Verona, G., Provera, B. (2013) 	Olivetti office, Italian office machine firm failed to enter new technology.	Embeddedness within what electronics engineers at the company referred to as "the mechanical establishment" impelled inertia, inhibiting it from transitioning to electronic technology.
3. The dynamics of standing still: Firestone Tire & Rubber and the radial revolution. Sull, Donald N. (1999).	Firestone Tire and Rubber failure to explore new technology in radial tiers.	Embeddedness within managers' existing strategic frames and values, and the company's processes and long- standing relationships with customers and employees resulting in active inertia - accelerated activities that had contributed to its past success which led to a failure to explore.
4. Capabilities, Cognition and Inertia: Evidence from Digital Imaging. Tripsas and Gavetti's (2000).	Polaroids inability to explore new technology (digital cameras).	Embeddedness within the firm's dominant logic (razor blade business model), existing cognitions and capabilities created inertia in the company's ability to develop a new

Table 3 – Embeddedness / Inertia nexus papers

Studies / year	Exploration failure	Type of embeddedness/Inertia
		business model.
5. Technological discontinuities and flexible production networks: The case of Switzerland and the world watch industry. Glasmeier, A. (1991)	The Swiss watch industry's restrained response to the rise of digital watches.	When technology shifted from electronic to digital to quartz, a myriad of organisational voices dis-unified the Swiss region's elaborate network of watch producers, causing institutional inertia, limiting the firm's ability to explore.
6. Customer Power, Strategic Investment, and the Failure of Leading Firms. Christensen & Bower (1996)	Failure to explore via investing in new technology in the disk drive industry.	Inertia was associated with firms' embeddedness within existing markets. More specifically, incumbent firms' existing customers drove resource allocation processes, which created an impetus towards sustaining innovations.
7. Unravelling the process of creative destruction: complimentary assets and incumbent survival in the typesetter industry. Tripsas (1997)	Failure to 'authentically' explore in the typesetter industry	Although firm invested in exploration of a new generation of competence destroying technology, they were handicapped by their embedded approach to new product development.
8. Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms Henderson and Clark (1991)	Failure to explore due to structural barriers	Structural barriers inhibited architectural innovation in the photolithography firms.

2.5. Ambisinisterity in Emerging Market Contexts

Whilst the contribution of theories of the traps and the embeddedness/inertia nexus cannot be understated, their emphasis on the path-dependent/ evolutionary nature of ambisinisterity (fuelled by a tendency towards inductive and theoretic concept development), does not sufficiently account for the differences in the rate of ambisinisterity across firms/business units within the

same firm. Furthermore, these theories focus attention on the impact of the task environment and resource dependency on MNCs in first world contexts, and by extension, view institutional pressures that impinge on firm performance as peripheral, because institutional environments are assumed to be relatively stable. By contrast, extant theory purports that MNCs operating in emerging markets are subjugated to weak institutional environments (Khaima & Palepu, 1997 in Mair et al., 2012), which create additional constraints on strategic choices available to them and places pressure on their ability to commercialise and scale. More recent research (e.g., See Mair et al., 2012) however suggests, that the institutional environment can instead be considered different, as opposed to weak, with Rodrik (2007:162-163 in Mair et al., 2012) highlighting the "need to maintain a healthy scepticism towards the idea that a specific type of institution is the only type that is compatible with a well-functioning market economy". Thus, the fact that emerging markets do not have 'western' institutional environments does not undermine their productive functioning, in theory, as they have very different cultures as well. As an example, a legalistic approach to contracts, as is dominating in the UK and in the US, may not necessarily function as well in emerging markets, which are very 'rich' in other aspects/features derived from a "relationship-centered pervasiveness, which explains why trust building, social capital, networks, relational governance, and reciprocity maintenance are critical" (Barkema et al, 2015:462). Regardless of these differing positions, the fundamental axiom of institutional theory is that market-based activities are significantly influenced by *non-market* institutional factors (Ingram & Silverman, 2002; Oliver, 1991; Peng, 2003) that comprise formal institutions – "the rules of the game" – laws, court systems, financial systems (or a proxy) and Informal institutions – culture, ethics and norms (North, 1990). Such institutional influences are exerted on organizations through rules and regulations, normative prescriptions, and cultural-cognitive expectations

(Scott, 2008)¹⁷. Whilst within-country institutional differences can be less attributed to differences in regulatory regimes, differences in normative and cognitive-cultural regimes can be significant¹⁸, especially when there are extreme economic and sociocultural disparities like those that exist between the TOP and BOP in the same emerging market. In particular, there tends to be differences in: (1) collective actors, such as accreditation bodies (e.g., Greenwood et al 2002; Purdy & Gray, 2009; Washington, 2004) at the TOP and village tribunals at the BOP; (2) primary "social control agents", such as professional associations (Greve et al., 2010) at the TOP and village chiefs/NGOs at the BOP; and (3) "infomediaries", such as the media and consultants at the TOP (Deephouse & Heugens, 2009; Hoffman & Ocasio, 2001) and word of mouth and market place coordinators at the BOP.

Normatively, personal relationships (rather than market exchange structures) are often emphasized more at the BOP over the task or company (Hofstede, 1980), and the social network represents the primary source of information, legitimacy and economic exchange (Hofstede, 2001). For example, Banerjee & Duflo (2007) explained how social networks provide informal insurance in Nigeria, with a large percentage of individuals (50%) both borrowing and lending to other poor villagers. Furthermore, Munshi & Rosenzweig (2005, in Banerjee & Duflo, 2007) argue that there exists a similar approach through the jati or subcaste networks in India.

¹⁷ Normative elements: emphasise a "prescriptive, evaluative, and obligatory dimension into social life" (Scott, 2008:54). Regulative elements: stress "rule-setting, monitoring, and sanctioning activities" (Scott, 2008:54). Cultural-cognitive elements focus on the "shared conceptions that constitute the nature of social reality and the frames through which meaning is made" (Scott, 2008:57). Each offers "a different rationale for claiming legitimacy, whether by virtue of being legally sanctioned, morally authorized, or culturally supported" (Scott, 2008:51).

¹⁸ Although there is a school of thought that Institutional differences are not greatly relevant in understanding variations in performance within a single country I posit that this is short-sighted, as there are critical differences in the maturity of the field in the TOP and BOP, and by extension patterns of interaction among institutions and articulated institutional infrastructure. Further, Greenwood et al (2011) illustrate that regional pressures are not uniform in their influence on firm operations.

Cognitively, whilst it is difficult to make broad sweeping statements due to the heterogeneity across the BOP, there exist vast differences in exposure and educational experiences between the TOP and the BOP (Banerjee & Duflo, 2007), which impact the skill sets available to MNCs at the BOP, as well as the product acceptance and use by the poor. As an example, Banerjee & Duflo (2007:152) indicated that poor workers tend to be less specialised due to the need to manage risks, which lead "47 percent of the urban households in Cote d'Ivoire and Indonesia to get their income from more than one source; 36 percent in Pakistan; 20.5 percent in Peru; and 24 percent in Mexico." Additionally, Simanis (2012:122) states "Consumers at the bottom of the pyramid lack what anthropologists call a "cultural competence" for product consumption [when] they aren't accustomed to using and experimenting with products. The adoption of new products entails a steep learning curve for them."

Lack of consideration of these institutional factors results in potentially incomplete analyses, overly simplistic rationales, or mismatch between theoretical constructs and empirical observations. It is therefore prudent to integrate insights from ambidexterity theory with complimentary institutional insights, in order to address my research question: What antecedents and factors influence the predicted failure of MNCs to balance or synergise efforts at exploiting existing TOP segments, whilst simultaneously exploring the BOP segments within the same emerging market context?

This approach not only provides a more holistic picture, but also extends MNC motives beyond financial success/adaptability that is often associated with ambidexterity, to consider issues of legitimacy and survival, which are pivotal forces in emerging markets (Covaleski & Dirsmith, 1988). In the end, I show that these combined insights are not substitutive, but represent a valuable extension

of, rather than a break from, or contradiction of the logic in extant ambidexterity literature.

2.5.1. Environmental factors

Following ambidexterity scholars Chao & Kavadias (2008), ambisinisterity is impacted by environmental complexity¹⁹, which shifts the MNC's balance toward innovation/exploration, while environmental instability shifts the balance toward improvement/exploitation²⁰. This perspective contrasts heavily with the work of Raisch & Hotz (2008), which illustrates that companies moved toward a more balanced orientation in their strategic and structural alignment when environmental conditions became increasingly hostile, and that of Jansen et al. (2008), which explains that becoming ambidextrous appears to be instrumental in attenuating, although not fully eliminating, the inherent destabilising tendencies of environmental dynamism. Ambidexterity literature is therefore undecided in this regard. Considerations from institutional theory tend to be linked to the former predicate and reveal additional antecedents (e.g. institutional distance and conflicting institutional demands), which increase complexity and exert strain on the MNC, increasing its proclivity towards ambisinisterity in emerging markets.

Firstly, a high <u>degree of institutional distance</u> between the TOP and the BOP has a crucial formative influence on ambisinisterity. The institutional difference arises from differences in the communal logics, norms, values, customer profiles and beliefs (Kostova & Zaheer, 1999; Ricart et al., 2004), which exposes the MNCs with TOP experience to significant knowledge gaps when exploring the BOP. This increases its search and information costs (cost to obtain information

¹⁹ Chao & Kavadias (2008) define environmental complexity as the number of unknown interdependencies among technology and market parameters which impact/determine product performance.

²⁰ Chao & Kavadias (2008) define environmental instability as the probability of changes to the underlying performance functions.

regarding BOP market participants, and the cost to protect oneself against opportunism)²¹ and impairs the organisation's ability to assess ex ante credible exploration opportunities/potential utility/externalities of alternative solution technologies. As a result, the firm may experience error amplifying 'decision traps' (Schulman, 1989)²², where uninformed responses and resource commitments in the early stages of development may propel the organisation into a path which may inadvertently constrain BOP exploration (Ghemawat, 1991) in the long-term, precipitating ambisinisterity.

The abovementioned logic emphasises that an MNC's choices in the early stages of exploration can create/limit the space within which its knowledge of the BOP's institutional dynamics develops and matures. Naturally, the early behaviour of the firm is likely to be more limiting when the approach to exploring the BOP is deliberate/predefined, rather than emergent/modular. Deliberate approaches (Mintzberg & Waters, 1985) to a market specify all or most elements of the business model ex ante and aim to leverage familiar problem-solving methods and solutions, which may inhibit appropriate changes as institutional knowledge unfolds²³. In contrast, an emergent approach is designed to inculcate learnings about institutional and other factors into the firm's business model in a more accretive fashion, unfolding through a series of stages and transformations (Mintzberg & Waters, 1985). Often, with the latter approach, firms tend to refrain from large investments in specialized competencies up front and focus on more fungible investments, increasing its resource commitment as its knowledge unfolds. As such, the probability of irreversible strategic commitments early in

²¹ Increase in costs as there are less formal intermediaries; as an example, consulting firms who would bridge the knowledge divide. Furthermore, Semanis (2012) outlines that operating on a village scale means that the organization needs to deploy and spend large sums collecting necessary product knowledge.

²² This relates to Ghemawat's (1991) insight that irrevocable strategic commitments made at a given point in time may limit the flexibility of incumbents, and constrain their ability to respond to subsequent changes in the environment.

²³ As the MNC's institutional knowledge matures however, the impact on institutional distance on ambisinisterity is expected to dampen.

the process decreases and the MNC is less constrained in its ability to respond to new institutional knowledge in the BOP environment. In light of this, I conclude that whilst high institutional distance increases environmental complexity and exposes the firm to additional risks early in the process, a deliberate as opposed to an emergent approach to the market, further constrains its ability to adapt as new knowledge unfolds, placing the exploratory agenda at risk, and increasing the organisation's proclivity towards ambisinisterity.

A similar effect on ambisinisterity is associated with the extent to which the MNC can **transfer institutional relatedness between the TOP and the BOP**.

Institutional relatedness is "the degree of informal embeddedness or interconnectedness with dominant institutions" (Peng et al., 2005:623). A high degree of institutional relatedness reduces environmental complexity, because it means that the MNC shares a dense network of ties with dominant institutions that confer resources (to obtain licenses from the state, arrange financing, secure technology, and hire and train labour forces) and increase their legitimacy (Granovetter, 1985; Oliver, 1997; Powell & Di-Maggio, 1991). MNCs operating at the TOP in emerging markets often have fairly well established institutional relatedness, built on a constituency of institutions whose relationships increase the firm's social capital, political capital, and reputational capital in those markets. To the extent that MNCs are able to transfer this benefit from the TOP to the BOP, the complexity of their environment will reduce and they will be better able to traverse the institutional challenges and decrease the risks associated with exploration at the BOP. However, where such spill-overs may not be particularly appropriable or transferable to the BOP because institutional relatedness appears idiosyncratic to the TOP²⁴, the firm is ill-equipped to deal

²⁴ Embodied in knowledge, contacts, established supply chains and distribution networks and routines only relevant to the TOP markets.

with the high levels of uncertainty at the onset of exploration, increasing its risks of unrewarding search, and with this, its proclivity towards ambisinisterity²⁵.

Of course, the degree to which these institutional relationships are valuable when transferred to the BOP is a logical point of contention. To address this, one needs to distinguish carefully between the transfer of upstream and downstream institutional relatedness. I propose that the transfer of downstream (Hill & Rothaermel, 2003) institutional arrangements, which are more proximal to commercialisation, tend to be less valuable because success within the BOP requires engagement with indigenous social, cultural and political institutions and intricate relational networks, which exert considerable influence over purchasing choices. Given the dependence on these conditions in furnishing market exchange and directing decisions related to appropriate pricing, product naming and marketing pitches at the BOP (as examples), the value of transferring downstream institutional relatedness is expected to be limited. In contrast, upstream institutional relatedness focuses more on the production process (Hill & Rothaermel, 2003), and some of the formal relationships from the TOP are more likely to retain their value. This may be in the form of access to scientific research, ability to obtain permits, and other situations where MNCs can utilise their formidable clout and existing ties in regulatory/bureaucratic systems from its TOP markets. Furthermore, where there are gaps in transferring upstream institutional relatedness from the TOP to the BOP, the MNC can often leverage its international networks to gather knowledge/technologies from other branches serving low-income markets, to provide parsimonious solutions, circumventing its dependence on local partnerships and relationships with dominant institutions, as appropriate. Thus the transfer of upstream institutional

²⁵ Stated differently, an MNC's 'institutional bridging capabilities' that allow the firm to transfer institutional relatedness from the TOP to the BOP as a means of reducing environmental complexity, is expected to impact ambisinisterity.

relatedness appears more valuable in reducing complexity, enhancing the MNC's ability to explore, by reducing the need to reinvent its relationships with dominant institutions, thereby dampening its proclivity towards ambisinisterity.

Finally, environmental complexity **associated with high levels of conflicting institutional demands** is also pertinent to ambisinisterity.

MNCs exploring and exploiting in the diametric segments of BOP and TOP in emerging markets are more likely to face different degrees of conflicting institutional demands. Such conflicting institutional demands result from multiple and contradictory regulatory regimes, normative orders, and/or cultural logics (Kraatz & Block, 2008), which increases organisational complexity and may require the development of some incompatible prescriptions within the firm. At the TOP, these conflicts are more often worked out at the field level, either by negotiation between field-level actors and/or by dominant actors enforcing compliance, such as market leaders, regulatory and accreditation bodies (Greenwood et al, 2011). As a result, MNCs experience a relatively more predictable and consistent set of competing institutional demands at the TOP (Garud, Jain & Kumaraswamy, 2002; Lawrence & Phillips, 2004). This makes them better able to develop appropriate internal structures and business models in response to their institutional environment. By contrast, the institutional structure at the BOP tends to be more fragmented, less formally structured and decentralised²⁶, comprising of more non-formal players (village chief, etc.) upon which MNCs are dependent for legitimacy or material resources. Within this plurality, Pache & Santos (2010) state that many institutions may be influential/potent enough to be imposed on organization, but not dominant enough to unify the host of demands on MNCs. As such, the "constitutive

²⁶ Fragmented: The number of uncoordinated constituents upon which an organization is dependent (DiMaggio & Powell, 1983), as well as in the complexity of their resource and power arrangements. Formal structuring refers to whether those demands are formally organized; e.g., through sovereigns, and constituency groups, organized groups, communities, or associations Meyer et al. (1987).

institutional rules defining legitimate activities, membership and boundaries, often remain ambiguous, permeable, or are not widely understood" (Greenwood et al., 2011:336). This makes it more difficult for MNCs to capture options effectively in relatively simple analytical models, or broker and assimilate the demands of such conflicting institutional regimes via innovative business models, and apply these to commercial ends. As a consequence, exploratory efforts are jeopardised, and by extension, the firm exhibits a proclivity towards ambisinisterity.

The degree of complexity is however tempered by the nature (incrementally or radically innovative) of the MNC's BOP exploration aspirations (e.g., Gatignon et al., 2002; Tushman & Anderson, 1986). Incremental innovation often manifests in simple product modifications, such as creating sachet-size versions of goods currently available at the TOP, which address the liquidity and financial constraints of the BOP. Whilst incremental innovation may necessitate working with additional institutions which may play a pivotal role in commercialising the products, it is less likely to require the profound uprooting/abrogation of long established institutional relationships. In contrast, more radical approaches (e.g., Christensen & Bower, 1996; Tushman & Anderson, 1986) to the BOP market that develop pioneering/new to the world products do not only necessitate developing new technologies, but also creating, as opposed to simply capturing new markets. This is likely to require the engagement of a larger group and develop a wider range of institutional arrangements than with incremental innovation. These new relationships may expose the firm to conflicting institutional demands, especially when they antagonise hard-won existing institutional compromises between players in the field that benefit the firm's exploitation agenda. As a result, the exploration agenda may be compromised, increasing the firm's proclivity towards ambisinisterity.

Whilst the argument linking high levels of institutional plurality at the BOP to complexity, and by extension ambidexterity, is relatively easy to establish, the literature contains a counter argument. In particular, the line of reasoning

represented by Jackson (2005) suggests a reverse relationship, namely that the ambiguity created by such institutional plurality creates room for a larger range of strategic responses and for creative reinterpretation, increasing MNC flexibility to innovate (Saka-Helmhout & Geppert, 2011). This in turn enhances the MNC's ability to explore without having to accede to dominant or established institutional norms, reducing its proclivity towards ambisinisterity. Within this tradition, institutions are seen as resources to solve coordination problems, or develop specific capabilities that enhance exploration rather than constraints that restrict it (Saka-Helmhout & Geppert, 2011). This line of reasoning is supported by the 'institutional void' theory (Dacin et al., 2010; Mair & Marti, 2009), which postulates that a lack of strong formal institutions creates a 'void' that MNCs can leverage to exploit new markets (Mair & Marti, 2009). However, logically, the MNC's ability to fill those voids is likely hampered by the same conflicting institutional frameworks, which increase ambiguity, opportunity costs and discourages commercial exploration. For an MNC to therefore develop strategically creative responses to voids, it must be incentivised to do so, either internally through a metrics and rewards system that emphasises experimentation, or externally through seeing other success cases of firms that have assuaged substantial institutional pressures (mimetic isomorphism induced by competitors) towards profitable ends (DiMaggio & Powell, 1983). The former provides clear signals of the organisational commitment to this endeavour, and the latter provides a supportive context for more creative behaviours, buffering the significant/perceived risks. I therefore argue that whilst it is plausible that high levels of institutional ambiguity may increase the opportunity to leverage loopholes and enhance the MNC's exploratory agenda, it is far more probable (barring specific aforementioned incentives) ambiguity increases that institutional conflict, which increases complexity, and by extension the MNC's propensity towards ambisinisterity.

2.5.2. Firm Factors

We now shift our attention from external factors to firm factors. Within ambidexterity theory, ambisinisterity has been associated with organisational size, mode and mode of development. With respect to organisational mode, organisational crisis increases a firm's proclivity towards ambisinisterity. Hermann (1963) argues that organisational crisis leads to restricted information processing, consideration of fewer decision alternatives, and 'threat-rigidity responses' (Staw et al., 1981), resulting in reduced attention to developing new capabilities and competences required for exploration. Furthermore, Levinthal & March (1993) and March (1991) identify drivers (environmental scarcity and the need for proximate outcomes), which precipitate exploitation to drive out exploration in crisis situations.

With respect to size, Lubatkin et al. (2006) argue that small firms with fewer resources may not be able to manage contradictory knowledge processes, which thus increases chances of ambisinisterity. Other scholars support this view and illustrate that SMEs are on average, biased toward exploratory processes, such as "the proactive acquisition of new information (Zahra, Ireland & Hitt, 2000), higher level learning (Busenitz & Barney, 1997), product leadership (Eisenhardt & Schoonhoven, 1990), and the aggressive use of resources in new arenas (Romanelli, 1987)" (Lubatkin et al., 2006:649). Finally, there is some indication from the alliance literature that mode of development has a direct impact on ambisinisterity. Although studies are limited, external development through acquisitions was found to stimulate the exploration of new capabilities, as well as have negative consequences on exploitation by redirecting attention and resources away from internal growth innovation (Barkema & Vermeulen, 1998).

The abovementioned propositions appear rooted within a broader understanding that firm factors associated with resource endowments have a crucial formative influence on ambisinisterity. Resource constraints (emanating from crisis, firm size, or its acquisition strategy) appear to reduce the firm's ability to develop structural designs and sustain complex strategies required to simultaneously pursue exploration and exploitation (Lubatkin et al., 2006). However, this perhaps offers a short-sighted view as organizations often have access to, not only the resources that they own, but also to resources in their external environments (Powell et al., 1996). Access to such external resources result from either resources that constitute public goods, or from strategic alliances with other stakeholders who own or control complementary resources. This suggests that a firm with low resource endowments may have high resource munificence²⁷ (Anderson & Tushman 2001) through access to resources in its networks. These resources would allow the firm to pursue the structural and complex strategies associated with ambidexterity, and as such dampens the linkage between resource endowments and ambisinisterity.

Beyond resource-related factors, institutional theory illustrates that firm characteristics (the MNC's structure, ownership, governance and identity) impacts upon its location in the institutional field (periphery/central) making it particularly sensitive to certain logics and less so to others. An institutional logic is an overarching set of principles that prescribe "how to interpret organisational reality, what constitutes appropriate behaviour, and how to succeed" (Thornton, 2004:70) within an institutional environment. Leblebici et al. (1991) noted that organizations located at the "periphery", like social enterprises and SME indigenous players, are more motivated to deviate from established practices because they are less likely to receive the social nudging and policing that reaffirms existing practices (Westphal & Zajac, 2001). By contrast, central organisations (by virtue of size, age, international governance and status), like MNCs, experience intensified institutional demands because of their visibility, and thus are subjected to the intense scrutiny of more formalized, coordinated constituent groups (Leblebici et al., 1991). These groups comprise governments

²⁷ Munificence: The extent that resources available to firms are plentiful or scarce.

(who supply infrastructure), the business community (who supply legitimacy), professional associations (who supply graduates) and ranking and accreditation agencies (who provide varying degrees of endorsement). This line of reasoning implies that the cost of institutional compliance/costs for coordinating activities cross-nationally to meet institutional demands is higher for MNCs than for their local counterparts, who are less likely to be sanctioned for violations of institutional logics. This places the MNC at a cost disadvantage in the price sensitive BOP market, increasing the risks associated with exploration and resulting in ambisinisterity.

At the same time, a countervailing argument is advanced that peripheral organisations are more disadvantaged by institutional regimes (Greenwood et al., 2011), and central organisations like MNCs, due to their size and status, retain a measure of immunity from institutional pressures, reducing their cost of compliance. This second line of argumentation assumes that MNCs have discretion over the institutional demands it accedes to. This is generally the case when:

- the specificity of institutional prescriptions is low (more mimetic and normative, rather than coercive (DiMaggio & Powell, 1983)²⁸;
- the firm's organisational identity²⁹ is not threatened (to the extent that the firm will lose legitimacy in the eye of critical constituencies (Greenwood et al., 20011) if it chooses not to respond to institutional pressures;

²⁸ Coercive pressures stem from the regulative structures and are the least flexible, whilst normative processes impel organizations to conform to other actors' expectations and obtain their approval. These pressures derive primarily from professionalization, and the society at large (DiMaggio & Powell, 1983). Finally, mimetic processes impel organizations to mimic practices of other successful organizations (DiMaggio & Powell, 1983).

²⁹ Organisational identity: How the organization sees itself as different from other organizations (Greenwood et al., 2011)

- institutional referents are not able to exert pressures on the MNC to conform to various institutional demands by resource dependence relationships (Pache & Santos, 2010);
- the MNC's Head Office is less attentive to details of the terra incognita because it has devolved the loci of power, or authority to respond to local institutional pressures, to the host company, and therefore does not monitor subsidiary refractions from norms of practice.

Once discretion is high, MNCs can be more discriminate in terms of which institutional pressures they accede to, which in turn lowers the costs of compliance, reducing the likelihood of exploration hazards in the price sensitive BOP, thereby reducing the proclivity towards ambisinisterity.

2.5.3. Leadership Factors Process-based and Cognitive

Finally, I discuss leadership factors, which are thought to play a decisive role (Gibson & Birkinshaw, 2004; Smith & Tushman, 2005) in determining ambisinisterity. Conventional ambidexterity literature (see Table 4 below) explores a host of leadership antecedents that enhance the firm's ability to balance exploitation and exploration, or other associated concepts like managing the challenges of incremental and discontinuous change. Although some of the factors display certain salient similarities to the factors that lead to ambisinisterity, the rationale differs significantly.

Table 4 – Leadership factors that impact ambidexterity

Author	Type of paper	Summary	Cognition	Behavioural Integration	Vision	Team composition	Consensus / Cohesion	Leadership style	Reward structure
Smith & Tushman (2005)	Theoretical	Achieving ambidexterity is associated with paradoxical cognition (a frame embracing contradiction) among senior managers. This is developed by following either a team-centric approach (shared mental models), or a leader-centric approach (emphasis on team interactions, supportive coaching).	x						
Tushman et al. (2004)	Empirical: Multi-case design (36 cases, 15 business units)	Ambidextrous SBUs (Strategic Business Units) comprise a combination of high structural differentiation, high senior team integration and targeted structural integration.		x					
O'Reilly & Tushman (2004)	Theoretical	Ambidextrous organizations need ambidextrous senior teams – executives who have the ability to understand the needs of very different businesses, articulate a clear and compelling vision, and demonstrate commitment to ambidexterity.	x		x				
Benner & Tushman (2003)	Theoretical	Ambidextrous organisations, which comprise internally tightly-coupled subunits (i.e. the culture, tasks etc. within the sub units are well aligned), which are also loosely coupled across subunits (distinct from other subunits) require (heterogeneous) senior teams who can promote the development of common aspirations and strategic integration across the different loosely-coupled subunits.			x	x			
Tushman & O'Reilly (1997)	Theoretical	Leadership plays a crucial role in minimising the tensions associated with balancing exploration and exploitation by articulating and communicating a compelling vision. This involves both the use of software (e.g., culture, norms, social networks) and hardware (e.g., rewards and			x				

Author	Type of paper	Summary structure, systems and rewards).	Cognition	Behavioural Integration	Vision	Team composition	Consensus / Cohesion	Leadership style	Reward structure
Tushman & O'Reilly (1996)	Theoretical	Ambidextrous Managers' coherent vision plus structural (autonomous business units) and cultural (loose-tight culture) factors facilitate the simultaneous pursuit of incremental (exploitation) and discontinuous innovation (exploration).	x		x				
Lubatkin et al. (2006)	Empirical: Multi- source survey data from 139 SMEs	Top management teams (TMT) behavioural integration by virtue of their information exchange, high levels of collaboration and joint decision-making and, are better able to handle the informational contradictions and conflicts associated with balancing exploration and exploitation, and is therefore positively associated with achieving ambidexterity within SMEs.		×					
Beckman (2006)	Empirical: Longitudinal study of 141 high- technology ventures, using interview, survey, and archival data.	Ambidextrous firms draw on TMTs' unique affiliations, leveraging their common and diverse experiences and affiliations at founding.				×			
O'Reilly & Tushman (2007)	Theoretical: n.a.	The following TMT processes and actions improve the propensity of firms to simultaneously explore and exploit: the presence of a compelling strategic intent, the articulation of a common vision, a clear strategic consensus among the senior team, the use of separate aligned organisational architectures, and the ability of senior leaders to manage contradiction.	x		x		x		
Jansen et al. (2008)	Empirical: Survey of 89 branches of a Dutch	Senior team shared vision and contingency rewards are positively related to balancing exploration and exploitation. In addition, transformational leadership behaviour was			x			x	x

Author	Type of paper	Summary	Cognition	Behavioural Integration	Vision	Team composition	Consensus / Cohesion	Leadership style	Reward structure
	financial services corporation.	found to positively moderate the impact of senior team social integration and negatively moderate the effect of contingency rewards on ambidexterity.							

Adapted from Simsek, Heavey, Veiga and Souder (2009)

Drawing from a small stream of relevant literature, ambisinisterity has been associated with an overstrained capacity of management to conceive, design, manage, support and adapt to the complexity of ambidexterity. Daellenbach et al. (1999) state that durable commitment of senior managers to all traditional and emerging business can be difficult to maintain over time when some business units fare better than others. Gibson & Birkinshaw (2004) speak of a cognitive tug of war, which comes about when decision-makers face different competing demands.

Ambisinisterity has also been linked to the characteristics of the leadership collective – the Top Management Team (TMT), which represents the "dominant coalition" of individuals in charge of the strategic decision-making of firms (e.g., Cyert & March, 1963). In particular, research suggests that TMTs comprised of longer-tenured top management are associated with increased rigidity and commitment to standardized practices (Miller, 1991; Katz, 1982) / exploitation and high levels of senior team cohesion, which facilitates increasing reliance on narrow and restricted sources of information (Michel & Hambrick, 1992), resulting in lesser recognition of the need for exploration. By contrast, Smith et al. (1994) illustrate that TMTs, which are not sufficiently behaviourally integrated, are more prone to divert their attention to team maintenance, which increases the firm's proclivity towards ambisinisterity.

From an institutional perspective, TMTs play a role in interpreting institutional arrangements which are conceptual and discursive points of reference, creating expectations and delineating a space in which a legitimate TMT response can unfold in the light of the firm's resource constraints (Delmas & Toffel, 2008). Managing businesses that simultaneously exploit the TOP and explore the BOP places additional pressure on the TOP to process and resolve contradictory information streams from two differing institutional environments, thereby increasing their information-processing demands. Particularly difficult for TMTs, is the information-processing demands of the unsophisticated, geographically expansive BOP market. Its mere breadth requires the handling of large volumes of context-specific knowledge, to effectively identify and craft appropriate sales pitches and product solutions (Semanis, 2012), and its depth requires a wide range of mechanisms for problem-solving, as breaches are harder to punish through legal avenues (Mair & Marti, 2012; Khanna et al., 2005). It therefore follows that factors that affect TMT's ability to engage in complex information processing like TMT turnover, team size and team diversity will affect the degree to which the organisation is capable of managing the different institutional demands required to simultaneously explore and exploit, thereby impacting ambisinisterity (Halevi et al., 2015). As examples:

 High levels of turnover curtail the abilities of TMT members to build and accumulate knowledge in institutionally plural environments of the TOP and BOP. Particularly damaging is turnover among executives who occupy central network positions, have deep institutional support in the communities (Wiersema & Bantel, 1992) and provide/exchange information, resources and legitimacy with other members of the TMT. This is also made worse when their replacements are foreigners who do not understand the fluid institutional context of the emerging markets in which the firm operates. Lack of diversity or its proxy and size of the TMT (Halevi et al., 2015) constrains the range of institutional logics socialised/represented at the leadership level, inhibiting the MNC's understanding of the plurality of institutional pressures at the TOP and BOP. A less diversified and smaller team also reduces the MNC's exposure to inter-institutional inconsistencies, decreasing awareness of alternative possibilities, thereby limiting the available repertoires of responses.

Thus, high levels of TMT turnover and low levels of TMT diversity reduce the firm's ability to respond to the contrarian institutional pressures at the TOP and BOP, increasing the likelihood of ambisinisterity. However, the other extreme also proves non-optimal, namely, high levels of TMT diversity leads to too many competing logics about what constitutes effective (Whetten, 1978) or legitimate (Deephouse, 1996; Ruef & Scott, 1998) responses to institutional pressures. Absence of strong leadership may descend into turf battles, directing attention away from task performance and diluting firms' ability to exploit and explore, increasing their proclivity towards ambisinisterity.

The propensity for turf battles appears to be amplified when the TMT conflict is centred around ideological goals versus the means (courses of action the organisation deems a legitimate response to those institutional demands) (Pache & Santos, 2010). Pache & Santos (2010) state that conflicts over means are less likely to have negative consequences, because deviation from prevailing expectations are less likely to jeopardise institutional support (Elsbach & Sutton, 1992). By extension, high levels of TMT diversity may not spiral into turf battles over 'means' because they would naturally be more flexible and willing to negotiate, or even delegate these decisions, given the limited institutional repercussions (Pache & Santos, 2010). However, conflict over goals is more difficult to navigate in highly diversified TMTs. Within the context of the BOP, the most severe conflicts over goals are often manifested in institutional pressures related to social, environmental or welfare logics that aim to protect the most

vulnerable in society. In response to these institutional pressures for social contribution, TMTs often accompany their exploration of BOP markets with morally loaded discourse, including 'positively impacting poverty' and 'bettering of the human condition'. This somewhat 'fashionable' rhetoric often represents a symbolic rather than a purposeful commitment initially referred to as decoupling (Meyer & Rowan, 1977; Westphal & Zajac, 2001). However, Pache & Santos (2010) indicate in the long-run, TMTs may be pressured to stop faking institutional compliance (Pache & Santos, 2010), or jeopardize the legitimacy/resources required for exploration at the BOP, as well as the support of employees whose faith or moral conviction had been mobilised in the process. Given the high stakes, the more diverse the TMT, the higher the probability of turf battles, as each individual may have their own ideas of how to accede to institutional demands for social contribution. Where this cannot be reconciled (due to the oft idiosyncratic nature of social pressures and the considerable ambiguity around future resources required to attenuate pervasive externalities associated with them), the unifying focus of fiscal discipline often precipitates a repositioning of managerial attention and migration of organisational strategies away from BOP markets. This may lead to the broad remit of exploration being retracted, curtailed or abandoned, resulting in ambisinisterity.

Finally, institutional pressures do not just "enter" an organization — they are interpreted/given meaning by individual actors, the most important of which is leadership. It is well established that leadership has a disincentive to invest in new institutional relationships at the BOP that, if successful, might cannibalise/create disequilibrium conditions in its core markets at the TOP (e.g., Ghemawat, 1991; Reinganum, 1985). This is particularly so if the disequilibrium affects the core/proprietary technology (Reinganum, 1985), or flagship product of the firm, or disturbs institutional relationships that produce predictability and reduce the risk of organisational decline. As a consequence, leadership is predisposed to engaging in exploitative productive processes and detracted from the pursuit of exploratory initiatives, increasing the firm's proclivity towards ambisinisterity. This predisposition may be further enhanced where there are long gestation periods (Hill & Rothaermel, 2003) associated with the exploratory BOP initiative. This may be due to a mix of exogenous factors, such as Government regulation/industry standards, and endogenous factors, such as the scale and complexity of engineering problems. These long gestation periods allow for coalitions against exploration to build up and leadership may address the conflicts via embellishing original targets so as not to threaten TOP strongholds. McCarthy & Puffer (1995 in Peng, 2000) refer to this as "muddling through", which may result in the leader altering the original target to focus on less arduous segments, like the Middle of the Pyramid. Should this persist, ambisinisterity may result, unless there is a routinized (March & Simon, 1958) and disciplined process for committing legitimacy and resources to the exploratory BOP projects. These create expectations with regards to appropriate behaviours and reduce the potential for politicising, prompting greater forbearance for the institutional trade-offs associated with the BOP.

2.6. Limitations

One of the main virtues of this chapter is trying to pull together the diverse perspectives of ambidexterity and institutional theory to guide a more focused and systematic investigation into ambidexterity failure in emerging markets. Whilst it is more likely that the move from the TOP to the BOP will result in more contestation and conflict (Battilana & Dorado, 2010; Zilber, 2002) in institutional regimes, Hall & Soskice state "institutions can be … complementary if the presence (or efficiency) of one increases the returns from (or efficiency of) the other" (2001:17). As a next step, more focus on the coexistence (McPherson & Sauder, 2013) or logic blending (Binder, 2007) of institutional regimes could be explored in greater detail.

In addition, this chapter establishes two baseline propositions:- (1) that economic behaviour is shaped by institutional, in addition to market logic, and (2) institutional demands do not dictate firm action, but are subject to reflexive interpretation, and as such, MNCs and their actors have a role in filtering and resolving institutional pressures (Greenwood & Hinings, 1996). I recognise that there are conflicting sentiments in institutional theory with regard to the second proposition, with some perspectives supporting a more deterministic role of institutional pressures than that which is put forward in this chapter. I however feel that my approach is in line with more contemporary (Greenwood et al, 2011) and empirically sound perspectives.

Finally, I have not explored the dynamic effects of institutional pressures. Given that the MNC's institutional environment in emerging markets is constructible, and thus may dynamically change over time, the MNC's ability to source and share information, legitimacy and resources, may also change over time, impacting its proclivity towards ambisinisterity. In the end, the field of knowledge is still young and there remain many unexplored questions yet to be resolved.

2.7. Conclusion

This chapter was opened by illustrating ambisinisterity is a prevalent phenomenon for MNCs exploring and exploiting distal segments of emerging markets. Despite having some explanatory power, it was suggested that ambidexterity theory did not provide the whole story and elucidated a number of institutional factors, which increase the MNC's proclivity towards ambisinisterity. In doing so, I have integrated two complimentary literatures and have come up with perspectives that have few precedents in the extant literature. It is recognised that this chapter is not exhaustive, but I have focused on the most relevant institutional factors that impact the relationship between the BOP and TOP. Until further work is conducted, the theoretical extensions put forward in this chapter will remain suggestive, rather than definitive. However, they represent a most fruitful line of enquiry, with significant possibilities to explicate the forces that are associated with MNC failure to explore and exploit in emerging markets. **SECTION II**

EMPIRICAL CHAPTERS

CHAPTER 3: Reconstituting the Success Trap (Exploration Under-adaptation)

3.1. Chapter Overview

The central ambition of the prior chapter was to establish ambisinisterity as a worthwhile and distinctive theoretical field and illustrate its potential and usefulness in explaining challenges faced by multinationals in emerging market contexts. This required an examination of a wide breadth of research, as well as integration with non-traditional literature streams, like institutional theory, in the hope of exhibiting novel insight. This chapter signals the beginning of the empirical research, by migrating from the more holistic concept of ambisinisterity developed in chapter 2, to a scope that can be fruitfully examined within the confines of a thesis. In this regard, I focus on one of the most widely referenced, but seldom investigated elements of ambisinisterity: the success traps theory, in order to answer the research question: How and why does exploration under-adaptation evolve in resource-constrained emerging market contexts from a learning and risk perspective? What are the mechanisms by which it occurs? Consistent with the theoretical direction advocated by Levinthal & March (1993), this chapter briefly outlines the success trap and its two dimensions: the learning and risk-taking trajectory, which is used to sensitise the empirical research.

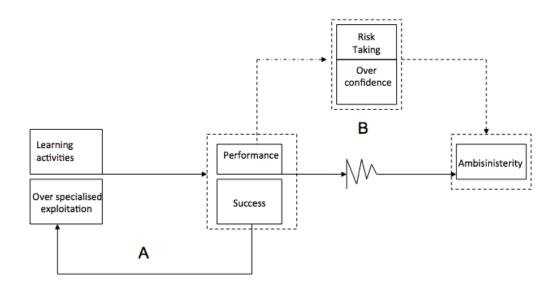
3.2. An Overview of the Research Domains

Early learning theorists purported that the imbalance in exploration and exploitations occurs due to *a series of path dependent traps* (failure traps, success traps and competency traps), which result in negative performance consequences for the firm (March, 1993; Levinthal & March, 1993). Here, exploration is defined as "experimentation with new alternatives" and exploitation "refinement and extension of existing competencies, technologies and paradigms" (March, 1991:85). Despite its prominence within management

scholarship, research on the theory of the traps in general is still fairly embryonic (See Walrave et al., 2011). This thesis focuses on the analytic concerns of the success trap (only), which has been duly acknowledged to be far more prevalent, making the dearth of empirical scholarship particularly noteworthy (Levinthal & March, 1993).

The success trap results when a firm overspecialises in exploitation-oriented activities. As the firm achieves success, the positive feedback mobilises/impels the business entity to further refine and improve current technologies, allowing for a virtuous circle of exploitation (Levinthal & March, 1993). The success trap theory is rooted in two perspectives/research domains. The scope of the first research domain I call the **learning trajectory**. The logic underpinning this trajectory posits that a firm, having had prior knowledge and experience in exploitation, will overspecialise, build more experience and knowledge, which leads to more success, and so on and so on (Cohen & Levinthal, 1990; Levitt & March, 1988) (area A in Figure 3 below). Thus, the mutual positive feedback between prior knowledge and experience makes trying alternative strategies unlikely, precipitating myopic tendencies (Levinthal & March, 1993:101). Over time, persistent specialization in exploitation increases the vulnerability of the firm by reducing its ability to survive in conditions that warrant new learning (zig zag lines in area A, Figure 3 below).





The scope of the second research domain, namely the **risk-taking trajectory**, is represented by area B in Figure 3 above, which includes the elements in the dotted line. This is arguably peripheral to the learning trajectory, but nonetheless equally important. At its most fundamental (which is what is mapped in Figure 3), Levinthal & March (1993:104) state that during a series of successes, individuals (as a collective) become biased in their perception of risk and causality. They become over confident about their abilities and optimistic about the odds of success, or any favourable occurrences in their exploited area of specialisation. As a result, search and practice become focused on well-known alternatives, underestimating the potential benefits of the unknown (March, 1994) until the point of survival. Levinthal & March (1993) also link the concept of risk-taking to a series of individual level constructs, but because the success traps theory operates at an organisational level of abstraction, those have not been included in this thesis.

At a first glance, scholarly examples of success traps in developed markets appear to abound in diverse industries: disk drive (Christensen & Bower, 1996), photolithographic equipment (Henderson & Clark, 1990), and watch (Glasmeier, 1991) industries. However, many of these studies, as established in Chapter 2, have embeddedness/inertia foci³⁰, focusing on resistance to change, rather than the process of adaptation, which is the primary vantage point of the success trap theory. To the best of my knowledge, there has only been one theoretical simulation study (in the peer reviewed Journal of Management) by Walrave et al. (2011) that attempts to focus on an adaptation view of success traps as a springboard for theoretical advancement. The authors found that the interplay between management and the Board precipitates the success trap, but failed to define mechanisms. Furthermore, Walrave et al.'s (2011) study displays a number of systematic limitations. One being the assumptions of extreme risks, such as economic downturn that underpins the simulation, and two, as per all simulation research, it raises questions regarding the generalisability of their findings to non-experimental, 'everyday' settings.

Sato (2012) perhaps points to one of the most significant gaps in the success trap literature: "Since March's view on organizational learning tends to advocate an excess of exploitation, Levinthal & March (1993) also treat over-adaptation as a problem, and do not acknowledge under-adaptation. However, if we look at the respective phases, it is normal for both over-adaptation and under-adaptation to occur" (Sato, 2012:51). Importantly, the difference between an over-adaptation of exploitation, versus an under-adaptation of exploration view of a success trap, is not merely taxonomical for two reasons:

 Firstly, and logically, the processes are expected to be different because exploration-oriented activities are more uncertain in their outputs, and operate on a longer time frame, whilst exploitationoriented activities are more able to deliver measurable short-term results (Fast, 1981).

³⁰ Embeddedness/ inertia foci: How embeddedness within existing cognitions, capabilities, etc., constrains management's attention/beliefs directing search/resource allocation towards existing capabilities, causing organisational inertia to set in.

2. Secondly, without considering under-adaptation, the traditional success trap does not address the constructs/mechanisms associated with the development and implementation of exploration-oriented initiatives. Rather, it infers that Management are either <u>neglectful of the need for exploration</u> (Walrave et al., 2011; Levinthal & March, 1993), or alternatively, if the need is recognised, management refrains from allocating resources (Sato, 2012; Levinthal & March, 1993), because the opportunity cost of investing in exploration becomes comparatively more costly than investing in exploitation.

However, a cursory examination of the dynamics of MNCs operating at the BOP proves otherwise. Semanis (2012), in his article, 'Reality check at the Bottom of the Pyramid', cites many examples of MNCs with strong roots in exploitation of the top tier segments of emerging markets (typical of a success trap), being motivated to explore the BOP with limited success. Here, exploration failed to mature due to challenges in understanding the needs of the BOP market, or innovating solutions to overcome the debilitating costs of village scale high-touch product distribution models required to serve the geographically scattered BOP (Semanis, 2012). Failures also resulted from an incapacity to fully consider the range of externalities as was the case of GE's low cost ultrasound technology, which made it possible to tell the sex of a baby in the womb for the first time in disenfranchised markets in India. This led to sex-selective abortions and mass female infanticide (referred to as Kokh Me Katl, or Murder in the Womb), given India's cultural preference for male children due to their ability to carry on the family bloodline and inherit wealth (Prasad & Ramesh, 2007). This example aptly describes the centrality of exploration to MNCs stuck in a success trap, and necessitates a recognition that MNCs' motives expand beyond exploitation. It also concurrently recognises that the inability to achieve success via exploration, shapes and perpetuates the underlying processes in a success trap. These very specific conditions of MNC exploration at the BOP in emerging markets therefore appear to highlight the conceptual limitations of the success trap.

Thus, by extending the scope of enquiry to understand exploration underadaptation; i.e., how exploration oriented initiatives evolve (are initiated and retracted) and impel a refocus on exploitation, *I attempt to overcome the shortcoming outlined by Sato (2012). I also increase the propensity for the success trap theory to be of use in analysing MNC failure in resourceconstrained environments*. In these respects therefore, the under-adaptation view of a success trap provides a missing link, illuminating what was previously somewhat of a 'black box' in the success trap literature. In consequence, this thesis and the forthcoming chapters focus on an under-adaptation of the exploration view of success traps.

Furthermore, within the context of the under-adaptation of exploration view, I address the final critique of success traps theory, namely the "underlying processes have remained largely unstudied" (Walrave et al., 2011:1745), by showing how learning and risk-taking processes dynamically develop over time (and possibly even interact) to result in a single trajectory of exploitation.

<u>Learning processes</u>: Argote (1999) states that fundamentally, learning processes relate to the means by which a firm attains experience and repeat engagement facilitates the ability to both gain insights and draw inferences from the outcomes of its actions. Across the breadth of learning theory, processes have been divided into <u>types</u> of learning, which include "organization's learning from its own experience versus learning from others, experimentation, trial-and-error learning, refinement versus exploration, forgetting, knowledge sharing, and knowledge generation" (Miner et al., 2001:304), as examples. There has also been a focus on the <u>output</u> of learning processes, which can take the form of new activities, knowledge, or insight gained (see Miner et al., 2001). Furthermore, the <u>outcome</u> of the learning process has also been defined with exploitation expected to "generate clearer, earlier, and closer feedback[which] corrects itself sooner" (Levinthal & March, 1993:107), as opposed to exploration which is expected to generate returns that are "uncertain, distant and often negative"

(March, 1991:85), making causality harder to unravel. In this way, "learning [processes are expected to] give advantage to results in the spatial neighbourhood of current action" (Levinthal & March, 1993:103). There is also a tradition of using performance outcomes/changes (in part or in full) as a measure of learning outcomes (Bingham & Eisenhardt, 2011). For example, Vermeulen & Barkema (2001) determined the degree to which acquisitions broadened a firm's knowledge base by measuring subsidiary success. And Inkpen's (2005) case study of the NUMMI alliance measured the outcome of learning based on a combination of objective data and statements from senior management. And finally, the use of the word process has also been associated with the *sequence of different types of learning*. Examples include Miner et al.'s (2001) description of how a trial and error learning process was initiated by improvised learning and more recently Sonsa et al. (2010), who illustrated that learning mechanisms varied across stages of business model development, with second order learning surfacing during the early exploration phase, and first order learning being prioritised during the exploitation phase when the business model achieved scale. Thus the mechanisms of learning are likely to change as the exploration project progresses. I chose to sensitise my study of exploration under-adaptation with such a broad range of learning insights for two reasons; firstly because research into the success traps is embryonic, and secondly in an attempt to provide a comprehensive assessment by not only examining the types, outputs and outcomes of learning inductively, but also their sequencing and interdependencies.

<u>*Risk-taking process:*</u> Given that exploration is inherently risky by definition there is some expectation that risk-taking processes would play a prominent role in the under-adaptation process. Not just because of challenges associated with the newness of the BOP target market, but also because the experimental, unpredictable, uncertain nature of exploration (March, 1991) is expected to exert strain on long developed and favoured systems and processes that generate stability and reliability, typically associated with a firm that has over specialised in exploitation (Lubatkin, 2006; Güttel & Konlechner, 2009). Even where the exploration and exploitation are established as separate units, some lateral processes are expected to link them together (Ambos et al., 2008). These may take the form of protocols, schedules, and routines, which may become largely inadequate if they promote standardisation, resulting in destabilizing tendencies for the exploratory agenda with potentially dreadful outcomes. I coin the term **intra-operative** – to define the process of risk-taking in situations where there is a high threat of morbidity/hazards to the exploration initiative, in the context of an over-specialised history of exploitation (success trap). Intuitively, an MNC would not need to engage in intra-operative risk-taking if formal discretionary space is created (through new protocols, schedules, and routines), to allow for egalitarian outcomes where both exploration and exploitation can perpetuate. But if space for exploration is not convened, the strain exerted by exploitation-oriented systems, processes, business models, distribution systems, etc. on exploration can be exacerbated and can precipitate crisis, necessitating risk-taking (intra-operative) to allow exploration to survive/ prosper. The ultimate aim of intra-operative risk-taking therefore is to allow exploration room to grow and become consequential, and as such can be considered a balancing force to the learning view, which, according to Levinthal & March (1993), will always pre-select exploitation at the expense of exploration. Thus, a learning combined with an intra-operative risk-taking perspective allows for the recognition of the web of conflicting interests, which surround exploration and exploitation. Combined, they provide coherent constructs for the analysis of the process of exploration under-adaptation, and are better suited to deal with the idiosyncrasies of the MNC case at the BOP, which confound research within the current vein of success traps.

3.3. Conclusion

To reiterate, a success trap results when the short-term positive feedback from exploitation "drives out exploration due to self reinforcing dynamics of learning"

(Levinthal & March, 1993:106). Notably, Levinthal & March's (1993) conception of the success trap focuses on the over-specialisation of exploitation, but does not consider the reverse, which is the under-adaptation of exploration, thereby treating the success trap in a largely undifferentiated manner (Sato, 2012). Furthermore, Sato (2012) suggests that the processes of exploration underadaptation are distinct from the processes that over emphasise exploitation. Accordingly, the mechanisms would naturally differ between the two contrary views of a success trap. In this thesis, I explore the exploration under-adaptation process because, arguably, the true black box in success trap theory depends ultimately on answering questions surrounding what is happening with exploration to allow exploitation to prosper. Furthermore, this perspective seems to accord better with the observed behaviours of MNCs at the BOP, a focus of this research. Finally, to examine exploration under-adaptation, I focus on both learning and intra-operative risk-taking, two behavioural constructs. I coin the term intra-operative to define the process of risk-taking in situations where there is a high threat of morbidity/hazards to the exploration initiative in the context of an overspecialised history of exploitation (success trap). My aim is to unearth the mechanisms, processes and interplay (if relevant) between the two views, details of which are not forthcoming in the present traps theory. And finally, before proceeding with a detailed description of the methodology that underpins my empirical research, it is worth reiterating that the **theme of this** thesis is ambisinisterity, with a success trap being a specific type of ambisinisterity. Thus, in advancing the logic of exploration under-adaptation, my immediate motivation is to contribute to ambisinisterity, traps and process theory, and as a secondary objective, to learning and risk literature streams as the opportunities arise.

CHAPTER 4: METHODOLOGY (The XXX Case Study)

4.1. Chapter Overview

This chapter explores the methodology for the empirical part of this thesis, which addresses the much neglected theoretical domain of a success trap from the perspective of exploration under-adaptation in low munificence segments of emerging market contexts. Specifically, in this chapter I outline the research context, design and rationale, followed by the data collection and analysis procedures.

4.2. Research Design, Setting and Rationale

My research examines how learning and intra-operative risk-taking processes (and their possible interaction) precipitated exploration under-adaptation. Given the lack of prior theoretical insight, I utilised an inductive qualitative case study methodology (Eisenhardt, 1989). As Attride-Stirling (2001:403) argues, "the value of qualitative research lies in its exploratory and explanatory power". It enables the researcher to make sense of the process by which events and actions take place (Maxwell, 1996) and is particularly apposite for theory building of novel phenomena which extant theory neglects to explain (Eisenhardt, 1989; Yin, 2003).

As is typical with inductive research, I utilised purposive sampling (Eisenhardt, 1989; Flick, 2009). My overall sampling logic was to find a MNC encumbered by a success trap in an emerging market in which I could track the development of an exploratory project. This would allow me to examine the learning and intra-operative risk-taking at the level of a single unit of analysis (the exploratory project), whilst concurrently situating it as part of a larger set of experiences within the rest of the (exploitation-oriented) organisation (Bingham & Eisenhardt, 2011). On the basis of this sampling logic, XXX Healthcare in India proved the perfect fit. Firstly, India was particularly interesting because historically under-

adaptation of exploration has resulted in the most heinous consequences, such as infanticide (associated with GE low cost ultrasound machine), suicides (associated with micro-financing) and other socially destabilising outcomes for the disenfranchised (Hart & London, 2005; London & Rondinelli, 2003). As such, the Indian context would benefit greatly from a scholarly review that sheds light on this phenomenon. Furthermore, XXX Healthcare presented an environment with both a strong systemic proclivity towards exploitation (evidenced by a historical focus on the top of the pyramid markets), combined with a highly motivated drive towards the implementation of an exploratory project focused on the disenfranchised market segments, which was later rescinded, making it a perfect fit for my research. The following section provides a more detailed breakdown of the research setting.

4.2.1. Research setting

XXX Healthcare, India, is part of the premier XXX Group, known for innovation and product excellence. XXX India's operations comprise a number of specialised units, one of which is its Healthcare division. Until recently, this division focused on B2B (business to business) transactions, selling imported products from various global XXX subsidiaries to healthcare providers in Tier A (the wealthiest) markets across India. Healthcare providers include: *large multi-specialty hospitals and small clinics, dental and orthodontic practitioners and pharmaceutical companies*. Given its focus on imported products, XXX's major competency had historically been trade related, including but not limited to logistics, distribution and sales. Its business model was decidedly exploitationoriented, premised on pushing high-quality, high-margin, imported products. Growth was largely driven by product differentiation, introducing new product categories and building exceptional customer relationships with high-income healthcare providers.

Within the last three years however, XXX Healthcare began developing the infrastructure to penetrate lower income, or Tier B and C markets (low income,

disenfranchised segments of the market), as part of a wider strategy, termed localisation. This would not only attenuate some of the challenges of operating in a mature market, but also leverage the vast potential opening up in lower income segments of the Indian market (see a detailed list of reasons in Table 5 below and additional evidence in Figure 4 below). The first step of localisation was acquiring funding from its Global Investments Divisions to construct a factory to manufacture low cost products. As the construction of the factory progressed, the Executives became concerned over the inherent limit to which the existing sales force (hereinafter the Core Team) could (a) absorb the factory's surplus/utilise its full capacity when it ramps up, and (b) effectively generate growth in market segments beyond its Tier A stronghold, given its lack of prior experience in poverty prone markets. This precipitated the development of a new Unit called Project Break Out or PBO.

At the outset, the PBO focused specifically on the sale of locally produced medical consumables for Tier B/C in India. This unit is characterised as exploration-oriented (Levinthal & March, 1993) because XXX could not leverage existing internal assets and replicate current business models (Tallman, 1991; Prahalad & Lieberthal, 1998) to serve this new customer segment. Instead, it had to engage in "experimentation with new alternatives" with returns that are "uncertain, distant and often negative" (March, 1991:85). In less than eighteen (18) months, XXX retracted this exploratory agenda, which was signalled by refocusing the PBO on market segments closer to Tier A (see Table 5 below for additional details). The case follows the PBO unit from its conceptualisation to the point where it was rescinded, and presents a fascinating story of exploration under-adaptation, in which learning and intra-operative risk processes unfolded.

Table 5 - Research setting

Historical business in India focused on Tier A	Rationale for Localisation & exploration of Tier B/C	Rescinding of exploration (Tier B/C) and refocus on exploitation
"XXX India has always been a trading sort of a company where they import products and sell them to the top markets in India"	"The whole idea was to increase our local footprints to meet the local market requirements, and improve our whole understanding of the Indian market and customise our offering to what the Indian market needs, rather than just to look at US products to be sold in the Indian market"	<u>Rescinding of exploration:</u> "It is now a coverage model, so there is some movement towards the lower end, but nowhere close to the bottom of the pyramid, but there is definitely still some movement towards a lower end from where we started."
"We traditionally always focused on metros in the Tier A cities, so while that will always be our core market, we have not explored the other	"The rationalisation for it was to appeal to a broader cross section of society; i.e., make the transaction costs more affordable by bringing down costs per purchase and customising what is required in India."	"So we are clear now that we are only talking about skimming Tier B, and even in the way we define it may be misleading; we are looking at all those cities where we are not present as a XXX person, so it is just a penetration strategy."
markets at all. " "We don't have a large glaring history, or a project example in the past, which I can share with you that shows a grand Tier B and	"Healthcare growing at around 13 to 14% growth over the last few years and then going forward, that's what all positions say, but actually it is not a homogenous growth where 12-14% grows to 10-11% in your metros and top cities, actually around 18-19% in Tier B and C, so the real growth that comes from B and C and so much from Tier A, so that has been a powerful driver."	"When you think about it, we are still very small compared to what the entire market, so even the penetration of the top part of Tier B itself is such a huge leap for us, so to really look at the bottom of the pyramid is a bit unreasonable."
grana Her B ana Tier C play."	ariver.	"We are at this point in time not totally aiming the Tier C we are basically trying to fit ourselves into the upper crest of Tier B we are well placed in Tier A, we are well placed in core business, we already have some coverage in the upper crest of Tier B, but still we have some gaps which we will address through Project Outbreak."

Historical business in India focused on Tier A	Rationale for Localisation & exploration of Tier B/C	Rescinding of exploration (Tier B/C) and refocus on exploitation
	"Take the currency impact, for example, as the first point, that's only made the vision on localization even stronger; now we realized that the lesser we are dependent on the imports, the better it is, and then we have protection from currency fluctuations ' the rationalisation for it was to appeal to a broader cross section of society i.e. make the transaction costs more affordable, by bringing down costs per purchase and customising what is required in India"	<u>Re-establishment of exploitation</u> : "Under X (the old MD) and I guess the healthcare global team before the current one, we were growth focused so I guess this is where localisation came in. Now, with the new MD in India and global, I guess productivity, and efficiency, reduced costs and increased profit and margin game – all these things are key words right now in India. Yes, 3 years ago growth and punction was the force right powe
 <i>"Basically, [the idea] was there for</i> <i>over a decade in mind of one or two</i> <i>individuals and maybe in the past 5-6</i> <i>years we started pitching it. We</i> <i>thought we could really help to create</i> <i>a differentiation and small economic</i> <i>value to the customer where customer</i> <i>looking for a lower price point and a</i> <i>higher economic value so we had some</i> <i>idea, but finally this concrete thing</i> <i>came up when we had a chance to</i> <i>have our own local manufacturing in</i> <i>India so we could make customize as</i> <i>per the requirement, and that's the</i> <i>time we started working on [Tier</i> <i>B/C]."</i> 	expansion was the focus, right now it's consolidation, right now its <u>operational efficiency</u> and removing all the flab completely, removing unnecessary cost! Because of this mandate efficiency people do look at the PBO with a bit more with vigor in terms of are we getting maximum impact for our initiatives."	
	"So there is a lot of investment in localisation and that I think is going to stop for some time because we want to see what we are doing and get some benefits from what we have invested	
	"Going ahead is actually an economic compulsionin India is happening there so you better, you don't want to be the one left out because getting left out means that one day Tier A will also be taken away from you; we just can't hold onto it by not doing anything else."	already."

Historical business in India focused on Tier A	Rationale for Localisation & exploration of Tier B/C	Rescinding of exploration (Tier B/C) and refocus on exploitation
focused on Tier A	"Our market is absolutely mature extremely; each and every person sells the [medical plasters and bandages] today, and we found that some people from the lower tiers are now encroaching on our space, so we need to find new avenues for growth fast." "One day it starts shrinking then you are worried and one day when something from there starts attacking your core things, that's when you really get worried so that's what we have seen happening especially in my business that there are products and companies which are catering to the customers, and for them it will be a very simple up move; they will not have any challenge of cannibalization this side and that side, they will make their moves much more quickly. So we think it is good to engage at that level; of course you will gain growth in business, but I think when we started this it was a in fact keeping that competition at an arm's length, we will	
	engage you in your market only and we will not let you come over to our side and fight the battle so it's like that is how we had started thinking about it."	

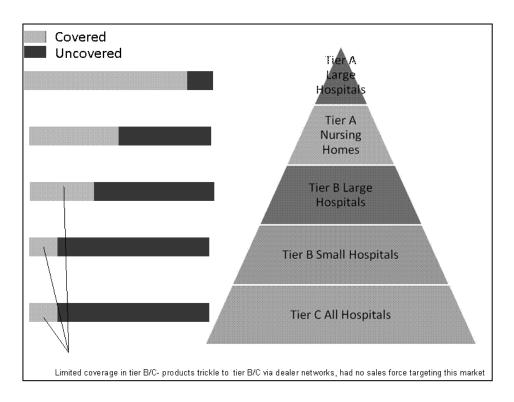


Figure 4 - Overview of XXX's market penetration illustrating negligible presence in Tier B/C

4.3. Data Collection

4.3.1. Background

Data was collected over a one and a half year period, from March 2013 to August 2014. It warrants brief mention here that prior to the commencement of the study I spent two weeks in Bangalore and Chennai in India, to get a sense of the landscape, as it specifically relates to MNC operations in disenfranchised market segments. This involved meeting with Senior Executives at FMCGs, owners of intermediary firms who consult to MNCs wishing to penetrate low income markets (e.g. VISHESH), indigenous Indian MNCs that focus on poverty prone market segments, as well as site visits to rural BOP communities in Hyderabad and Umbra Pradesh. This was beneficial for two reasons. Firstly, it afforded me the ability to acquire information that would facilitate my purposive sampling of the most appropriate case based on first hand interaction with Executives within

MNCs. Secondly, given the under-explored nature of my phenomenon of interest (the BOP), especially in the setting of large, established firms, it precipitated a number of significant changes en route, regarding how I viewed the key constructs. In particular, the experience provided valuable contextual information and directed me to eschew Business Model innovation as a promising theoretical approach, as ambisinisterity (failure to explore and exploit) appeared more relevant.

Securing XXX as a research setting perhaps constituted the most difficult part of the process, which took more than six months. However, once the XXX confidentiality agreement was signed, access to the organisation and its key members proved relatively straightforward until the end of the case, when the organisation fell into a state of flux. Thus, the time I invested to secure the organisation was well worth the effort based on the fit with my phenomenon of interest and the dearth of similar comparative longitudinal single case studies in the literature in resource-constrained settings (Linna, 2013).

4.3.2. Research Methods

My study relied on several sources of data with semi-structured interviews being the primary source of insight and the participant observation and archival data being used mainly to contextualise or corroborate the former. This approach was adopted in line with Flick (2009), who states that utilising multiple methods allows for between method triangulation, which improves the degree of accuracy of the emergent theory.

4.3.2.1. Archival Data

Starting with archival data, I analysed more than 1200 pages from secondary sources. Publicly available data included: press clippings on XXX's position on the BOP, Healthcare industry reports and XXX published annual reports. These were supplemented by client data (Flick, 2009), which included business cases, organisational charts, performance data and consulting reports. I utilised the

documentation I collected as a means of corroborating facts and the authenticity of some of the historical claims (e.g., why the PBO was started). Beyond context, archival data helped to identify learning outcomes (performance of the PBO unit), learning output (included in Microsoft Power Point presentations), as well as details about the medical consumables market, in terms of scope, topography and distribution. Although attempts were made to access archival data on existing XXX protocols and processes to inform the intra-operative risk-taking process, due to a lack of documentation on the part of XXX, this was not available. Furthermore, in collecting archival data, every attempt was made to ensure that all the data I received met the four criteria of authenticity (genuine), (distortion/error-free), representativeness credibility and meaning (comprehensible and clear) (Flick, 2009). To achieve this I solicited documents through the Head of Strategy/the head of the PBO who played an intermediary role, checking the authenticity of the documents sent to me, ensuring I had the correct and latest version, since version control appeared to be a problem when I started collecting information.

4.3.2.2. Participant Observation

In contrast to archival data, participant observation was undertaken to gain insight of XXX's operations at the BOP in situ (see Yin, 2003). Here, purposive sampling was used to identify relevant clients (hospitals and nursing homes) to visit. A visit comprised accompanying a PBO/XXX salesman to Tier B/C cities and towns. I negotiated access to as much variety as possible in my choice of sites (e.g., ten sites, rural and urban, public hospitals and private nursing homes) and XXX was accommodating. However, the topography and geographical expanse of India, combined with language barriers, made it impossible not to discriminate somewhat when weighing choices of places to visit, thus making some degree of subjective impressions unavoidable. In the end, given the transactional nature of the sales visits (I was only allowed a small window of opportunity to ask one or two questions, at maximum, and could not engage directly with patients) my existence was somewhat unobtrusive (Miles & Huberman, 1994), minimising my contamination of the setting. The results of the participant observation exercise were recorded in notes. Whilst the conclusions drawn from ten days of participant observation were of course limited, this data collection method proved invaluable in helping me to understand the context within which the PBO operated, the XXX jargon and many examples provided in the interviews. It also provided some, although limited, exposure to the BOP as a general setting.

4.3.2.3. The Interview

The vast majority of my data was sourced via semi-structured interviews. In total, fifty (50) interviews (See table 6) were conducted over four stages, to facilitate the analysis of dynamic changes over time in the learning and intra-operative risk processes associated with exploration under-adaptation (Eisenhardt, 1989; Flick, 2009). This process also enabled me to use subsequent interviews to validate information and initial findings gleaned from prior batches of interviews.

Interviews took place at XXX headquarters in Bangalore, with the exception of salespersons' interviews, which were usually conducted via telephone due to the nature of their job, which required regular travel to other regions in India. My first interviews involved the Head of the PBO, the Head of Strategy and other members of the TMT, who then helped to identify other informants via snowballing. As the interview process evolved, I also proactively ensured that I sampled across:

- three dimensions Exploration (informants involved in PBO), Exploitation (informants involved in the Core Team), and Executives (TMT).
- the different levels of hierarchy heads to middle managers to sales force
- the different functional areas (R&D, Marketing, Sales).

Gathering data from participants at multiple hierarchical levels and from multiple parts of the MNC (triangulation amongst respondents) is a well recognised approach for reducing potential biases, allowing claims to be confirmed and/or contradicted via multiple sources (Martin & Eisenhardt, 2010). At the beginning of most interviews in the earlier rounds, the Head of the PBO introduced me, illustrating his support for my research and requested that the informant be open/candid in answering my questions. Then each participant was informed that I signed a confidentiality agreement and the nature of the restrictions (which included anonymity). I then disclosed my background and broad research aims to put participants at ease and requested verbal consent to tape the interview, which was given by all participants, with the exception of one. The shortest interview lasted twenty-five (25) minutes and the longest one hundred and twenty (120) minutes, with an average of sixty-five (65) minutes. I stopped interviewing when I reached meaning saturation, which suggests that a more detailed understanding, new surprises, representations or insights would not be achieved by conducting more interviews (Gaskell, 2000).

Each interview was roughly divided into 4 parts. The first part focused on the PBO's history (or as the research progressed, the more recent history since my last visit), in order to establish a chronology of events from different vantage points within the organisation. To achieve this, I asked open-ended questions that focused on the informants' stream of experiences (e.g., Why did XXX initially enter the BOP?), in order to avoid broad speculation that was not grounded in specific realities (Bingham & Eisenhardt, 2011). The second part of the interview represented more general questions about the performance of the PBO, which was used as a proxy for learning performance as outlined in my literature review. In the second part, I also asked about the challenges or advances being made with respect to the PBO. These questions were deliberately non-directive (Eisenhardt, 1989; Bingham et al., 2007), in order to let the inductive process unearth new insights which were not predefined a priori. As an example, it was during this line of questioning that an informant indicated a staff freeze was an early hazard to the exploration agenda, and this precipitated more direct questions, which later informed my assertions about the intra-operative risk process. This approach accorded with Binghnam & Eisenhardt (2011:1443) who purport that "The technique of asking different questions (i.e., non-directive and

directive) provides a stronger grounding of theoretical insights and mitigates bias (Eisenhardt, 1989; Bingham et al., 2007)." The third part of the interview addressed learning more formally, with direct probing questions like: "What did you do to try to understand the Tier B/C market?" (types of learning); "What did you learn from that?" (content of learning); "Describe the process - break it down for me step by step?" (sequence of learning); "How did you use that information/What was the result?" (learning outcome); "What changed as a result of that learning?" (learning output); "What additional insights did you gain?" (learning output). Of like importance was the last part of the interview, which focused on the intra-operative risk-taking process, which included questions like: "What are the most important things that frustrated your attempts to tackle the BOP market?"; "What established rules/protocols/routines placed major restrictions on the PBO agenda?" These types of questions focused on examining the sources of, and reasons for, intra-operative risk-taking whilst questions like: "How did the organisation deal with that hazard?" and "When there were challenges what did you do? Why was that considered the best option?" helped to identify the type of intra-operative risk-taking utilised; e.g., skirting rules. [See Appendix A for a more detailed Topic Guide.]

On the whole, most key informants were interviewed more than once. And as per Eisenhardt (1989), brief notes on each interview were made to capture my initial impression. With the exception of a few interviews (which were transcribed by myself), all interviews were transcribed verbatim by a third party transcription company, recommended by the Indian Institute of Management (IIM) for its professionalism and confidentiality. This approach was used to increase the accuracy of the transcription, given some of the informants' strong Indian accents, references to complex product terms, regions/cities in India and occasionally Hindi terms, which made accurate comprehension of the tape recordings more difficult than face-to-face interviews. On receiving transcriptions, I reviewed each for accuracy and made changes where necessary, in line with my contextual understanding of the participants' responses. I also triangulated interview data with observations and archival data to improve accuracy and completeness. Furthermore, by juxtaposing real time and retrospective longitudinal data, potential informant bias was minimised (Golden, 1992; Leonard-Barton, 1990) and this increased my confidence in my interpretation of the evolution of exploration under-adaptation and the factors and mechanisms that drive it (Ozcan & Eisenhardt, 2009). Bingham & Eisenhardt (2011:1440) further outline the benefit of this approach "retrospective data enables more efficient collection of multiple observations of learning (leading to better grounding and external validity), while real-time data collection deepens the understanding of how events evolve (improving internal validity) (Leonard-Barton, 1990)".

Position/ Change of position	First	Second	Third	Site visit/
	interview	Interview	interview	discussions &
				observations
TMT – Head Division 1	х	x		
TMT –Head of Factory Project $ ightarrow$	х	x	x	
Head of Strategy				
TMT – Head of Strategy → Head	х	х	х	
Division 2				
TMT – Division 3 Head	х	х		
TMT – Managing Director (former)	x			
TMT – Managing Director (new)	х	х		
TMT – Quality/ Regulations	х	x *		
Manager				
Head of PBO	x	х	х	x
National Key Account Manager	х	х		
National Sales Manager	х	х		
PBO Sales/Area Sales Manager	х	х		
Regional Sales Manager $ ightarrow$ RSM &	х	х		
Product Portfolio Manager				
Black belt – Lean Six Sigma	х			
Marketing Manager→ exited XXX	х	х		
Management Trainee→ exited XXX	х			
Head of R&D	х	х	х	
National Sales Manager– Division 1	x	x		

Table 6 – Interviewees

Position/ Change of position	First interview	Second Interview	Third interview	Site visit/ discussions & observations
Regional Market Development	х	х		
Manager – Asia/Pacific				
PBO Area Sales Manager	х			х
Team Leader – Sales	х			х
Marketing Manager- Division 3	х			
Area Sales Manager – Division 3	х			
Area Manager - Project Outbreak	х	х		
Marketer – Division 3	х			
Regional Sales Manager – Division 1	х	х		
Regional Sales Manager – Division 3	х	х		
Marketing Manager – Division 1	х			
Regional Sales Manager- Division 3	х			

4.4. Data Analysis

Having collected my data, I began by synthesising the data into a case history, which described the chronology/order of events and the rationale behind various changes. Then I utilised thematic analysis, which comprised three stages to analyse my data. My general approach was guided by procedures recommended by Miles & Huberman (1994) and Eisenhardt (1989), and I also utilised NVivo software (version 10) to help codify and analyse transcripts (Bazeley, 2007). I chose to code the data from the two dominant perspectives together (rather than code learning first, and then intra-operative risk-taking), as this would help to examine the concepts individually, but also open up the potential to examine the interplay between the two constructs (Harrison & Rouse, 2015). I coded intra-operative risk from informants articulated statements. These statements emerged from the semi-structured interviews, as the archival and participant observation bore little relevance to this area. In contrast, the coding for the learning perspective relied heavily on responses to the semi-structured interviews, but also considered notes from the participant observation and archival data (particularly in the area of learning outcome). Here, I followed the approach utilised by Inkpen's (2005) case study of the NUMMI, where the performance of learning was based on a combination of statements from senior

management and objective data, where available. Furthermore, for both the learning and the intra-operative risk views, I considered something relevant when two members of the TMT or two levels of persons; e.g., TMT and another level, concurred, reflecting a collective understanding which is appropriate, given that the level of abstraction of success traps theory is at the organisation level. Finally, at this stage I also used memos to make note of the more nuanced points about how intra-operative risk-taking affected learning and vice versa.

The second phase of thematic data analysis involved developing second order themes through axial coding, which involved linking the first order categories together to suggest more abstract theoretical categories. Through an inductive, recursive process, I reduced the descriptive codes to interpretative clusters (Miles & Huberman, 1994). I assessed whether my new codes were qualitatively similar or different in character and purpose, using two questions to guide the clustering. The first question, "Is this code similar to that code?", helped me to develop internally consistent clusters, and the second, "Are these codes different from those codes?", was intended to ensure that the clusters were discrete. I reviewed this several times, going back to the data to refine codes and ensure categorical fidelity of the emerging codes. As my theory begun to emerge, I related my findings to ambisinisterity literature to highlight similarities and differences (Eisenhardt, 2009), making note of the confirming, as well as contradictory points.

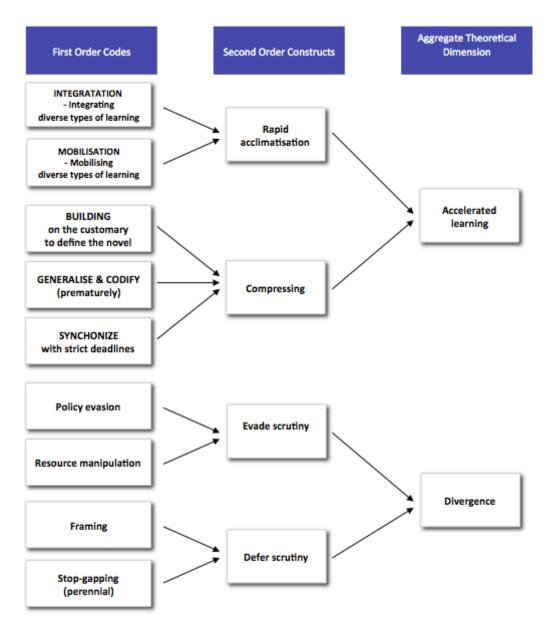
In the third stage, I began iterating between data and theory more frequently to inform the patterns I was beginning to see. Here, I focused on a wider array of theory – ambidexterity theory, incumbent failure theory, success traps, failure traps and process literature (e.g., see Burgelman, 1991/2002), and as a secondary exercise, learning and risk theory. I then consolidated the second order themes into two primary constructs – accelerated learning and divergence (see Tree diagram in Figure 5 below for details), and developed an initial

conceptual model. Chapter Five (5) presents the findings of this thematic analysis, the initial conceptual model and the chronology of key events.

The final phase of my analysis involved understanding how accelerated learning and divergence mechanisms dynamically changed over time. Here, I focused on "detecting the patterns" among the various learning and intra-operative risk mechanisms and used tabular forms and charts to map the dynamic process. As this part of the analysis process progressed, there was a recognition that different combinations of accelerated learning and divergence occurred and interacted at different stages of the under-adaptation process and this bore fruit in a re-conceptualisation of the conceptual model, the identification of force fixing and force fitting mechanisms to explain the interaction between out two dominant research domains and other novel insights associated. The results are presented in Chapter Six (6).

To close off this section on data analysis, it warrants mentioning that in both findings chapters, I highlighted parts of the narrative as thick descriptions (Lincoln & Guba, 1985), which provided support for various elements of my theory.





4.5. Limitations

Virtually all research has its limitations. "According to the positivist outlook, the biggest limitation of a case study has been its virtual inability to provide a sound basis for the *generalization* of study findings" (Mariotto et al., 2014:360). Mariotto et al. (2014) went on to say that where a single case study is involved, the implications of this limitation are even more significant. With that said

however, methodologically, in conducting a single case study I was able to reap the benefit that broad industry factors would be held constant, minimising potentially confounding influences. Furthermore, every effort was taken to observe rigorous research procedures, which are outlined in the section that follows.

A further noteworthy limitation of this study was associated with the binding confidentiality agreement. As a result, detailed product/proprietary information, or competitive market position data ascertained through archival data could not be included in this thesis as evidence. Nevertheless, this was not viewed as a major restriction because the process-based nature of my research meant that the confidentiality agreement had little negative impact on the presentation of the findings of my analysis.

In part related to the confidentiality agreement, there were two additional, but minor limitations with regard to the interviews conducted that also warrant mentioning. Firstly, interviews comprised only present employees, as the confidentiality agreement barred me from speaking to ex-employees without the permission of XXX. However, this proved not particularly restrictive because I had at least one interview with all informants who were heavily involved and who had influenced the decision-making in the period prior to the start of my unit of analysis, the PBO. Perhaps more challenging than the confidentiality agreement was the level of turnover and staff transfers during the period of my study. On the plus side, this piqued my interest for further enquiry, but on the negative side, it inhibited my goal to interview each key informant at least twice. Due to a change in the Managing Director and also the Six Sigma expert, I did not achieve this aim. This was initially concerning because, as Flick (2009) asserts, being able to interview informants multiple times proves critically important to facilitate the ability to work through an iterative process of data collection and theory development (Flick, 2009). However, the fact that all but two key informants were interviewed twice (with some even three times) limited the impact of staff turnover on my study.

4.6. Quality Standards

Table 7 below summarises steps undertaken (some already discussed) to ensure the quality of this empirical research in line with the six quality indicators by Gaskell & Bauer (2000).

Table	7 –	Quality	Standards
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Criteria	Evidence
Triangulation refers to approaching a phenomenon	Triangulation:
from two or more methods or	I employed different types of triangulation (Flick, 2006):
perspectives.	- Theoretical triangulation by combining different theoretical perspectives (including learning, risk etc.) (Denzin, 1989).
	- Between method triangulation via the use of interviews, archival data and participant observation.
	- Triangulation amongst respondents - Gathering data from participants at multiple hierarchical levels and from multiple parts of the MNC reduced potential biases of individual participants by allowing claims to be confirmed and/or complemented by multiple sources (Martin & Eisenhardt, 2010).
<u>Reflexivity</u> implies that before and after the data collection, the researcher is no longer the same person.	Care was taken during the participant observation not to contaminate the interactions. However, exposure to the BOP enhanced my need to explore research avenues that does no harm to the disenfranchised.
Transparency and Procedural clarity relates to the way the data is collected.	Many standard protocols for capturing emerging themes in field research were followed. e.g., With a single exception, all interviews were audio-recorded and later transcribed verbatim, notes were taken after each meeting, etc.
Corpus construction	As stated above, a broad range of respondents was selected and I only stopped interviewing when I reached meaningful

Criteria	Evidence
"is functionally equivalent to representative sampling and sample size, but with the different aim of maximizing the variety of unknown representations" (Gaskell & Bauer, 2000:347).	saturation.
Thick description provides sufficient details for the reader to assess the assertions of the research	Verbatim reporting of sources and where possible detailed quotes were used. Special care was taken to include quotes in relation to the context of the BOP so as to provide the reader with insight into the context in which this research was undertaken.
Surprise as a contribution to theory and/or common sense suggests that it is important that the research bears some contrary findings to the reader's expectations	Initially I expected this research to generate factors in relation to Business model innovation. The emergence of ambidexterity during the preliminary research trip was unexpected. Particularly unexpected was also the combination of mechanisms which precipitated exploration under adaptation.

4.7. Ethical Considerations

Of like importance to the quality controls underpinning this research was attention to ethical considerations particularly because the research context touches on the most vulnerable and disenfranchised/poor individuals in emerging market contexts.

Ethical considerations were guided by LSE's Research Ethics Policy and were kept uppermost throughout my research process. According to Saunders et al. (2009:184), research ethics is about "how we formulate and clarify our research topic, design our research and gain access, collect data, process and store our data, analyse data and write up our research findings in a moral and responsible way." The overarching ethical principle that I was guided by is that no harm should come to any party involved in the research, from those involved in granting access, to those who actively participated in the research and those whom the results might impact upon.

To ensure no harm came to the participants, I respected all tenets of the confidentiality agreement including interviewee anonymity which meant that quotations are not attributed to any named person or position within XXX (with a few rare exceptions), as in many instances only one or two persons held a unique post; e.g., Head of PBO. As a further precaution, I have liaised with the Research Degrees Unit and gained approval for redacting parts of this thesis before submitting it to LSE for electronic publication. Finally, it should be noted that although the focus of my research is on the BOP, I had very limited interaction with the poor and disenfranchised, and neither said interaction, nor any aspect of these research findings can be deemed to do them any harm.

4.8. Conclusion

This chapter discussed the research design and methodology utilised to address the research question: **How and why does exploration under-adaptation evolve in resource-constrained emerging market contexts from a learning and risk perspective? What are the mechanisms by which it occurs?** As such it outlines the logic behind the purposive sampling of XXX, as well as justification for the data collection approaches and a description of the data analysis methods. The chapter ends with a discussion of the limitations, quality and ethical considerations, which were taken into account in this research.

CHAPTER 5: Findings - The Mechanisms (Accelerated Learning and Divergence)

5.1. Chapter overview

My research examines: How and why does exploration under-adaptation evolve in resource-constrained emerging market contexts from a learning and risk perspective? What are the mechanisms by which it occurs? This chapter presents my initial findings, which briefly touches on the first question (which will be addressed more fully in the next chapter), but is arguably more focused on the second research question. With respect to the first question I present a chronological description of the development of the PBO, from its emergence to the point at which exploration was rescinded in favour of exploitation. Then I address the second research question by describing two categories of mechanisms that led to exploration under-adaptation: accelerated learning and divergence, which accord with my two research domains - learning and intraoperative risk-taking, respectively. By way of brief preview, from the learning perspective, I discovered two sets of mechanisms (rapid acclimatisation and compression) that precipitated under-adaptation by negatively impacting learning outcomes³¹ or learning output³². From an intra-operative risk-taking perspective, I postulate that the process of evading scrutiny and delaying scrutiny are key drivers of under-adaptation, as they signal that the MNC did not create formal discretionary space (e.g., through new protocols, schedules, and routines), to allow exploration to perpetuate.

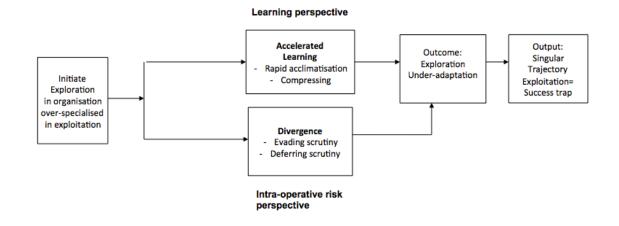
In this chapter, I also present my 'emerging' conceptual model (see Figure 6 below), where I initially considered divergence on par with accelerated learning – both contributing equally to under-adaptation. At the point at which this early

³¹ The outcome of learning based on a combination of objective data and statements from senior management.

³² The output of learning takes the form of new activities, knowledge, or insight gained (see Miner et al., 2001).

iteration of the conceptual model was developed, the interaction between the two categories of mechanisms was not fully established. Furthermore, isolating them temporarily in this chapter allowed for a singular focus on each set of mechanisms, ensuring that analytic emphasis on reciprocity/interplay does not distract from inquiry into the core processes and mechanisms themselves. It warrants brief mention here, that in Chapter 6, I revise the conceptual model by considering more fully the interaction between learning and intra-organisational risk taking mechanisms, and I also extend the analysis to include some insights related to dynamic changes in the exploration under-adaptation process.

Figure 6 – Emerging Process of Exploration Under-adaptation



5.2. Chronology of Key Events

This section establishes the chronology of key relevant events covering the period prior to XXX's establishment of the PBO until the retraction of its exploratory agenda.³³ It addresses the question how did exploration underadaptation evolve. The events associated with the key locus of my study are delineated over three phases: Conceptualisation, Ramping-up and Go-live. The

³³ To be clear, from a business standpoint the exploration initiative may be characterized as marginally successful as the organisation did achieve some new sales, albeit below expectations, as the PBO underperformed against its sales targets. However, the organisation failed to achieve its ambidexterous aspirations because by the end of the case, it retracted its exploration of the more disenfranchised segments of the market and refocused the organisation on exploitation

conceptualisation phase is associated with the first month of operation, where the primary objective was to determine the viability of the Tier B/C market, whilst the Ramping-up phase focused on structuring and resourcing the PBO. Combined, the Conceptualisation and Ramping-up stages comprise Birkinshaw's (1997:207) definition of "An initiative [being] essentially an entrepreneurial process, beginning with the identification of an opportunity and culminating in the commitment of resources to that opportunity." The Go-live phase therefore represented the period during which the PBO was no longer considered a 'project', but was considered a fully established Unit.

I present my event chronology in tabular form (See Table 8) in the tradition of other process theorists (e.g., see Burgelman, 1991), so that as I progress through the findings, reference can be made to the tabular narrative via a simple coding system that links aspects of the findings of the three key phases.

		Mth/	
		Yr	
	E1	1998	XXX Healthcare division established in 1988, which forms part of XXX India, a diversified company comprising of a range of products and services from automotive to graphical display technologies.
	E2	1988- 2008	For over 20 years XXX focused on the sale of imported medical consumables, such as medical tapes (plasters), antiseptic liquids and small surgical tools (like scalpels), as examples. Its target market included large and medium-sized hospitals and nursing homes located in the top richest cities across India (hereinafter, Tier A cities). Tier A comprised mainly the urban metros with good infrastructure (electricity, roads) and the existence of established intermediaries, such as distributors.
Before the PBO	E3	2000- 2010	Over time, Healthcare division's performance has been challenged. Performance has been sub-par (when compared with other subsidiaries) in the XXX group, due to: - imported product range, which exposed the subsidiary to substantive exchange rate risks, and - the highly mature/saturated market in which it operated.
Bef	E4	2006	In 2006, XXX decided to extend its reach beyond Tier A markets. To

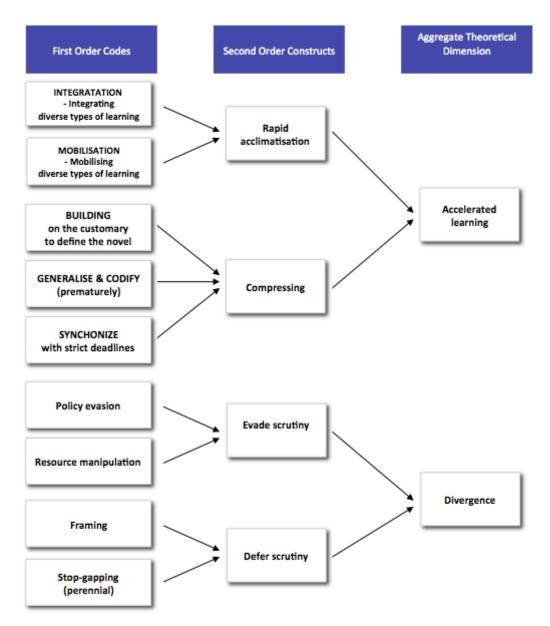
Table 8 – Chronology of Events (from inception to the retraction of exploration)

		Mth/ Yr	
			achieve this they needed funds to construct a factory, which would allows XXX to customise products to the needs of the Indian market, thus XXX began requesting funds from XXX Global for the factory.
	E5	2011	After five (5) years of requests, XXX Global approves the construction of a factory (YYY) in India, to produce medical consumables that are more idiosyncratic to the needs of the Indian population.
	E6	2011	The approval of the factory coincided with the launch of a new strategic intent, defined as LOCALISATION, which utilised a tag line 'For India, From India'. This involved manufacturing low cost products to meet the needs of the Indian market, and selling it to Tier B/C markets, which were defined as lower income, more price sensitive clients, located in less industrialised/geographically dispersed locations.
	E7	2012	Factory construction started with plans for release of the first batch of localised low-cost products targeted for Tier B/C in June 2013.
PBO Conceptualisation	E8	Jan 2013	PBO established with one member of staff as the sales force for the localised low cost factory products due to come out of the factory in six (6) months. His remit to cultivate demand for the 'localised' factory products in the more disenfranchised Tier B and poverty prone Tier C segments of the markets without cannibalising the organisation's Tier A strongholds. The emergence of the PBO meant that XXX Healthcare moved from a mono-dexterous firm (focused only on exploitation) to an ambidextrous firm (focused on balancing exploitation of the Tier A markets and exploration of the Tier B/C markets).
PBO CC	E9	Jan 2013	Head of PBO develops business case with management trainee and the TMT – approval from the Six Sigma process granted.
	E10	Jan- Jun 2013	The Head of the PBO afforded six (6) months to build its organisation. New leads and early success, combined with wide geographical coverage meant that more staff was needed.
	E11	Mar 2013	In order to ramp up the PBO for localised product go-live, eight (8) Managers transferred from the core team, due to a wider organisation staff freeze.
PBO Ramp UP	E12	June 2013	During the six-month period, fifty (50) additional uneducated contract staff members were hired via a third party company, but controlled fully by XXX.
PBO Ra	E13	June 2013	PBO ready for factory product release.
Live- Fully	E10	Jun 2013	XXX fell behind in the production process. As such products were not ready by July as planned, even though the PBO was ready
Live	E11	Jun2	As a response XXX decided that the PBO should sell Tier A products,

		Mth/	
		Yr	
		013	which had more complex features (sterility, water resistance, etc.), as well as more complex application processes. This was beyond the capability of the uneducated contract workers and led to lacklustre sales figures from the PBO.
	E12	Aug 2013	Second set back – When the low-cost products were ready, the unit cost was higher than anticipated, i.e., could not meet the liquidity and affordability requirements of the poor/disenfranchised.
	E13	Aug 2013	The organisation decided not to sacrifice margins and release the products at the higher price, placing pressure on the salesmen to acquire/increase sales.
	E14	Jun- Oct 2013	PBO sales continued to be lacklustre (40% of target).
	E15	Oct 2013	Representatives of the US Corporate headquarters visited to re-establish the primacy of XXX's margin-driven approach to profitability. This demanded a high price, low volume logic similar to the Tier A model, as opposed to the volume maximising (low price, high volume) logic required to explore Tier B/C.
	E16	Dec 2013	XXX recognised the difficulty in making the PBO productive by the new US standards. More specifically, the firm was able to estimate that it needed to sell ten (10) times more Tier B/C products than Tier A products, as the return per average hospital in Tier B/C was estimated to be 10% of the return per hospital in Tier A.
	E17	Jan 2014	In response, XXX decided to dissolve the structural separation between exploration (PBO) and exploitation (Core Team), replacing it with a dual reporting structure. In this new structure, the members of the exploration PBO team would be responsible to both the head of PBO (exploration), as well as the Regional Sales Managers (RSM) in the core team (exploitation).
ecline)	E18		PBO continued to underperform, still operating at 40% of target on average.
PBO exploration decline)	E19	Mar 2014	The Top Management Team reshuffled and a new CEO was appointed whose remit had a stringent focus on productivity, in line with the fiscal tightening emphasised earlier by American disciplining in 2013.
PBO ex	E20	May 2014	PBO focus changed from Tier B/C to middle of the pyramid. This represented a retraction of exploration.

Having outlined the chronology, I now present the results of the thematic analysis focusing on learning (accelerated learning mechanisms) first, and then intra-operative risk-taking (divergence mechanisms) second. Figure 7 below is presented as a reminder of the key constructs in the thematic analysis, on which the discussions that follow are based. Additionally for each Section further supportive quotations follow at the end of the section.





5.3. Accelerated Learning Mechanisms

I found evidence of accelerated learning mechanisms. The scope of these mechanisms include mobilising, soliciting, developing and integrating knowledge to meet organisational interdependencies without negatively affecting established Tier A/Core team operations. Whilst the range of accelerated learning mechanisms appears broad and diverse, the common denominator is the facilitation of faster entry and knowledge accumulation of the Tier B/C

market. In the early phases (E7-E9), XXX's motivation to engage in accelerated learning was driven by external market forces vis-à-vis two important threats, which made establishing and progressing the exploration of Tier B/C urgent. Firstly, XXX was late to market (laggard) compared to other competitors. Many of its competitors of equal stature, like Johnson and Johnson and Becton Dickinson, had, as a XXX Executive described "an established Tier B/C play" and were beginning to generate revenue from that segment. Thus, it was felt that XXX was playing catch up, which motivated an accelerated approach to learning and knowledge development.

"I know Johnson and Johnson and other people have this kind of model, so we are actually late in the game, so it made sense to do it now, rather than lose out later."

"While we were ignoring it [Tier B/C], or did not know too much about it, things were happening there; it was not just waiting for us to come and start selling there, so we find that there are companies who you may not innovative or something, but they just happened to be there ... and are hence gaining ground."

The second reason for accelerated learning in the early phases was to counteract the imminent risks associated with Tier B/C competitors encroaching on XXX's Tier A strongholds. Due to recent changes in regulations, a host of new indigenous, often smaller, Indian retailers of medical consumables were slowly encroaching on XXX's segment of the market. A pattern was beginning to develop whereby they established some expertise in the lower income segments and use this experience as a base to approach niches within Tier A. XXX therefore saw it necessary to quickly encroach on their Tier B/C market as a defensive strategy. "It was the threat of competition from there [Tier B/C] coming and hurting us in the Tier A strongholds that's driving us to think more and more about Tier B and Tier C."

"This is more flanking to ensure that they don't come and attack us here, so we need to go there [to Tier B/C]... so it's really a defensive strategy."

As exploration progressed (E10-E13), XXX's impetus for engaging in accelerated learning switched from external to internal motives. Firstly, XXX was motivated by the threat of idle capacity associated with the planned release of the localised laboratory products six (6) months after the PBO was established. Idle capacity would result if the PBO was not well-prepared (with deep knowledge of the Tier B/C market) to push the localised products as soon as they were launched. XXX therefore saw it necessary to invest heavily in accelerated learning.

"An immediate compulsion is that the manufacturing units take off, so once you have a new plant, the most important thing is what is it that the plant should be running with some good capacity. You just can't be running 10% or 20% because that will never make sense, so my immediate compulsion is that whatever we have made in our new plant needs to be sold, so there is special focus on the PBO from a very selfish perspective of making the plant run, and this is about asking the team to do what is our selfish objective."

Finally, XXX's dedication to learning at pace was precipitated by self-induced pressures. These were based on promises made by the Managing Director to Asia Pack (a meeting where the Asia directors present their plans and set expectations), which predicted exponential short-term growth from its Tier B/C exploration initiative.

"I guess X (Managing Director) was very clear even with our Asia Pack leadership that unless he sees the hockey stick (small dip in performance followed by exponential growth) in Tier B/C we are not going to invest in this further, though the worrying thing for me at that point in time was that typically the hockey stick is plotted over the x axis for a number of years, he wanted to plot it over months."

Combined, these factors impelled the use of two broad categories of accelerated learning mechanisms: Rapid Acclimatisation and Compression. I start by discussing Rapid Acclimatisation first.

5.3.1. Rapid Acclimatisation

Rapid Acclimatisation relates to efforts to build, integrate and share XXX's Tier B/C knowledge, whilst attempting to maintain high levels of performance in Tier A strongholds. It comprises: (i) <u>Mobilising</u>: mobilising diverse types of learning, and (ii) <u>Integrating</u>: Integrating diverse types of learning. Both exhibited traits that negatively impacted learning outcomes, thereby precipitating exploration under-adaptation.

5.3.1.1. Mobilising: Mobilising diverse types of learning.

Initially, I was surprised by the diversity in <u>types of learning</u> that was mobilised particularly in the conceptualisation phase (E8-E9). Firstly, I found evidence of vicarious learning (*Bandura, 1965*), as XXX turned to other industry players for clues about how to interpret the unfamiliar Tier B/C market;

"We looked into what business models other companies have been following, what have been the pros and cons of following a particular business model, how they have fought on the issues they faced, how have they been able to take corrective actions and what kind of corrective actions that have taken place, what kind of reporting structures they have ... So before we went ahead, we looked at different and various models and then decided on our model."

"So basically he (the head of the PBO) would look at companies like J and J and Becton Dickinson, what are they doing in that market, he would look at it from a business model perspective to determine what should his [the PBO] team look like, what kind of channel partners he should have, what sort of pricing he should have."

Consistent with past research, sometimes vicarious learning emerged from referencing ³⁴activities (Bandura, 1965), as one Director aptly describes it:

"...studying and reading combined with imagination." ³⁵

Other times, vicarious learning was achieved via socialisation (Bandura, 1965), where managers leveraged their relational networks for learning opportunities. This appeared to provide advantages over referencing in the form of increased specificity, with some information bordering on guidance and advice. As an example of socialisation, a member of the TMT described some advice about a rival institution gained by initiating a conversation with a friend about the profitability expectations in exploring Tier B/C:

"In fact, I was talking to someone from this company called Becton Dickinson (BD), they make IV needles and they did something similar, they did a sort of a PBO; so what he was telling me was that his experience was, that there is already a latent need for BD products in B and C markets that people were not able to access in the past because of lack of availability of those products. So he is saying just by having the distribution in place, for the first three years you don't have to bother about anything else, because that latent need will start you off with good sales and then to expand you need education."

³⁵ Several instances of referencing related to low cost Jugaad innovation ('make do' in Hindi), Prahalad's work on the BOP (2004), Harvard Business review articles on business models. In rare cases (four informants) spoke of specific success stories in GE and Uni Lever, which they were exposed to via published material.

Furthermore, vicarious learning also emerged from leveraging serendipitous opportunities from chance encounters with chosen role models. XXX, in line with DiMaggio & Powell (1983), was selective in their choice of role models, focusing mainly on Johnson and Johnson and Becton Dickinson, based on their traits of visible success and comparable stature. A particularly interesting story involving one of these role models occurred at a social gathering, where a XXX Executive took the opportunity to approach the Managing Director of Becton Dickinson. He wanted to get the latter's opinion on how far an MNC should go in reducing health-related product attributes (sterility, transparency, water proofing, adhesiveness) to meet the affordability and liquidity needs of the BOP, before sacrificing its quality brand name. As seen from the quote below, vicarious learning afforded XXX benefits beyond a purely commercial focus, to include philosophical and ethical advice to problems that perennially dog MNCs operating in poverty prone markets:

"So the CEO of Becton Dickinson [BD] had come [to an event] and I got an opportunity to ask him this question, so I said you have products which are amazing, like it is a typical MNC thing, you have awesome stuff, it has got real good quality, it has got nice attributes, great stuff, so my thing was the man on the street is a guy who probably hasn't had lunch and he doesn't know if he is going to get dinner or not and he has got a family to feed, so his reality is very different from what we are talking about so he would not be concerned if the needle is painless, he wouldn't give a damn, he is more worried about getting food right now. So BD has these syringes and these needles and stuff that they were planning to make and sell to [Tier B/C], so my question was why would they build in stuff which adds cost, why don't they make a basic stuff? So I think the answer he gave really sums up at a philosophical level why MNCs struggle with this thing [de-engineering products], his point was - I fail to find a reason not to give a human being in Delhi versus a human being in New York something which my scientists tell me is a minimum, so if sterility is required, I need to give sterile product; if it adds cost, so be it."

In the conceptualisation phase (E8-E9), beyond **vicarious learning**, XXX also <u>mobilised two additional types of learning</u>: immersion and analytical modelling mechanisms, which were used to garner more specific knowledge in situ. Immersion involved offline learning (Miner et al, 2001), where the Head of the PBO would travel for four weeks from town to town across India, engaging with potential clients to understand and map the needs of the Tier B/C market in more granular detail. An Executive explains in great detail the activities associated with immersion.

"[The head of the PBO] would basically go as a novice, or a person who doesn't understand the business, he will go and meet customers, he will go and meet 50-bed hospital owners, or a 100-bed hospital, he will go to 200-bed hospitals and understand how does that function in terms of providing services to the patients, clearing goods and then what kind of practice they implement. So he would understand it from the customer's perspective, and then he is meeting those customers and understanding from them their personal behaviour and their purchasing decision making; he would understand which are the key channel partners whom they buyin from and then he would go to those channel partners and understand what kind of role they play in this whole from the manufacturer to the hospitals, what kind of product portfolios they deal in, so it would give you a perspective of what channel partners should we look at, as we want to then grow rapidly so he would try to understand that. He would also try to understand what kind of margins they make at each level"

Immersion was complemented by **business analytics**. This took the form of research undertaken by a management trainee who used sophisticated econometric analysis to map the structure of the Tier B/C market (liaising with

salesmen on the ground for additional information in situ). The management trainee explained the key activities in business analytics:

"I just called them [sales men] up, gave them a product type, asked them to take a week or so find out from the market place how many products were moved last year and this year across all competitors, so we get an idea of what is the total surgical market for that particular product...then I built a regression equation. So the equation came to something like the estimated annual surgicals potential in a town X is 159,000 times the number of registered hospitals plus 19, 000."

As exploration progressed, in the Ramp-up phase (E10-E13), XXX also **mobilised new knowledge** through a limited range of experiments undertaken by the PBO team. Experiments³⁶ are a <u>type of learning</u> whereby the learner deliberately creates contrasting situations in order to generate systematic experience (Cook & Campbell, 1979 in Miner et al., 2001), or to see how actions under different conditions at one time produce varying outcomes at a later time. A Senior member of the PBO described how his unit created various sales pitches for the same product for target customers and went into the field to acquire first hand information about clients' preferences, replicating this test across multiple products within the Tier B/C region. By focusing testing on a small range of clients, the typical costs and risks associated with experimenting were constrained (Miner & Haunschild, 1995 in Miner et al., 2001).

"So, we have the first three months of test marketing where we check the product quality, we also took some select locations and decided to try our sales pitches in those places. We did this and we saw improvement after the three months of testing in how we sell and the packaging, then we went ahead with this exact configuration moving forward."

³⁶ Experimentation was dissimilar to XXX's traditional/exploitation approaches, referred to as Voice of the customer, which typically unfolded through surveys as part of ongoing activities.

Contrary to my expectations, I found evidence that this *wide range of learning types* resulted in positive exploration adaptation (*learning outcome*), in the form of early successes, whereby specific benefits were outlined in relation to each *type of learning*. Firstly, consistent with extant research, vicarious learning allayed *the challenges of uncertainty and primed XXX for rapid entry into Tier B/C* (Barkema & Schijven, 2008; Cyert & March, 1963).

"Because we wanted to be quick to reach there and then we can shuffle things around, because we are not good at Tier B/C and our understanding of the market, our best alternative was to look at other people who did it before."

Business analytics was used to compile a list of:

"Markets in Tier B/C where XXX can actually operate successfully, markets with a lot of potential, a lot of potential."

and immersion confirmed that a Tier B/C strategy was valuable and achievable:

"The first phase of the PBO was market mapping, to understand what is the market there, what is the kind of products that are being sold and so from that criteria it has been quite successful [since] we have a much better fix on Tier B/C markets and their potential than before."

Furthermore, the outcome of the experiments were also positively assessed:

"We are already seeing that using this approach [experimental] definitely improving our understanding of the specifics of what the channel partners, as well and the customers [nursing homes, hospitals] in Tier B/C want."

These findings were particularly unexpected, as it defied conventional logic presented by Levinthal & March (1993) that exploration returns are notably long-term.

As the PBO matured through the Go-live phase (E10-E17), <u>the range of types of</u> <u>learning significantly reduced</u>, as did the performance of the PBO.

"If you are trying to compare them [the PBO sales people] with expectations which are there, then they are not doing well, they are like 40% of what was expected."

In fact, during the Go-live phase, there was little evidence of explorationoriented types of learning (characterised by mechanisms used for distant search (Cyert & March, 1963), experimentation and variation), with the exception of vicarious learning. Thus it appeared that using external sources of learning was not a perfect substitute for internal sources of learning, and a mix appears more optimal to deal with the inherent complexities/peculiarities of the BOP. In conclusion, the data illustrates that mobilising a limited range of <u>types of</u> <u>learning</u> was associated with negative <u>learning outcomes</u>, and therefore was recorded as a source of exploration under-adaptation.

Vicarious Learning	Other- data analytics, experiments, immersion
<u>Socialisation:</u>	Data analytics:
"One of the companies with the most successful	"We had a management trainee
similar model is J&Jtheir Tier B/C model is very	working on understanding and mapping
successful if you look at the figures; we were inspired	the whole market in terms of the
by this and many other such companies as we entered	opportunities, how many cities are there
the market."	in India, how many hosp had > 1000
"I found from a colleague that companies who have	beds, how many had 500-1000 - the
done it successfully like Johnson and Johnson, they	whole classification.
have very strong information of the secondary sales,	"He found that there is around 400
so whereas we still go by primary sales, what we sell	crores of surgical business available in
to the distributor, so we know we have to eventually	non-metro cities and if we are able to
get that kind of info."	get about 15-20%, we can easily add
"J and J has this most awesome name in sutures	some 70-80 crores of business from non-
across the world, so in their model sutures are a part	metros, which is as good as or equal to

Table 9 – Supportive additional quotations: Mobilise diverse new types of learning

Vicarious Learning	Other- data analytics, experiments, immersion
of their PBO and their PBO model is very successful, but when I got some real data I found that out of I have to convert all this data for you so they have like 2.5 billion Indian Rupees of sale from their PBO model after 6 years; but out of that 2.5 billion, 2 billion is in sutures and only 500 million is in new [Tier B/C] products. In XXX my P & L (profit and loss) is made without Product X, which is like our 'sutures' and we have to sell only newer products. When people keep challenging me on the state of my P & L, I tell them [the Executives] just give me Product X; take it away from the core team [who focus on Tier A markets in XXX] and their P&L would be under threat too, and they [the Executives] do nothing, so right now, my P & L is the one under threat."	one of our biggest divisions." Experiments (with reference to learning from experiments to improve selling techniques): "So we didn't talk about products at all because if we go into a hospital and talk to them about tape they'd say forget it I'll use masking tape either that or a duct tape. So, if you go to them and say that we can help you grow your profits then you've got the edge." "I can assure you that nobody has thought of this final pitch which we use today."
Referencing: "There is a lot of Harvard articles on why new business models [like the PBO] fail; the top articles give five reasons which are all so true and all of them are in place here [in XXX] so whenever I got frustrated, I just go and read those points and solutions again." "I read about GE which has come up with lots of stuff, so they have the low cost ultrasound machine and the easy ECG machine and they have de-engineered a lot of stuff for that [Tier B/C market]." "Have you heard about Shakti [at Uni Lever]? – It's a very good way / example where companies can really make meaningful outcome for the country prosperous, improving lives, as well as make money, there is no reason why XXX can't do the same."	Immersion: "So we wanted him [The Head of the PBO] to have an unbiased perspective of the whole thing to basically accelerate the whole process, so we had him spend the first few weeks going to the market with no preconceived notions."

5.3.1.2. Integrating: Integration of diverse types of learning

Whereas **mobilisation** focused on <u>the range of learning types</u> that was marshalled by XXX, **integration** relates to the way XXX planned and combined (i.e., integrated) the various <u>types of learning</u>. This impacted <u>learning outcomes</u> in both positive and negative ways. I coin the term forward learning integration

to describe the adaptive version, which had positive consequences for exploration, and the term backward learning integration, which had **maladaptive** or negative consequences for exploration.

With <u>forward learning integration</u>, XXX pre-planned and coordinated a wide <u>range of learning types</u>, their order, their timing and how learning responsibilities would be dispersed across the different relevant parties, and later integrated to provide XXX with a wide variety of experiences. This structured deliberate approach to learning allowed XXX to familiarise itself with new B2B customers, build relationships with new distributors and identify and understand competitors.

"There were a few things happening parallely, so everyone was trying to get information on Tier B/C, but we also had [the head of the PBO] working on a very focused program of going out there to figure out what's going on and then parallely we had another management trainee working on understanding the whole market in terms of the opportunity."

Forward learning integration was achieved via regular face-to-face sessions. At these sessions the objective was joint sensemaking (bridging perspectives from diverse domains (Weick et al., 2005) between the PBO, internal consultant and the Top Management Team (hereinafter TMT)). Here, negotiation of the meaning took place, as well as identification of gaps and additional information required to improve the reliability of the insights, which spurred further data collection activities.

"In the beginning, I tried to build up the team to start thinking about Tier B/C now, brainstorm, think about what can we do, go out in the market and see how different people are behaving, talk to colleagues, review stories, whatever; start building up that whole thought process early, and then we would meet and chat about what we found." Again, quite surprisingly, forward learning integration was associated with **positive learning outcomes**, some similar to the benefits discussed under Mobilisation, but there were also links to early commercial benefits. <u>First, forward learning integration was associated with the effective assessment of market potential</u>:

"We completed the market mapping to understand what is the market there, what is the kind of products that are being sold, and so from that criteria it has been quite successful [since] we have a much better fix on Tier B/C markets and their potential than before."

Second, it was credited for defining a business model:

"When [the head of the PBO] started out, it was not a clearly laid out plan, it was a sketchy plan, and then he brought the moving parts together with X [the management trainee] and then we decided to move ahead."

Third, it led to new opportunities identification:

"We had a coordinated effort and went into the other cities that we [XXX] had never gone to. We went and found many uncovered hospitals who were willing to take our product. So we found a lot of new opportunities early, it was a great success."

Fourth, it led to the identification of new leads:

"They [the PBO] found all these new customers in new geographies; I was surprised how many good leads they found."

In contrast, during backward learning integration (where returns from learning were negative, as evidenced by PBO sales performance below target), much of the learning was uncoordinated and there were no longer regular joint consultations. I considered it backward because the knowledge and experiences

that existed were only integrated on the basis of concerns of need, productivity or profitability. As an example, when the relevant parties came together, the primary objective was no longer sensemaking about the idiosyncrasies of the Tier B/C market (which had played a prominent role in the joint consultation sessions in the earlier phases). Instead, these sessions focused on reporting and problem solving (assessing preliminary results and consulting about possible next steps to attain a useful outcome). On many occasions, there was also a final arbiter (generally a member of the TMT or an individual Executive), making a decision based on his/its conventions of validity, even though neither had direct experience or exposure to Tier B/C segments of the market. In the absence of formal integration efforts, backward learning integration and its lack of a structured 'joined up' approach resulted in exploration under-adaptation. This is well aligned to Zollo & Winter's (2002) proposition that deliberate approaches to learning are superior to "semi-automatic" experience accumulation in circumstances with high levels of heterogeneity and causal ambiguity, like the Tier B/C segment.

Forward Learning integration	Backward Learning Integration
"We met regularly and looked at what business models other companies have been following, what have been the pros and cons of following a particular business model, how they have fought on the issues they faced, how have they been able to take corrective actions and what kind of corrective actions that have taken place, what kind of reporting structures they have So before we went ahead, we looked at different and various models and then decided on our model." "We discuss Tier B/C on a regular basis and there is a buy-in from all the people [Executive] in terms of the strategy down to details of the implementation and execution of the plan."	"Absolute autonomy to the extent that the negative part about complete autonomy is they [the TMT] only get involved with the targets if they were more involved, then they will probably realize what's not working." "I [Head PBO] have a monthly meeting with them [the TMT] where I give them some performance, state some issues, some issues they say you need to figure out yourselves and there are some issues they do help out like for example training was becoming a big issue."
	and they are very afraid of any

Table 10 – Supportive additional quotations	: Integration of diverse types of learning
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5.3.2. Compression

In contrast to rapid acclimatisation, which affected <u>learning outcomes</u>, compression relates to shortcuts taken that negatively impacted <u>learning output</u> (what was generated as a result of learning; e.g., new activities, knowledge, or insight gained (see Miner et al., 2001)). It comprises (i) **Building**: Building on the customary to define the novel, (ii) **Generalising & Codifying**: Premature generalisation and codification, and (iii) **Synchronising**: Synchronising learning with aggressive, fixed internal deadlines.

5.3.2.1. Building: Building on the Customary to Define the Novel

Building on the customary to define the novel placed limitations on the quality of XXX's *learning output*. Here, XXX leveraged customary stakeholders (B2B suppliers, hospitals, nursing homes, distributors), to collect archetypical information (commercial oriented information) from novel sources (new clientele) to gain insights about Tier B/C. Stated differently, the novelty in XXX's learning process related solely to new clientele, but not the variety of information collected, or the variety of sources. A clear example of this is XXX's approach to immersion, where its search remained biased to commercially viable opportunities and did not encompass the needs of non-client beneficiaries (patient, government), even though its objective was to increase its understanding of the Tier B/C market.

OBJECTIVE: "The whole idea was to increase our local footprints to meet the local market requirements, and improve our whole understanding of the Indian market and customise our offering to what the Indian market needs." EXECUTION: "So although I was really focused in theory on the base of the pyramid market, right, or let's say Tier B and C, or Tier C even particularly, the actual details of that market in terms of, you know, appealing to the poor and stuff is not part of the process internally in the organization, so I did not focus on that."

"No, we did not consider interactions in terms of government offices, government was not a part of that exercise at this point."

Two key reasons were proffered for building on the customary to define the novel. Firstly, the firm wanted to place some structure to the high levels of uncertainty associated with the Tier B/C market. Secondly, there was the assumption that some sources of information were richer than others; i.e. can lead to faster productive outcomes (because XXX already knows how to work with these types of players).

"It is just not <u>productive</u> to look into all these new things... The focus of our team is ideally localized products, it is, but we have also been told that to make these guys <u>productive</u> we have to ensure that they have someone to sell to."

However, XXX missed critical information, and as the exploration initiative matured, gaps in *learning output* due to these shallow search trajectories (Davis & Eisenhardt, 2011) that ignored beneficiaries/non-traditional players and Government became apparent. As an example, despite immersion and experimentation taking credit for collecting detailed product-related data in situ, there continued to be huge gaps in *learning output*, as it relates to which product attributes were valued by the Tier B/C market:

"Even after all this, I don't know what the market need is, maybe they [Tier B/C] don't need all of these features, they just need [medical] tapes that are easy to fix and low cost, but everyone is now doing low cost tapes. We have a huge Tier A advantage in the market because we are hypo-allergenic, waterproof, etc., so should we use some of that advantage but make it cheaper? - Do they [Tier B/C] even want that? – I don't know."

Thus, XXX's failure to forge deeper/vanguard relationships with parties who deal directly with the poor, limited its *learning output* and by extension its ability to unravel complex Tier B/C issues, precipitating exploration under-adaptation.

5.3.2.2. Generalisation & Codification: Premature Generalisation and Codification

The need to ensure that knowledge related to the Tier B/C segment of the market could be generalised and then codified³⁷ quickly was noted by Executives as important. Two main reasons were proffered for this. Firstly, the business model used to explore Tier B/C was predicated on the use of primarily contract staff in the PBO, with an expectation that there would be potential for high levels of turnover. Early codification of XXX's learning about Tier B/C was required to develop standardised work products like effective sales pitches, as an example; allowing exploration to continue, without periods of stagnation associated with high turnover.

"I think the attrition levels, well the [Tier B/C] model normally assumes that there is some attrition because when you are talking about PBO it is a contract representative model, so that people will keep moving, but I don't think there will be much of a challenge because we have some base set ups - guidelines, sales pitch, so that when new people come, they will not take too much time [to get up to speed]."

³⁷ Codification – A way to structure interactions, what needs to be done by whom, and these actions are stipulated based on information derived from the environment about Tier B/C.

The second reason for generalising knowledge for early codification was the need to demarcate the interactions between the existing core (exploitation) team and the new PBO, so as to pre-empt issues of cannibalisation. It therefore served an important coordinative function, driving decisions on how to allocate work between the two divisions. Thus, based on this early codification, XXX aimed to reduce task and role ambiguity:

"The Tier A people would be more concentrated in terms of quality systems, in terms of implementing processes, which are defined as best practitioner's guidelines and protocols, so those guys would be more quality ... as you go down the tiers, say Tier B and C will be a cheaper resource ... there will be more compromises in terms of quality."

However, the strong emphasis on early/premature generalisation and codification resulted in maladaptive *learning outputs*. A particularly compelling example relates to the problems associated with early generalisations made about the distinction between Tier A and Tier B/C markets. Based on data garnered in the conceptualisation phase, XXX codified Tier A as metro cities with large nursing homes and hospitals, and Tier B/C as rural cities with small to medium nursing homes and Government hospitals. On the basis of this broad distinction, it allocated different zones and types of clients to the PBO and the Core team. Whilst there was some expectation that there might be very small areas of overlap, the reality as the exploration initiative unfolded, proved far more complex. Given the topography of India, a Tier C hospital can be placed in an urban Tier A city, or a Tier A specialist hospital can be found in a remote Tier B town. These idiosyncrasies were far more common than expected, and resulted in far greater heterogeneity and overlap between the segments than was initially anticipated. This oversight/under estimation prompted conflicts between the PBO (responsible for Tier B/C) and the core team:

"A lot of conflicts have come in between the PBO and the core team; which territory is ours, which is not ours, which account is yours, which account is not yours, something or the other, there were lots of conflicts."

"I guess the issues come also because of this territory demarcation..... there always used to be some business which used to happen in the Tier B/C markets that were awarded to the core team and all that, and they suddenly see a part of business going away and given to PBO."

Thus early generalisation and coding precipitated missteps, which negatively impacted how the exploration agenda unfolded. In the example above, it resulted in predefined work patterns which failed to accurately reflect interdependencies leading to conflicts, which contributed to maladaptive *learning outputs (exploration under-adaptation)*.

5.3.2.3. Synchronising Learning with Aggressive, Fixed Internal Deadlines

XXX's *learning output* also appeared to be encumbered by reciprocal obligations to several fixed internal deadlines, such as Six Sigma approval process at the end of the first month, and the release of factory products at the end of the sixth month, etc. This excerpt from an interview about the immersion process provides a good example of a *learning output* driven by time horizon limitations:

Executive: "After he went out to these town [BOP market], he [Head of PBO] reported back after his trips and we ensured that it did not get out of hand."

Interviewer: "Out of hand?"

Executive: "Yes, in terms of time, we had some internal deadlines which we had to keep."

Another example of synchronising that affected learning output related to restraints placed on patient capital learning (where a firm or department is allowed a period of time to search/increase its repository of knowledge about the Tier B/C market dynamics, unfettered by sales targets). Typically, a patient capital approach is advocated because firms operating at the BOP find it difficult to develop and prove their concepts within a short time frame. Kennedy & Novogratz (2013) (although writing in relation to patient investment capital in the BOP) state that the benefit is really derived over longer-term periods, years even. However, XXX, in an effort to align the end of the patient capital period with the release of factory products, compressed the former to six (6) months.

<u>"He said six months you quys just go out and explore, no questions asked,</u> <u>no targets, nothing asked."</u>

Of course having stringent deadlines is no proxy for pressured learning, and as such, repeated observation of aggressive deadlines alone does not fully demonstrate its overriding importance to the under-adaptation process. The important consequence is that these independencies between learning and fixed deadlines placed extensive pressure to produce learning at pace, which was first and foremost toilsome. One Executive stated that one reason why it was particularly difficult was due to the complexities of healthcare products, which has safety standards, lots of competitors, complex regulations and thus entails potentially significant planning and preparation that would precede the development of commercially viable options.

"I think some timelines that we took were too aggressive ...we could have maybe done more work and taken it more slowly; taken time and planned it out and maybe that might have helped. I think there were too many things coming out at the same time, too many new processes coming out at the same time... we should have realised that it would take longer time because being in this field that we are in, things are more complicated than the regular products." In addition to being toilsome, other interviewees stated that Synchronising compromised the quality of the learning output, as nuances were not allowed time to unfold, especially in relation to product attributes demanded by Tier B/C.

"We just don't know how much [product] differentiation had been enough or even if we do less of it ... in the past we just over did it too much [too many attributes]."

In consequence, close synchronisation between learning and fixed internal deadlines negatively impacted *learning output*, precipitating exploration under-adaptation.

Building on the customary to define the novel	Premature generalisation and codification	Synchronise learning with aggressive fixed internal deadlines
Interviewee: so there is a breed of people called the daily passengers and they are guys who work and stay 100km away, in the suburbs and they come to the city to work and then go back in the evening. So they will keep the same bus or the same train these guys besides the normal thing will generally go and carry product pack and forth, so they will go to the wholesaler and they will have a list of products that they need which the doctors and the pharmacists have told them and buy them in small quantities and put them in that small packs they have. At the end of the day they will go back home	"The truth about what they did in market is all over-laps, more over lap than tier segments, so you will find a small hospital in a Tier C city but doing some best neuro- surgeon of that place, doing work there and they don't mind buying the best or recommending the best. You see that and you see a large hospital, a Delhi or a Bangalore, having the fanciest infrastructure, but still it is penny-pinching as much as they can, so the market is full of over lapse but still, to generalize, the large and the big cities do end up getting classified as	"The down side a little bit is that a really good R & D requires a lot time, you need people just to be able to dream, you need people to be able to just read, you need people to be able to think to potter around the lab. Tried doing something and the productivity led model hurts a little bit because you have already got program that they are working on, that already limited on the resource list, so it doesn't too many people too much free time and I think that's most in R & D because R & D is expected to dream up the next big thing, and I think that in the long-term we will
and then they will go to the chemist and give, they will give the material to them, so you	<i>Tier A overall, even when we tried to spot these finer points, we still pitched them</i>	find that to be negatively co- related with this fast paced productivity approach, so my

Table 11 – Representative quotations for compression mechanism

Building on the customary to define the novel	Premature generalisation and codification	Synchronise learning with aggressive fixed internal deadlines
have a distribution network which is totally unorganized sector, so the gap probably makes enough to pay for his daily fare so he is good with that. Interviewer: So why doesn't XXX engage these guys? Interviewee: How would I take the guy, he would not have a vendor code, he would not have a ten pin number? It is all because if I need to make a payment that's what I need to follow the local laws, the local law says that the guy should be registered with the sales tax; he is not registered with the sales tax guy, so I could never use that model so this is called the 'jholawala model'; 'jhola' is the small bag that they carry anything."	as Tier A." "From when we looked at the market in the early days, the logic [early codified & generalised] we initially believed in, is we don't need smart people (salesmen for the PBO), we need to have people who will run from one hospital to the next and show their faces and use some tactic, but get some orders. But now I think that is not working very well, seeing the results we have, I would again go back to the key account thing, saying that more than 50-60 % of sales we do comes from just a few accounts per person, so he will get most of the sales from five accounts [in Tier B/C], and everything that is left is almost nothing at times."	hope is that the productivity model is temporary."

5.4. Divergence Mechanisms

The outcome of exploration under-adaptation was not only contingent on accelerated learning mechanisms. Examination of intra-operative risk-taking resulted in the identification of divergence mechanisms. Given that much was at stake should exploration not be successful (e.g. idle capacity, etc.), divergence mechanisms ideally aim to perpetuate exploration, but were inherently maladaptive because the firm did not fully adapt/create formal discretionary space (e.g. through new protocols, schedules, and routines), to allow exploration to perpetuate. The insights contained in this section were therefore drawn from

an examination of data associated with the following: *sources of, reasons for, and forms of intra-operative risk-taking. From these,* I identified two types of divergence mechanisms, one aimed at **evading scrutiny** and the other at *deferring scrutiny*. I describe each in turn.

5.4.1. Evading scrutiny

Evading scrutiny comprised **process evasion** and **resource manipulation**, whereby the firm relaxes established policies and procedures when following them would have taken too much time, caused a delay or permanently cripple the exploration agenda. Evading scrutiny was for the most part, a judgement call of the TMT and other senior members of XXX, who engaged in intra-operative risks-taking by going against best practices that have been established in the company through its long history of exploitation.

5.4.1.1. Process Evasion

Certain processes were identified early in the conceptualisation phase as potential *hazards* to the smooth continuation/survival of PBO exploratory initiative, therefore were deemed <u>sources of intra-operative risk-taking</u>. These formal organisational processes can sometimes be tricky to navigate because opinions may differ; rules were originally defined for exploitation and they require employees from different functions/foci to agree, which can lead to an impasse that can negatively affect exploration. For example, the PBO Head may want to progress the initiative quickly, but the Head of Regulation might see traps in moving forward so aggressively, and the Six Sigma expert may be concerned about the danger posed if they approve something that has not been properly vetted. In describing the *intra-operative risk-taking* in response to these hazards, several Executives and other Senior members of staff stated that XXX relaxed strict adherence to the official stage gate/Six Sigma criteria and process to allow the approval of the PBO business case with lenient levels of scrutiny. "Yes there is the stage gate process which sanctions the strategy, but it did not sanction business model to achieve that strategy ... it did not require anything to be clearly outlined."

The head of a key function alluded that it was typical for rules to be relaxed for Tier B/C related projects when compared with the approval process of other projects, which hinted that these initiatives were given preferential treatment:

"XXX has a lot of emphasis on the bottom line, so we may not get approval or may have to go back and forth before we convince our stakeholders, BUT purely in a Tier B/C innovation space, our ideas are really welcomed and are really easily supported and it [the approval process] doesn't hamper us at all."

The **reason** for process evasion as an **intra-operative risk-taking** response emanates from the importance of the initiative to the achievement of the larger localisation strategy to which the firm was committed. Several Senior informants also stated that this was necessary because of the high levels of uncertainty surrounding the Tier B/C market. This made it difficult to define a priori the level of detailed information required for the approval process.

"The reality on the street is this, people don't have food, their requirements are not brand conditional, they are just managing to get some piece of road where they can sleep probably and not get squashed by a truck or something, so that's what the reality is right there, its so different from XXX's reality."

From a larger perspective however, more lenient protocols upset expectations within the company and is a form of unnecessary risk-taking from the perspective of some interviewees. As an example, a Six Sigma expert (who was not involved in adjudicating the original Tier B/C business case) states:

"Of course I don't know the details, but my feeling is that the gate process should be stringent on [the presenters] understanding Tier B and C very clear needs, or else we should have not gone forward. The process is there for a reason to safe guard the company ... and if the [business] case can't pass the internal test, there is very low likelihood that it can pass the market test."

In summary, process evasion is a type of divergence mechanism, which is used when time-critical cross-disciplinary decision-making has to occur. Here, the process boundaries are temporarily relaxed rather than adapted to allow exploration to perpetuate in the short-term, and as such is associated with under-adaptation.

5.4.1.2. Resource manipulations

The second form of evasion relates to resource manipulations. The <u>source of this</u> <u>intra-operative risk-taking</u> emanates from the need to compromise resource limits in order to progress the exploration agenda in the short-term. The reason for this is that existing exploitation-oriented limits aim to enhance productivity and efficiency at the expense of flexibility required for new exploration-oriented projects, like the PBO. Another **reason for resource manipulations as a form of intra-operative risk-taking** relates to the potential for disaster in terms of idle laboratory capacity, as an example, should the appropriate resources not be released.

On account of these reasons, the firm engaged in **three types of resource manipulations**, in order to evade scrutiny. The first I refer to as the **transfer mechanism**, whereby XXX transferred employees from the Core team to fill the eight Area Service Manager positions in the PBO, in order to bypass the *hazards* of resource constraints brought on by a hiring freeze. An Executive explains:

"This was a huge decision because this year we have been squeezed on man power; there is a global squeeze in man power and no replacements, forget new additions, there has been no replacements. Despite that, both [Division Heads] gave four key resources of sales guys. For their team to do it, especially when there was no sales, because the factory had not started, for six months, is unprecedented."

XXX also utilised an off-budget expenditure³⁸ mechanism to evade scrutiny. As an example, it hired the rest of the PBO sales force (beyond those that were transferred from the core team) via a third party company, making the PBO staff a variable operating expense. In so doing, the contract staff is recorded in the Profit and Loss statement as an expense, escaping payroll oversight, allowing the firm to skirt restrictions related to the staff freeze rule:

"So the rest of the PBO is outsourced [beyond the 8 ASMs] because of the staff freeze, so it is only a variable cost, that's a smart part of the business model."

Additionally, there was evidence of other forms of resource manipulations in order to evade scrutiny through the use of a **splitting mechanism**. Here, a full time job would be subdivided into two parts, each role being filled by a different individual. In consequence, salary costs remain constant, whilst increasing the effective manpower in the firm.

A common denominator of the resource manipulation mechanisms was their emergent, and contextualized nature, and thus could not be predicted. Several Executives simply stated that you need to accept a certain amount of increased risk in order to provide an immediate and flexible response that would allow exploration to progress:

³⁸ Evades effective budgetary control by concealing the true amount of staff working for XXX

"In this case, because it was such an important project for localisation and we believed in it, we took a decision that we needed to resource this and move forward much faster than usual."

However, such **intra-operative risk-taking** resulted in the commitment of large amounts of resources to the unproven Tier B/C project, exaggerating the potential cost of failure. Later during the Go-live phase there was evidence of the maladaptive qualities of these early resource manipulations, which frustrated performance. An Executive explained that early resource manipulations resulted in investment led growth (growth/penetration of Tier B/C, fuelled by increases in resource allocation), as opposed to productivity led growth (growth motivated by increases in per worker output). The former was simply not sustainable within XXX.

"You must have heard about productivity led growth versus investment led growth, so there is a lot of investment in the PBO, and that I think is going to stop for some time because we want to see what we are doing and get some benefits from what we have invested already."

5.4.2. Deferring scrutiny

In addition to evading scrutiny, the findings show mechanisms which aim to defer scrutiny. As a bit of context, exploration is by definition stochastic process, which cannot be predetermined a priori or controlled (e.g. Levinthal & March, 1993), and as such it takes time for the value of the investment to be brought to fruition. In response, deferring scrutiny mechanisms are **forms of intra-operative risk-taking** that allow the PBO time for its benefits to fully emerge. Stated differently, deferring scrutiny mechanisms divert attention from the shortcomings of the exploration agenda until it becomes/in hopes that it will become consequential. This contrasts with evasion mechanisms, which skirts convention, thereby immediately making the PBO consequential.

5.4.2.1. Framing

The first mechanism used to defer scrutiny was framing. Framing was used to address threats to the personal reputations/tenure of those championing exploration should it not be successful. These professional reputations were at stake because the members of the TMT, having lobbied for the development of a local laboratory and the targeting of Tier B/C, now have a personal stake in seeing the PBO prosper. Should the Tier B/C agenda not prosper, blame could be directly apportioned to them, not only within the country setting (in larger XXX India), but at the Asia Pack level. Thus, the TMT utilised framing mechanisms to deflect attention off the shortcomings of the PBO in the short-term, in hopes that it will become consequential in the longer-term (typical of deferring scrutiny). These intra-operative risks only pay off if the PBO becomes consequential in due course.

Interestingly, as the Tier B/C agenda unfolded, new interdependencies arose, which were positive initially in the Conceptualisation and Ramping-up phase, but then became increasingly negative in the Go-live phase. During the early/successful phases I found very limited instances of positive framing, even though the period was deemed a success. Instead, there was an overwhelming recognition that there were too many unknowns, that the path ahead for the PBO would be arduous and early benefits were not a predictor of future performance (See Table 12).

Table 12 – TMT early perceptions

Top Management Team

"Intuitively, I think we are very almost certain that this is the right way to go. Of course we don't know what troubles and what blocks will be there, that is always there, but we think we are in the right path, in the right direction."

"It is too early to say, we just implemented these things about two months back."

"All of us are in a learning phase still, so we don't have all the answers perfectly well."

"How we are currently, I think we have a long way to go; we have our intentions, we have our aims, we don't have anything figured out, that's my beliefs."

"We have a strategy of entering the low cost market, we are learning also as we go along and we plan to make a success of it, but it will take time."

"It's in India, it's for India I keep saying this, that it is good to declare your intention, but to get there we can learn only by playing and following the best."

However, during the Go-live period where performance was lacklustre, the TMT engaged in various forms of positive framing as a form of **intra-operative risk-taking**. One form of positive framing **emphasised past successes** as opposed to present performance gaps. This often came in the form of **blanket statements of optimistic sentiments** about the PBO initiative:

"I think the strategy is very clear, we want to execute it and our brand is committed to execute it, so if you want to really know what it means that we have put a lot of money and resources to localize the healthcare products and once the factory ramps up, the sales will start rolling in and we will make it a success."

At other times it manifested in **making pros out of cons**, as in the example below. This illustrates an overwhelmingly positive response in the context of a question about the one of the poorest performing PBO sales territories which was plagued with high levels of contract worker turnover.

"I think the attrition levels are high, but the model normally assumes that there is some attrition because when you are talking about project outbreak it is a contract representative model so that people will keep moving, but I don't think there will be much of a challenge because ... You will have some new people coming, they will take some time too, but they will take their sales to the next level." Positive framing activities also occurred at regional (Asia Pack) XXX meetings in order to save face (*laj rakhane vala*). *The concept of saving face* is rooted in the Indian ethos where people act to minimise loss of dignity. The quotation below aptly highlights the concept of saving face given that these comments were made well into the period of PBO under performance.³⁹

"When we presented this idea [of the PBO] to the Asia Pack (a meeting of XXX's Asia divisions) level and to the global XXX healthcare level, people are hugely excited because they are now realizing that the India story is not just about the Tier A metros, but also about B and C, and they know that XXX has now done this so they are closely watching, waiting and watching to see how is this progressing, so I am very excited about this project. Other groups and other businesses have been asking me to explain this and to give suggestions on that because they are also keen on grabbing this. So from outside healthcare and from outside India, the feedback has been hugely positive; everyone wants to know about this project, they want to know how we are doing this stuff, so very good feedback about the whole thing."

When a positive spin could not be placed on an issue, I also found **positive reframing** as a means of **intra-operative risk-taking**. A particularly interesting example relates to the association between XXX's Tier B/C strategy and the BOP predicate, which was well recognised in India in the slogan 'doing well by doing good'. In the early phases of the project, the TMT allowed associations between the Tier B/C strategy and the morally loaded BOP paradigm comprising discourse such as 'positively impacting poverty' and 'doing well by doing good'. Once it was clear however, that XXX's Tier B/C strategy lacked evidence of social goals, relationships with NGOs or non-traditional village leaders, engagement of the

³⁹ Such positive framing was deemed necessary in the context of prior presentations made by the Healthcare MD to the Asia Pack about XXX's positive plans for exponential growth in Tier B/C.

poor, all typical of means by which MNCs illustrate coherence with an authentic BOP strategy, the TMT reframed the organisation's focus:

"We used to talk about going down to the base of the pyramid, now it's about managing the pyramid ... that's what we are doing: managing the pyramid."

Unfortunately **intra-operative risk-taking via** positive framing did not pay off, as the PBO did not become consequential in sufficient time, and the US intervened.

"When the going is good, you don't bother about little inefficiencies you see and lots of things are swept under the carpet, but when your profitability is under pressure, everything goes under scrutiny and you have to look at everything in detail."

As a result of this review, the TMT was reshuffled and a new member (Head of Regulations) and a new Managing Director were appointed, whose remit was to make the PBO more productive.

"Under X (the old MD) and I guess the healthcare global team before the current one, we were growth focused, so I guess this is where localisation came in. Now, with the new MD in India and global, I guess productivity, and efficiency, reduced costs and increased profit and margin game – all these things are key words right now in India. Yes, three years ago growth and expansion was the focus, right now its **consolidation**, right now its <u>operational efficiency</u>, and removing all the flab completely, removing unnecessary cost."

In conclusion, positive framing was a form of **intra-operative risk-taking** utilised by the TMT to allow the PBO time to become more consequential within an exploitation-oriented environment. Such positive framing during periods of negative performance was inherently risk-taking, as the TMT was putting its reputation on the line should the PBO performance not rebound in adequate time to be aligned with the positive perception it was projecting. Thus, while XXX can **defer scrutiny** in the short-term, it was not a sustainable practice for addressing exploration challenges and therefore considered under-adaptive.

5.4.2.2. Perennial Stop-gapping

Stop-gapping is the final form of **intra-operative risk-taking** used to defer scrutiny in order to cope with time-critical task demands and high levels of uncertainty of exploring Tier B/C. The reasons for the use of stop-gapping mechanisms were multiple, but primarily the **source of this form of intraoperative risk-taking** was driven by incomplete knowledge or emergent complications XXX had not foreseen in the exploration process. On the basis of this, XXX switched to a new trajectory, where "typical" ways of evaluating problems, testing solutions, etc. appear to take a back seat to providing urgent intervention to pre-empt potentially negative fallout that could threaten the morbidity of the exploration agenda.

An interesting example of stop-gapping is when the TMT found out that the local factory products, which were designated to be sold by the PBO, were delayed. This meant that the PBO team would be idle. Instead, the TMT made an instantaneous decision to self cannibalise by allowing the PBO to sell Tier A products and compete with the core team.

"I guess that happened because there was a delay in the launch of few of the products ... the team found that the outbreak team had more time on their hands so why leave them idle."

"This was the organisation's decision, that the PBO should sell the same products as the core team, rather than remain idle in response to the factory being late, it is just not productive to have these guys sitting there." "So the simple solution is that we don't do it [because the factory was late], but then [the Executive's] point very clearly was, how will you make them [the PBO] productive enough? If we wait on the factory, they will never show that they are productive enough."

Another example was when the unit cost of production of the localised products was higher than anticipated, and XXX decided to release the localised products at a higher price, even if it meant that they were more expensive than its competitors.

"So if you ask me on the exact volume to volume basis of a particular product, we are definitely still more expensive. We try and offer a better value proposition, that's what we do, because we won't compromise on margin."

These two examples show the inherent nature of stop-gapping, which involves dynamic improvisation and an element of bricolage; that is the patching together working solutions with the knowledge and resources at hand (Weick, 1993). The third element of stop-gapping was the intention that the course of action was temporary, with the expectation that these problems would be addressed with time as the factory becomes more adept at manufacturing, decreasing its average cost of production with time.

"The XXX overheads and all are initially overwhelming, but with volumes when you add more and more products, when you spread the cost across many products, when you spread the cost across volume, there is bound to be an economic advantage to us, which is immediately not visible when you get in and you come in because there the cost is loaded among fewer products and smaller volumes."

However, whilst stop-gapping itself is risky, XXX engaged in perennial stopgapping, where these temporary measures were often not rescinded and perpetuated in the long-term. A key reason that accounted for this was the high degree of organisational flux within the organisation, in the form of a new CEO, shifting Executives, visits from XXX's headquarters, etc. It was indicated that the pace of these changes were not typical within XXX and occupied a large part of its TMT mindshare. As a result, the stop-gap measures were allowed to fester and resulted in long-term maladaptive consequences. As an example, the decision to sell products at a higher price than the market can bear created incompatibilities between its product range and the Tier B/C niche, precipitating exploration under-adaptation.

"I just don't think that is very realistic because I think our probability of our success would drop because the market is a market which can only afford that much price for such value. Just because we decide internally that we won't sacrifice our margins does not mean anything to the market, so I still feel like having cost effective products is the only way to penetrate the Tier B and C market."

"XXX's problem continues to be pricing. XXXs pricing is conservative, does not like to make a loss, have loss leaders, or even experiment with pricing. XXX's pricing strategy results in XXX sales man having to spend too much time in defending the price versus expanding the sales."

As a result:

"Our sales are not as it could be because the market is a market which can only afford that much price for such value. Just because we decide internally that we won't sacrifice our margins, does not mean anything to the market so I still feel like having cost effective products is the only way to penetrate the Tier B and C market."

"We are not still not in a position to do the exponential growth [in Tier B/C] for multiple reasons, because I still don't think we have the right cost points, we fool ourselves by thinking setting premium prices, our products are going to sell because of their benefits, it doesn't work." In conclusion, XXX utilised stop-gapping as a temporary expedient, to be replaced in the long-term with more optimal solutions. Stop-gapping is inherently risky, as it often warrants short-term inefficiencies with the assumption that it will be counteracted by more optimal solutions and future returns. It aims to delay scrutiny, by addressing immediate challenges, allowing exploration space to become more consequential whilst it works on finding more sustainable solutions. However, perennial stop-gapping results when these temporary measures become permanent fixtures, preventing the firm from being long-term adaptive.

Evade scrutiny	Defer scrutiny
Process evasion:	Positive framing:
"[The Head of the PBO] gave the	"In terms of results I think we need to talk next year.
presentation on the business model and	Next year I am sure I am going to be one of the
then the opportunity presentation was	happiest persons in XXX next year I am sure that
also done by that management trainee,	next year we would have exceeded all of them [sales
and [we used] both of them combined to	targets] and then let's see who they are going to be
take an informed decision on how fast we	talking to. So that's what I keep telling all my guys,
wanted to move, and then we had the	don't crib about your issues right now to anyone,
approval of all the members to go ahead	just start doing some sales, you will see who they
with this program."	will talk to next year."
Resource manipulation:	"There is no shifting strategy, there is an evolving
"The [Director of Division 1] gave us four	strategy for sure and which is always for the
people from his group – he gave us a lot	improved our operation. The strategy is only
of time, six months we go out, explore	improved continuously, from when we started to
areas (untapped markets), no question	now it has only improved."
asked, nothing asked, all resources givenOther Division head gave four people also."	<i>"If you ask me, the emergence of a project like project outbreak to the business, the overall execution and philosophical understanding, inception and over execution and journey, so far has</i>
"we have given [Project Break Out] some	been very right to this project, so the future looks
of our brightest people but down	promising in this. The only thing I would like to give
below that we will hire people who will be	a word of caution to myself and others also is that
doing the leg work. Actually, we hoping	this project needs to be made successful, and the
on hiring a brand new organisation	amount of effort required are still very high so at no

Table 13 - Representative quotes: Evading and Deferring scrutiny

Evade scrutiny	Defer scrutiny
through a contract model to deal with	point in time, myself or anybody, my regional
some challenges we have."	managers, my team can be casual about it. This
//	project surely has promise because this is the most
"There was no constraints on resource allocation other than don't want long-	relevant and right project we have embarked upon."
term commitments, so the sales reps were	"Is just a matter of time because eventually B and C
hired in a way that they could be	is a market which is growing at a very fast pace, the
expensed rather than become part of the	only thing is that the right infrastructure and facility
full time staff."	has to be put in place for them to overtake, and I am sure that eventually B and C will be bigger market
<i>"So then we got these eight people, and these eight people started to work, and</i>	for a country like India."
when they started to work, one thing came out again, because of all the leads	Stop gapping:
and opportunities we realised then even	"Because the localised product took time to come
with these eight people we can't do	and the PBO team was ready and were getting
enoughso we then hired more staff	leads, we were told to sell everything."
by outsourcing because of the staff freeze."	<i>"The focus of our team is ideally localized products, it is, but we have also been told that to make these guys <u>productive</u> we have to ensure that they sell</i>
	everything that can be sold."
	"Is a little confusing for them [the PBO sales force];
	they were supposed to focus on the factory, but then suddenly it became Tier A products also."

5.5. Discussion

The key question this chapter aims to address is related to the mechanisms of exploration under-adaptation in a low munificence environment, from a learning and risk-taking perspective. I found, consistent with the sensitizing questions, that accelerated learning and intra-operative risk-taking did indeed precipitate exploration under-adaptation in the long-term although surprisingly there was a period of success in the first months, during the initial phase (Conceptualisation and Ramping-up stage).

5.5.1. Learning

From a learning perspective, exploration under-adaptation was associated with accelerated learning mechanisms, such as a lack of deliberate integrated learning approach which inhibited internal knowledge transfer (Argote & Ingram, 2000) during the Go-live phase. More specifically, the findings illustrated that the difference between success and failure in the learning process was associated with the level of intentionality (Zollo & Winter, 2002), which is defined as the dedicated investment in planning, articulating (e.g., mentoring systems, debriefing processes) and codifying knowledge (e.g., in information systems, manuals). Broadly, high levels of intentionality were associated with success and low levels associated with failure in our case. However, the findings depart from Zollo & Winter's (2002) assertions in showing that early codification also made XXX susceptible to errors and were a source of under-adaptation later in the process. Recall the case of early codification of the Tier B/C boundaries and the negative impact it had on the interaction between the Core Team and PBO because it precipitated an over lap in tier sales territories. An Executive stated that it caused the PBO and the core team to compete rather than collaborate, and led to palpable tensions / negative fall out within the organisation.

One caveat however, is that the negative fall out of early codification on exploration under-adaptation may be contextualized (that is, very specific to low munificence markets). Indeed, international business literature illustrates that cultural differences [as in our case, between the TOP and the BOP] can create a knowledge gap that prevents a MNC from fully deciphering elements of the local environment (Luostarinen, 1980; Petersen, Pedersen & Lyles, 2008 in Zang et al, 2013), inhibiting the effectiveness of early coding.

Other learning-related reasons for under-adaptation included shallow search trajectories (Davis & Eisenhardt, 2011). Evidence from development scholars and practitioners (e.g., see Mair & Martí, 2009; Anderson et al., 2010) who deal with low munificence environments, like Tier B/C, emphasise that failure to consider

'deeper search trajectories' that include the role of non-traditional partners (religious, NGOs) puts exploration of the BOP/Tier B/C at risk. This is because it lacks authentic engagement with complex implementation issues and beneficiaries of the health services (patients) in the market. Although these shallower search trajectories may temporarily ameliorate MNC's uncertainty and increase speed of entry, deeper relationships with taken-for-granted institutions that "identify categories of social actors and their appropriate activities or relationships" (Barley & Tolhert, 1997:97) are paramount to success. In consequence, XXX's shallow search trajectories (Davis & Eisenhardt, 2011) therefore also jeopardised its exploratory efforts, precipitating underadaptation.

In general, much of the learning related findings perhaps appeared well aligned with current theorising, with the exception of one important point, that early exploration led to success which is counter-intuitive to the dominant perspective that exploration generates distant returns (See Levinthal & March, 1993). At first it appeared that early successes could be partially attributed with the extensive use of vicarious learning, which, according to Gavetti & Levinthal (2001) is associated with improved exploration performance. However, during the failure period I also found evidence of vicarious learning being extensively used, which suggests that it may not have been a key differentiating factor. Instead, success appeared to be associated with employing a wide range of types of learning concurrently (vicarious, experimentation, immersion, experiments, as examples). This challenges established precepts that "too much experience heterogeneity complicates the identification of causal relationships" (Barkema & Schijven, 2008:613) and is often problematic for firms in early stages of exploration.⁴⁰

⁴⁰ The underlying logic being that high levels of heterogeneity stymie learning because it impels a high level of causal ambiguity making it difficult to unravel "causal relationships between the decisions or actions taken and the performance outcomes obtained" (Zollo & Winter, 2002: 348).

5.5.2. Intra-operative risk-taking

Perhaps the more novel findings in this chapter relate to the intra-operative risktaking perspective. I contend that this construct allowed for a number of significant advances for theorising success traps, as it specifically focused on exploration-oriented risk-taking within an exploitation-oriented context. Here, I identified unique mechanisms – evading scrutiny and deferring scrutiny, which have not been previously defined in the ambidexterity literature to the best of my knowledge. Evading scrutiny implies a more permissive and benign selection system, allowing the PBO to go forward without being seriously challenged or questioned, whilst deferring scrutiny allowed the PBO time to mature. Stated differently, deferring scrutiny mechanisms divert attention from the shortcomings of the exploration agenda until it becomes/in hopes that it will become consequential. Whilst evading scrutiny mechanisms, skirts convention, thereby immediately making the PBO consequential. From the case, we saw a broad range of antecedents which precipitate these divergence mechanisms: the inflexibility of the exploitation protocol, the market did not react as expected, TMT reputations at stake, emergent complications and unexpected negative discoveries.

Another particularly interesting observation was that evading scrutiny was associated with early successes, and deferring scrutiny was associated with under-performance. Although the reasons for this difference could not be confirmed with a high degree of certainty from the data, this could perhaps be attributed to the fact that it would be difficult to evade scrutiny once there was objective evidence of under-performance in the form of sales targets (which was not present in the early stages). An alternative explanation is that during periods of success, more serious forms of subversion (like breaking explicit directives of a staff freeze) may be considered innocuous/benign/an exercise of creative initiative, but during periods of under-performance an organisation will be hard pressed to explain support for the use of such mechanisms.

5.6. Conclusion

This initial findings chapter highlights the key mechanisms associated with exploration under-adaptation and as such addresses the second research question – What are the mechanisms by which exploration under-adaptation occurs? Although, arguably, this chapter also touched on How and why does exploration under-adaptation evolve in resource-constrained emerging market contexts? by outlining key events and an emergent conceptual model. The next findings chapter aims to address the latter question in more detail by building on the insights of this chapter.

CHAPTER 6: FINDINGS – INTERACTION, CONCEPTUAL MODEL, DYNAMICS

6.1. Chapter overview

The purpose of this final findings chapter is to build a more integrated and dynamic perspective in order to answer the primary research questions: How and why does exploration under-adaptation evolve in emerging market contexts?

In the previous chapter, I established two mechanisms which precipitated exploration under-adaptation – accelerated learning and divergence, in accordance with the two research domains associated with a success trap, learning and (intra-operative) risk-taking respectively. By way of brief review, accelerated learning resulted from processes associated with rapid acclimatisation and compression. Whilst divergence resulted from evading scrutiny and deferring scrutiny (see Table 14 below for a brief review of the core concepts). For reasons of parsimony and tradition (i.e. in line with Levinthal & March's (1993) conception of a success trap), these mechanisms were explained in isolation from each other in the last chapter. However, to effectively respond to the research question above, it is imperative to determine if accelerated learning and divergence interact as a pre cursor to illustrating how they catalyze exploration under-adaptation as it dynamically evolves over time. Then on the basis of this assessment, refine the emerging conceptual model which was developed in the last chapter into one that exhibits greater fidelity with empirical reality. I therefore dedicate the first part of this chapter to illustrate how the two mechanisms (acceleration and divergence) work together, then focus on the different patterns of interaction moves, examine how they seem to give rise to different changes in exploration and describe how these patterns unfold over the course of the PBO project. Thereafter based on this assessment, I present a conceptual model of the process of exploration under-adaption. What resulted was a vastly different and rather interesting set of dynamics that precipitate exploration under-adaptation

Table 14 – A summary of the mechanism of exploration under-adaptation.
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Accelerated learning mechanisms

The scope of these mechanisms include mobilising, soliciting, developing and integrating knowledge to meet organisational interdependencies without negatively affecting established Tier A/Core team operations.

Accelerated learning resulted from processes associated with rapid acclimatisation and compression.

Rapid Acclimatisation	Rapid Acclimatisation relates to efforts to build, integrate and share XXX's Tier B/C knowledge, whilst attempting to maintain high levels of performance in Tier A strongholds. It comprises: (i) Mobilising : mobilising diverse types of learning, and (ii) Integrating : Integrating diverse types of learning. Both exhibited traits that negatively impacted learning outcomes, thereby precipitating exploration under-adaptation.
Compression	In contrast to rapid acclimatisation, which affected learning outcomes, compression relates to short cuts taken that negatively impacted learning output <i>(what was generated as a result of learning; e.g.,</i> new activities, knowledge, or insight gained (see Miner et al., 2001). It comprises (i) Building : Building on the customary to define the novel, (ii) Generalising & Codifying : Premature generalisation and codification, and (iii) Synchronising : Synchronising learning with aggressive, fixed internal deadlines.

Divergence mechanisms

Divergence mechanisms ideally aim to perpetuate exploration, but were inherently maladaptive because the firm did not adapt/create formal discretionary space (e.g., through new protocols, schedules, and routines), to allow exploration to perpetuate.

I identified two types of divergence mechanisms, one aimed at **evading scrutiny** and the other at **deferring scrutiny**.

Evading scrutiny	Evading scrutiny comprised process evasion and resource manipulation , whereby the firm relaxes established policies and procedures when following them would have taken too much time, delay or permanently cripple the exploration agenda. It comprises (i) process evasion – a form of intra- operative risk taking that aims to evade scrutiny by temporarily relaxing protocols/boundaries to allow exploration to perpetuate in the short-term, and as such is associated with under-adaptation, and (ii) resource manipulation – a form of intra-operative risk-taking that evades/emanates from the need to compromise resource limits, in order to progress the exploration agenda in the short-term.
Deferring scrutiny	The second type of divergence mechanisms which aims to divert attention from the shortcomings of the exploration agenda until it becomes/in hopes that it will become consequential. It comprises (i) framing (positive) – a form of intra-operative risk-taking used to defer scrutiny, in order to combat threats to the personal reputations/tenure of those championing exploration should it not be successful, and (ii) Stop-gapping (perennial) – a form of intra-operative risk- taking used to defer scrutiny in order to cope with time- critical task demands and high levels of uncertainty of exploring Tier B/C.

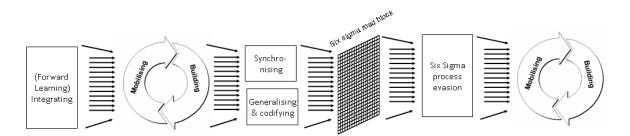
6.2. Interaction between Learning and Risk-taking

The first ambition of this chapter was to determine whether there was any interaction between the accelerated learning and divergence/intra-operative risk-taking mechanisms which comprise the two dominant processes in exploration under-adaptation (as outlined in the previous chapter). This was important because extant literature remains silent on the issue (Levinthal & March, 1993; March, 1991) and without articulation and consideration of this constituent element, it is impossible to assert whether accelerating learning and divergence account separately for exploration under-adaptation.

As regards to interaction therefore, I investigated longer portions of data where both divergence and accelerated learning occurred, as opposed to focusing on the dichotomous discourse specific to each mechanisms individually (Harrison & Rouse, 2015). As a result, I discovered two types of interactions between accelerated learning and divergence: force fitting and force fixing.

6.2.1. Force Fixing versus Force Fitting





By way of illustration (see Figure 8 above), within the context of the first divergence mechanism (Six Sigma policy evasion), the following interaction emerged. This interaction starts with XXX engaging in (forward learning) INTEGRATION by planning and deliberately MOBILISING a diverse range of learning types – vicarious learning, business analytics, immersion, etc., to develop new insights about the Tier B/C market segment. Experiences and insights were drawn from BUILDING on the customary, focusing on XXX's archetypical relationships with nursing homes, distributors, etc. These two mechanisms had a circular relationship, in that MOBILISING led to BUILDING, which led to more MOBILISING, until the point that the learning from these various sources were GENERALISED, CODIFIED and SYNCHRONISED, in preparation for the Six Sigma gate review, one month into the project. At this point, the organisation hit a roadblock/hazard to the exploration project, when the learning derived from this accelerated learning process was not adequate/sufficient to meet the requirements of the typical Six Sigma approval

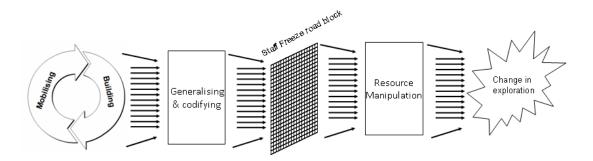
process. The Six Sigma process, being historically exploitation-oriented, demanded information on the Return on Investment and detailed financial forecasts, which is difficult to obtain reliably for the Tier B/C market due to its high levels of uncertainty and XXX's lack of familiarity with that niche. As a result, XXX could only produce a crude commercial schemata, which illustrated a rough estimate of the market potential within Tier B/C and the number of resources needed to serve that market. At this point there were four options – disband the PBO, adapt the Six Sigma process, collect additional data which would have delayed exploration, or engage in PROCESS EVASION (the option that was chosen). PROCESS EVASION allowed the firm to deviate from conventional practice to allow exploration to progress onto the next stage with scant scrutiny.⁴¹ As an example, the Head of the PBO states:

"We [the PBO] needed at least one direction to go ahead, and so we broadly use that [Six Sigma] framework. And we ensure that we answer specific questions right on time and move ahead. But beyond that, of course we have been given a high level of freedom for exploring, because this is so different from how we usually operate."

Noteworthy in this instance, the interaction between learning and risk did not catalyse an adjustment response in exploration. Instead, it forced a fit (hence the term force fitting) between the incompatibilities of exploration and the organisation's exploitation-oriented protocols and rules; without adjusting either one.

⁴¹ Thus process evasion avoided generating early pressures on learning to elevate to the company standards, instead force fitting compatibility with exploration.





Consider another example of an instance comprising an interaction between accelerated learning and divergence mechanisms (see Figure 9 above), which took place in the period after the PBO obtained approval from the Six Sigma stage review process to continue with exploration of the Tier B/C segment. XXX was still engaged with MOBILISING diverse types of learning, having now starting to conduct experiments in the Tier B/C market. The organisation also continued BUILDING on the customary to define the novel in the Tier B/C market. From these experiences it GENERALISED its understanding of the resource needs necessary to geographically cover the BOP, and CODIFIED that a team of fifty (50) new members of staff would be adequate for geographic coverage of the Tier B/C market. The exploration project then hit a roadblock/hazard due to a staff freeze rule that would prevent hiring new staff for the PBO. As background, the staff freeze rule ensured that XXX's Head Office still exerted considerable influence over resource allocation in its Strategic Business Units, like the Healthcare division in India. Given the Headquarters tight control on specifying conditions upon which resources would be made available, XXX utilised RESOURCE MANIPULATION and hired staff on contract, which would not surface in the payroll account, but in an expense account, an area where XXX Head Office had little direct oversight. In this case, the interaction between learning and risk catalysed, or forced, a change in exploration, expanding its manpower in an attempt to fix, not fit, the problem (hence, the term force fixing).

In the aforementioned two examples, I purposefully elaborated on examples, which were referenced in the last chapter to distinguish between the different

forms of interaction for reasons of continuity and clarity, but many examples abound throughout the dynamic process of exploration under-adaptation of force fixing and force fitting. Again:

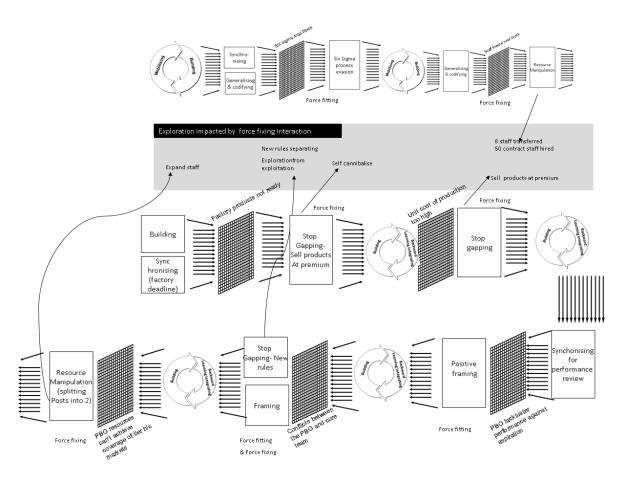
- Force fitting is defined as the interaction between learning and intraoperative risk-taking that drives a fit between incompatible exploration and exploitation-oriented systems, processes, protocols and rules, without adapting either one.
- Force fixing is defined as the interaction between learning and intraoperative risk-taking that prioritises a fix for exploration, when there are incompatibilities with the organisation's exploitation-oriented protocols and rules.

The conceptual distinction between these two kinds of interactions addresses a black box where previous research has remained silent (Levinthal & March, 1993, March, 1991). Thus, having made a conceptual distinction between force fixing and force fitting, I depart from postulations that exploration is solely associated with disequilibrium-creating [Volberda, 1996] activities, where the firm constantly upsets the status quo/changes in order to break new ground/penetrate new exploration-oriented markets (such as force fixing). Instead, I illustrate that managers employ, quite counter-intuitively, equilibrium-creating responses (such as force fixing) to force alignment between the 'incompatible' exploration and exploitation.

Dynamic process overview: Drawing on the findings above, I developed a multistage process model, separating out accelerated learning mechanisms and divergence mechanisms, for each instance of interaction. For best comparison I compare the successful performance period; i.e., the first six months of the exploration project (referred to as the Conceptualisation and Ramping-up phase), with the first six months of the underperformance/Go-live phase. More specifically, within the model (see Figure 10),

- the top line/area relates to learning and interactions during the six-month successful period;
- the grey boxed area relates to how the interaction affected exploration, and
- the area under the grey box illustrates the learning and interactions during six months of the underperformance period.

Figure 10 – Nature of interaction – success versus failure

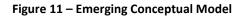


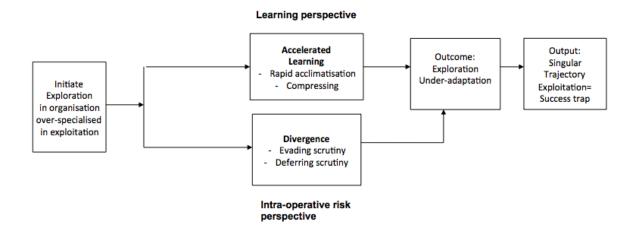
Important similarities and differences emerged. Firstly, in both periods, exploration appears to be guided by an admixture of both force fitting and force fixing interactions, as labelled in Figure 10. However, an interesting finding was that during the failure period there was much greater focus on interaction arrangements, whereas during the success phase, it was more of an exception.

This suggests that under-adaptation resulted, because exploration developed by making exceptions whenever trouble arose, as opposed to fully adapting. Case in point, when the organisation allowed the Tier B/C business case to pass through the Six Sigma stage gate process with low levels of scrutiny. In doing so, it never placed additional pressure on learning mechanisms for more meaningful information, as the interaction arrangements were always available to supplant the need for additional learning in times of emergency. In such a case, these sources of good will allowed exploration to progress uncontested, resulting in an almost a self-confirming plan (Mintzberg & Waters, 1985), making subjective assessment of early success practically inevitable. Figure 10 aptly shows that these interaction arrangements between accelerated learning and divergence mechanisms were becoming a fundamental and indispensable condition for a range of routine activities, like furnishing resources to market exchange (as outlined in the grey area). Thus, exploration under-adaptation was associated with fervent use of interaction arrangements, prompting a stronger and stronger reliance on the discretionary (force fitting and force fixing) to advance exploration.

6.3. Conceptual Model

The above examples and the proof of interaction between accelerated learning and intra-operative risk-taking begs a review of the emerging conceptual model (presented in the last chapter - see Figure 11 below).





The underlying assumption of the under-adaptation model is that the MNC has a joint interest in the continuous development of exploration, as well as maintaining its exploitation strongholds. A review of the emerging model from the last chapter (Figure 11 above) suggests that learning and intra-operative risk-taking account separately for exploration under-adaptation, with no interaction. However, evidence of force fitting and force fixing necessitates an amendment of the model, to increase its fidelity to empirical reality.

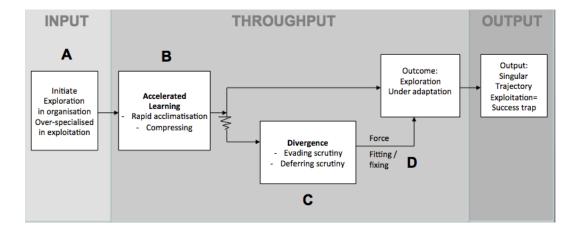


Figure 12 – Revised Conceptual Model

The revised conceptual model (Figure 12 above) is initiated by a firm with a history of a success trap (over-specialisation in exploitation) aiming to pursue exploration (Part A of Figure 12). In this traditional mode of exploitation, the "firm develops routines – these routines specify which behaviours are

appropriate and search processes that are reasonable and consistent with prior learning" (Nelson & Winter, 1982 in 1:359). Thus, to engage in exploration, where prior learning will not suffice, the organisation must initiate an organisational learning process (Part B of Figure 12 above). The importance or dominance of this learning perspective aligns well with theorists who explicitly conceptualize exploration as a process of information-acquisition and pursuit of new knowledge (e.g., see Voldeba, 1996).

This dominant learning trajectory comprises two processes: rapid acclimatisation (which comprise mechanisms: Mobilising and Building) and compressing (which comprise mechanisms: Integrating, Generalising and Codifying and Synchronising). In principle, the list of learning mechanisms used to explore are theoretically well grounded in extant literature, as outlined in Table 15 below.

Mechanisms	Theoretical equivalent	
Mobilising diverse types of learning	Appears similar to exploration, characterised as the boundary- spanning search for discovery of new approaches to technologies, businesses, processes or products (Levinthal & March, 1993; McGrath, 2001), OR as a quest for new routines or practices, to increase survival odds in evolutionary models (Nelson & Winter, 1982);	
Building on the customary to define the novel	Appears similar to exploration, characterised as gaining fresh information to improve present and future returns in rational-choice models (Radner & Rothschild, 1975);	
Synchronising learning with aggressive, fixed internal deadlines	Appears similar to exploration, characterised as a target aspiration-dependent collection of information in bounde rationality models (Simon, 1955);	
Integrating diverse types of learning	Appears similar to exploration, characterised as a process that is amenable to ex ante planning and control (Lumpkin & Dess, 1996),	
Generalising and codifying	Appears similar to exploration, characterised as the absorption of external information in models of learning and innovation (Levinthal & March, 1993).	

Table 15 – Link between accelerated learning mechanisms and theory

However, it is important to distinguish between these concepts in principle and XXX's approach to learning, which was accelerated. In this case, accelerated learning precipitated early success before impelling failure (exploration under-adaptation). Thus the learning trajectory appeared to support Barkema & Vermeulen's (2002) assertions that an increased pace of learning can result in diseconomies of time compression (Dierickx & Cool, 1989). This emerges when an organization is less able to absorb varied new experiences and apply them within the organisation, resulting in diminishing returns to learning. In summary, while the learning trajectory (Part B of Figure 12 above) is represented in a linear form in the diagram, in reality it may be fraught with variance, with phases of success and failure.

In addition to the learning trajectory, my findings illustrate a second trajectorythe intra-operative risk-taking trajectory. My findings highlight that intraoperative risk-taking is subordinate to (but not fully encapsulated within) the learning trajectory, which was rather interesting. The process of intra-operative risk-taking⁴² is triggered when there is a threat to exploration (signified by the lightening rod sign in Figure 12 above). These challenges trigger interaction between learning and intra-operative risk-taking. From the dynamic process diagram (Figure 10), I found that this interaction unfolded along a common pattern, where learning begets intra-operative risk-taking and intra-operative risk-taking in turn grants temporary allowances for exploration, via force fixing or forced fitting. Furthermore, from the dynamic diagram (Figure 10), I also found that fervent use of force fixing and force fitting precipitated exploration underadaptation. Perhaps the most succinct explanation of why this paradox occurred

⁴² This concept of risk-taking as a response to hazards is very much in line with March & Shapira's (1987) article 'Managerial Perspectives on Risk and Risk-taking', which eschew normative definitions of risks associated with probabilities for the more empirically accurate risk-taking that results from emergent threats.

(whereby the firm appears to be providing exploration preferential treatment, via accelerating learning, evading and subverting, force fixing and force fitting) and yet exploration under-adaption resulted, is defined in the quotation below by a Senior Member of the PBO, reflecting on why XXX continued to underperform in the Tier B/C market

"They gave us so much up front, but sometimes you build enough rope that you hang yourself, not because the strategy is not good, but possibly because we were allowed too much."

This suggests that a reason for exploration under-adaptation was because the unwarranted good will from the organisation towards the PBO allowed exploration to progress uncontested and therefore did not demand enough from the learning processes of the PBO for the investment made/for the approvals/support and executive mindshare it obtained.

6.4. Conclusion

Principally, my results show that exploration under-adaptation is the result of accelerated learning, or interaction between accelerated learning and divergence/intra-operative risk-taking mechanisms. This insight is particularly important because by recognising interaction, I reveal how XXX responded to the ambiguity, complexity, etc. related to exploration in a historically exploitation-oriented setting (success trap), thereby enabling under-adaptation. My findings therefore suggest that previous categories of risk and learning that have developed along separate streams, such as a success trap, can actually be considered complementary. In so doing, I eliminate a somewhat artificial separation between the two aspects of exploration and add a different and richer voice to success trap theory (Levinthal & March, 1993). These contributions have both theoretical and normative implications for ambisinisterity, BOP literatures, which I will explore in the concluding chapter of this thesis.

CHAPTER 7: Conclusion (& The Way Forward)

7.1. Chapter overview

The central ambition of this research is the due examination of ambisinisterity or ambidexterity failure. It is divided into two parts. The first part of the research is conceptual, starting with a systematic review of the ambidexterity failure scholarship and culminates by integrating insights from institutional theory, to explain MNC underperformance at the Base of the Pyramid. The second part of this thesis is empirical. It focuses on one of the dominant, yet empirically untested theories within ambisinisterity – the success trap (from an exploration under-adaptation perspective) and examines how this unfolds within XXX Healthcare in India. This chapter addresses the principal contributions of this thesis to both theory and practice of the primary literatures that have been the foci of my research domain. It then addresses the limitations, opportunities for future research and then the conclusion. A summary of the major findings, and contributions to theory and practice are outlined in Table 16 below.

Thesis	Major findings	Contribution to theory	Contribution to practice
Part 1:Conceptual	The propensity for MNC failure to exploit the TOP, whilst exploring the BOP, is well addressed by consideration of the aggregate effect of ambidexterity literature appended by various institutional perspectives.	Demonstrating the utility of ambisinisterity as a separate and important domain within ambidexterity research. Illustrating the usefulness of a dual ambidexterity and institutional focus.	The findings suggest that MNCs may wish to give more attention to the role of institutional factors when assessing the viability of BOP exploratory operations.

Thesis	Major findings	Contribution to theory	Contribution to practice
Part 2: Empirical	An over-specialisation perspective and an under-adaptation perspective of a success trap can be meaningfully differentiated. Regarding an under-adaptation perspective, both learning and intra-operative risk taking appear to be apposite lenses. Exploration under-adaptation is associated with accelerated learning (key driver), as well as divergence mechanisms were only triggered when there were hazards to exploration. Once triggered, it interacted with learning to precipitate maladaptive consequences through force fitting and force fixing. The process of exploration under- adaptation exhibited differential performance over time – firstly success, then failure. Failure was particularly associated with: - a fervent use of force fitting and force fixing mechanisms; - non-deliberate semi-automatic approach to learning; - shallow search trajectories (Further details are provided below.)	Demonstrating the utility of an exploration under- adaptation perspective to understanding failure of MNCs to explore the BOP. Development of the intra- operative risk-taking construct. Introduction of novel mechanisms to the learning and ambidexterity field (such as force fitting, force fixing, evading scrutiny, delaying scrutiny)	The findings suggest that: - organisations should consistently seek to engage in deliberate learning throughout the development of the BOP initiative; - vicarious learning is not a sine qua non for effective knowledge building at the BOP (as practitioner literature states), but is most effective when integrated with other forms of learning; - MNCs need to genuinely adapt systems and protocols and resist the fervent use of force fixing and force fitting to advance exploration.

7.2. Theoretical Contributions: Conceptual Section

The first part of this thesis addresses the much under explored domain of ambisinisterity in incumbent firms. Notwithstanding growing scholarly attention to ambidexterity (e.g., see Raisch & Berkinshaw, 2008; Gibson & Birkinshaw, 2004), I found a gap in the literature. Here the current theorising about the failure of ambidexterity was both fragmented and could not wholly account for empirical realities of MNC underperformance in low munificence environments. By focusing on failure therefore, this thesis helps overcome a notable limitation of extant ambidexterity research related to sample selection biases towards investigating success cases (e.g., see Raisch & Berkinshaw, 2008; Gibson & Birkinshaw, 2004). This resonates well with Whetten's call (1980, in Schmitt et al., 2010) for a greater focus on failure research across the academic spectrum of management.

The second theoretical contribution of this section of the thesis relates to the development of the much neglected integration between ambidexterity failure theory and institutional theory. Whilst other theorists recognise that there can be fruitful synergies (e.g., Greenwood et al. (2011) recognise the usefulness of the paradoxical nature of ambidexterity in examining organizational responses to institutional complexity characterised by multiple logics), little has been done to progress this very promising avenue. Yet this thesis contends that continued lack of conversance between the literatures will leave the former ill-suited to explain incumbent failure within the BOP. This is fundamentally because MNCs operating in low munificence environments in emerging markets are subjugated to weak institutional environments (Khaima & Palepu, 1997 in Mair et al., 2012), which create additional constraints on strategic choices available to them and places pressure on their ability to commercialise and scale. By appending the literatures, the conceptual section of this paper indicates quite concretely how environmental, firm and leadership factors combined with institutional complexity, distance, relatedness, as examples, precipitate ambidexterity failure. Testing these theoretical considerations in the future can help the field to develop more comprehensive and fine-grained theory of ambisinisterity in emerging market contexts. Beyond that however, at its most fundamental, this chapter signals the value of integrating and extending constructs and propositions of two distinct mature literature streams, in order to facilitate new understandings of a contemporary phenomenon (the BOP postulate).

7.3. Theoretical Contributions: Empirical Part

The empirical part of this thesis focuses on examining a success trap within the setting of XXX Healthcare in India, from the unique perspective of exploration under-adaption (Sato, 2012). Given its underexplored nature, a priori assertions were eschewed in favour of an approach, which allows the true mechanisms to emerge from empirical observation. Furthermore, the under-adaptation vantage point embodies a number of significant advances for theorising MNC exploration of disenfranchised segments like the BOP over the prevailing exploitation oriented view of the success trap (Levinthal & March, 1993). Critically, while a wide range of research has been associated with a success trap (exploitation crowding out exploration) in extant literature, they either focus on inertia and resistance (e.g., see Tripsas & Gavetti, 2000), or alternatively stray too far from the learning and risk-taking theoretical lenses. Consider Leonard-Barton (1992) who describes a capability-rigidity paradox in product innovation, where exploiting existing product innovation capabilities may have restrictive rigidity affects that crowd out exploration of new competencies. Also Burgelman (2002:326) describes a Co-evolutionary lock-in as "a positive feedback process that increasingly ties the previous success of a company's strategy to that of its existing product-market environment, thereby making it difficult to change strategic direction." I contend, that these theories either under-represent the complexity of success traps, or do little to enhance its conceptual and empirical rigour. Instead, a focus on exploration in an organisation that has historically only engaged in exploitation provides a more rigorous basis for theory development,

extending beyond the simulation research of Walrave et al. (2011), which as far as I am aware, is the one scholarly paper that addresses the elements of the success trap in its entirety. In the end however, the utility of departing from the pre-established exploitation-oriented view of a success trap was validated by the emergence of insights which have been otherwise unobtainable. More specifically, I:

- (a) discovered antecedents of exploration under-adaptation (being laggard/late to market, hyper-competition in market segments that are considered firm strongholds; Executive exuberance);
- (b) found that accelerated learning and divergence drove exploration underadaptation
- (c) developed and explored a new construct intra-operative risk-taking, and proved its effectiveness in assessing exploration under-adaptation;
- (d) discovered novel mechanisms evading scrutiny, deferring scrutiny, force fitting, force fixing which were distinct from the exploration-oriented mechanisms in a typical success trap, namely, specialisation and simplification⁴³ (Levinthal & March, 1993);
- (e) assessed the dynamic effects that affect the fate of exploration over time

 illustrating how fervent use of force fitting and force fixing, unplanned
 learning, deferring scrutiny, all contributed to exploration under adaptation;
- (f) developed a new conceptual model that illustrates that learning and intra-operative risk interacts, which is distinctive from prior success trap models, and

⁴³ Simplification involves buffering and enactment. Buffering separates learning goals across different units (departmentalisation), or across different time sequences. Enactment decomposes problems so that they can be allocated, so relatively few interactions need to occur between the different units or sequential periods. Simplification works hand-in-hand with specialisation. Specialisation focuses attention on one area/goal at the expense of the other, so that the whole organisation does not have to adapt all at once. Thus, simplification reduces complexity and specialisation renders focus, and together they promote exploitation-oriented learning associated with a typical success-trap.

(g) confirmed select aspects of extant learning theory; e.g. I found a broad and planned learning process was associated with early learning success.

In conclusion, a key contribution of the empirical section of this thesis is that an exploration under-adaptation perspective displays utility by opening up what was previously something of a 'black box' in success trap literature and that the perspectives contained herein provides an analytic framework for subsequent examination.

7.4. Theoretical Contributions: The BOP

Another notable contribution of this thesis is to the BOP literature stream. Recall, MNC performance within the BOP environment has been disappointing (Hart & London, 2005; London & Rondinelli, 2003). Such markets appear antithetical to the MNC DNA in terms of tangible factors (focus, market structure, revenue model and capabilities) and intangible factors (core beliefs, culture, and embedded assumptions). To date, the lion's share of the literature that addresses this phenomenon has been practitioner oriented (see Khanna et al., 2005; Simanis, 2012), which provides a host of prescriptive best practices to help successfully navigate the BOP. These invariably include, vicarious learning (Simanis et al., 2008), patient capital (Kennedy & Novogratz, 2013), business model innovation (Markides & Oyon, 2010; Markides & Charitou, 2004) as examples, all of which, quite interestingly, were employed by XXX, which still failed to explore the BOP (Tier B/C). A major contribution of this thesis therefore has been to eschew these normative prescriptions for scholarly analysis. In so doing, a host of novel and somewhat counterintuitive mechanisms (accelerated learning and divergence) surfaced as an explanation for MNC failure at the BOP. On a wider level, this thesis also illustrates the saliency of ambisinisterity as a useful theoretical lens for examining failure of MNCs within the BOP context. Stated differently, this study illustrates that research into the BOP is capable of being facilitated through the application of well-established theories to a historically (fairly) atheoretical domain.

7.5. Practical contributions

Both sections of this thesis provide credible opportunities for practical application. Firstly, the conceptual section illustrates that institutional factors influence the propensity for ambisinisterity at the BOP. Thus, integrating institutional considerations into business cases and other protocols/tools used (e.g., see Kaplan & Norton, 1993) for the assessment of the market potential of the BOP, can largely enhance the MNC's ability to develop more realistic expectations of the pace and scalability of exploration. It would also force the company to formally consider the informal ecosystems and subcultures in poverty prone markets in its analysis of the BOP potential. The implications of this could be a matter of life or death, as it is not uncommon for lack of formal consideration of norms within the BOP to lead to infanticide and suicides (Prasad & Ramesh, 2007).

The second half of this thesis also bears much utility in the real world. It forces MNCs to consider the extent to which they use accelerated learning and divergence (evading and deferring scrutiny) mechanisms to progress their exploration initiatives. Due to the parsimony of the conceptual model, it can be used in two ways. One, as a litmus test to help assess whether there is evidence in the company of these behaviours, and two, as a trade-off model (2x2 matrix), to determine the appropriate mix of accelerated learning and divergence that is adaptive and maladaptive.

Furthermore, there are additional specific insights which may be useful to practitioners:

- Organisations should consistently seek to engage in deliberate learning throughout the development of the BOP initiative;
- Vicarious learning is not a sine qua non for effective knowledge building at the BOP (as practitioner literature states), but is most effective when integrated with other forms of learning;

 MNCs need to genuinely adapt systems and protocols in order to both explore and exploit, and resist the fervent use of force fixing and force fitting, to advance exploration.

7.6. Future Research

Given the burgeoning nature of empirical examination of the success trap theory there are many opportunities for further empirical testing. As suggested above, this conceptual and case-based thesis can be used to inform future quantitative studies (derive testable hypothesis within larger samples). A potentially fruitful avenue is to determine relationship between MNC failure and intra-operative risk-taking. At the same time, it can also drive new multi-case qualitative research, which can probe more deeply into the core constructs of accelerated learning and divergence, both within the BOP environment, but also in new contexts. As a general point though, within the confines of future research, I encourage scholars to more carefully define and explicitly articulate the extent to which they address particular levels of analysis, sensitising lenses and outcomes in relation to the success trap theory, not only to guard against improper conflation with similar theories but also to advance its empirical and conceptual rigour. Thus this thesis provides ample opportunities for ensuing research. Such efforts will not only further promote a more profound appreciation of ambisinisterity, but of some of the novel propositions outlined in this thesis.

7.7. Limitations

In developing the conceptual part of this dissertation, every attempt was made to survey a wide breath of ambidexterity and institutional theory literature, with priority being given to scholarly articles in peer reviewed management journals. It is plausible that insights from the developmental studies stream of literature may have added further richness to the propositions in the context of low munificence environments in emerging market contexts. However, I decided to focus on elements that appeared to be most relevant to MNCs, choosing instead to develop a parsimonious set of influences that can be later adjusted/further dimensionalised to suit various contextual environments at the BOP. Indeed, because the BOP is heterogeneous (Banerjee & Duflo, 2007) with new distinctions contrasting mainstream BOP to the last mile, including conflict zones (Anderson et al., 2010), this may be a fruitful contextual extension to my research in the future.

In the empirical chapters, as with any single case study, a critical issue which clearly merits consideration is the degree to which the results are replicable (Mariotto et al., 2014; Flick, 2009), and if other patterns of ambisinisterity abound. In order to address this, there is a need to disentangle the enduring from the ephemeral dynamics. This requires repeated observation over time and within different boundary conditions, beyond the single case study contained herein (Flick, 2009). At the same time, I felt that the use of the single case study was particularly apposite, due to the very embryonic nature of this field of study; i.e., empirically examining an exploration under-adaptation view of a success trap. As Kennedy (1979, in Mariotto et al., 2014:362) postulates "the value of single cases in generating non-statistical inferences should not be underestimated, especially in situations where new paths arise for which the inference rules have not been established." Furthermore, "since it is a theorybuilding approach that is deeply embedded in rich empirical data, building theory from cases is likely to produce theory that is accurate, interesting and testable' (Eisenhardt & Graebner, 2007:25-26).

The other key limitation of the empirical part of this thesis is that data collection focused primarily on self-reported assessments of the interviewees, which has been associated with potential validity problems (Flick, 2009). To address this limitation I consequently sought to validate interview data against archival data, participant observation, as well as multi-source assessments (separating responses from the PBO, the Executive and Other), even if only to confirm whether consistent biases exist in the perceptions of different stakeholders. In the future a multi-method approach to assessing ambisinisterity may also prove useful.

7.8. Conclusion

In closing, the findings and propositions of this research are timely. Almost two decades after Prahalad's BOP (1996) postulate was proffered, little is still known as to the drivers of MNC failure in that context. I hope that the outcomes of this research, as well as the application of the well established theoretical construct of ambidexterity/ambisinisterity to this phenomenon will form part of a resurgence of scholarly interests associated with incumbent operations at the BOP.

REFERENCES

Adler, P., Goldoftas, B. and Levine, D. I. (1999) 'Flexibility Versus Efficiency? A Case Study of Model Changeovers in the Toyota Production System', *Organization Science*, vol. 10, no. 1, pp. 43–68.

Ambos, T.C., Mäkelä, K., Birkinshaw, J. and D'Este, P. (2008) 'When Does University Research Get Commercialized? Creating Ambidexterity in Research Institutions', *Journal of Management Studies*, vol. 45, no. 8, pp. 1424-1447.

Anderson, J. and Markides, C. (2007) 'Strategic Innovation at the Base of the Pyramid'. *Sloan Management Review*, vol. 49, no. 1, pp. 83-88.

Anderson, J., Markides, C and Kupp, M. (2010) 'The last frontier: Market creation in conflict zones, deep rural areas and urban slums', *California Management Review*, vol. 52, no. 4, pp. 6-28.

Anderson, P. and Tushman M. (2001) 'Organizational Environments and Industry Exit: The Effects of Uncertainty, Munificence and Complexity', *Industrial and Corporate Change*, vol. 10, no. 3, pp. 675–711.

Argote, L. (1999) Organizational learning: Creating, retaining, and transferring knowledge, Norwell, MA: Kluwer.

Argote, L., Ingram, P., Levine, J. M., and Moreland, R. L. (2000) 'Knowledge transfer in organizations: Learning from the experience of others', *Organizational Behavior and Human Decision Processes*, vol. 82, no. 1, pp. 1-8.

Arrow, K. (1962) 'Economic Welfare and the Allocation of Resources for Invention'. In: <u>National Bureau of Economic Research, Inc</u>. (ed.) *The Rate and Direction of Inventive Activity: Economic and Social Factors*, New Jersey: Princeton University Press, pp. 609-626.

Attride-Stirling, J. (2001) 'Thematic networks: an analytic tool for qualitative research', *Qualitative Research*, vol. 1, no. 3, pp. 385-405.

Bandura, A. (1965) 'Vicarious processes: A case of no-trial learning'. In: Berkowitz, L. (Ed.) *Advances in experimental social psychology*, New York: Academic Press. Vol. 2, pp. 1-55.

Banerjee, A.V. and Duflo, E. (2007) 'The Economic Lives of the Poor', *Journal of Economic Perspectives*, vol. 21, no. 1, pp. 141–167.

Barkema, H., Chen, X. P., George, G., Luo, Y. and Tsui, A. (2014) 'West meets East: New Concepts and Theories', *Academy of Management Journal*, vol. 54, no. 3, pp. 642-644.

Barkema, H.G. and Schijven, M. (2008) 'How Do Firms Learn to Make Acquisitions? A Review of Past Research and an Agenda for the Future', *Journal of Management*, vol. 34, no. 3, pp. 594–634.

Barkema, H.G. and Vermeulen, F. (1998) '<u>International expansion through Start-up or Acquisition: A learning perspective</u>', *Academy of Management Journal*, vol. 41, no. 1, pp. 7-26.

Battilana J. and Dorado S. (2010) 'Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations', *Academy of Management Journal*, vol. 53, no. 6, pp. 1419–1440.

Bazeley, P. (2007) *Qualitative data analysis with NVivo*, London: Sage.

Beckman, C.M. (2006) 'The Influence of Founding Team Company Affiliations on Firm Behavior', *Academy of Management Journal*, vol. 49, no. 4, pp. 741–758.

Benner, M.J. and Tushman, M.L. (2003) 'Exploitation, exploration, and process management: The productivity dilemma revisited', *Academy of Management Review*, vol. 28, no. 2, pp. 238-256.

Binder, A. (2007) 'For love and money: Organizations' creative responses to multiple environmental logics', *Theory and Society*, vol. 36, no. 6, pp. 547-571.

Bingham, C.B. and Eisenhardt, K.M. (2011) 'Rational heuristics: the 'simple rules' that strategists learn from process experience', *Strategic Management Journal*, vol. 32, no. 13, pp. 1437-1464.

Birkinshaw, J. (1997) 'Entrepreneurship in multinational corporations: The characteristics of subsidiary initiatives', *Strategic Management Journal*, vol. 18, no. 3, pp. 207-229.

Birkinshaw, J. and Gibson, C. (2004) 'Building Ambidexterity into an Organization', *MIT Sloan Management Review*, vol. 45, pp. 47–55.

Brown, J.S. and Duguid, P. (2001) 'Knowledge and Organization: A Social Practice Perspective', *Organization Science*, vol. 12, no. 2, pp. 198-213.

Bruton, G.D. (2010) 'Letter from the Editor: Business & The World's Poorest Billion – The Need for an Expanded Examination by Management Scholars', *Academy of Management Perspectives*, vol. 24, no. 3, p. 6.

Burgelman, R. A. (1991) 'Intraorganizational ecology of strategy making and organizational adaptation: theory and field research'. *Organization Science*, vol. 2, no. 3, pp. 239-262.

Burgelman, R.A. (2002) 'Strategy as Vector and the Inertia of Coevolutionary Lock-in' *Administrative Science Quarterly*, vol. 47, no. 2, pp. 325-357.

Cao, Q., Gedajlovic, E. and Zhang, H. (2009) 'Unpacking organizational ambidexterity: Dimensions, contingencies, and synergistic effects', *Organization Science*. Vol. 20, no. 4, pp. 781-796.

CARE India (2013) 'A Journey Towards Knowledge', *CARE India Annual Report* 2013 [Electronic], Available: <u>http://www.careindia.org/node/662</u> [23 October 2014].

Chao, R.O. and Stylianos K. (2008) 'A Theoretical Framework for Managing the New Product Development Portfolio: When and How to Use Strategic Buckets', *Management Science*, vol. 54, no. 5, pp. 907-921.

Christensen, C. M. and Bower J. L. (1996) 'Customer power, strategic investment, and the failure of leading firms', *Strategic Management Journal*, vol. 17, no. 3, pp. 197-218.

Christensen, C.M. and Overdorf, M. (2000) 'Meeting the Challenge of Disruptive Change', *Harvard Business Review*, vol. 78, no. 2, pp. 66-76.

Cohen, W. and Levinthal, D. (1990) 'Absorptive Capacity: A New Perspective on Learning and Innovation', *Administrative Science Quarterly*, vol. 35, no. 1, pp. 128-152.

Cooper, A.C. and Schendel, D. (1976) 'Strategic Responses to Technological Threats', *Business Horizons*, vol. 19, no. 1, pp. 61-69.

Covaleski, M.A. and Dirsmith, M.W. (1988) 'An Institutional Perspective on the Rise, Social Transformation, and Fall of a University Budget Category', *Administrative Science Quarterly*, vol. 33, no. 4, pp. 562-587.

Cyert, R.M. and March, J.G. (1963) *A behavioral theory of the firm* (2nd edition), Englewood Cliffs, NJ: Prentice-Hall.

Dacin, M.T., Munir, K. and Tracey, P. (2010) 'Formal Dining At Cambridge Colleges: Linking Ritual Performance and Institutional Maintenance', *Academy of Management Journal*, vol. 53, no. 6, pp. 1393–1418.

Daellenbach, U. S., McCarthy, A. M. and Schoenecker, T. S. (1999) 'Commitment to Innovation: The Impact of Top Management Team Characteristics', *R&D Management*, vol. 29, no. 3, pp. 199–208.

Danneels, E. (2011) 'Trying to become a different type of company: Dynamic capabilities at Smith Corona', *Strategic Management Journal*, vol. 32, no.1, pp. 1-31.

Danneels, E., Provera, B. and Verona, G. (2013) '(De-)institutionalizing organizational competence: Olivetti's transition from mechanical to electronic technology'. Working Paper

Davis, J.P. and Eisenhardt, K.M. (2011) 'Rotating Leadership and Collaborative Innovation: Recombination Processes in Symbiotic Relationships', *Administrative Science Quarterly*, vol. 56, no. 2, pp. 159- 201.

Deephouse, D.L. (1996) 'Does isomorphism legitimate?', Academy of Management Journal, vol. 39, no. 4, pp. 1024–1039.

Deephouse, D.L. and Heugens, P.P.M.A.R. (2009) 'Linking social issues to organizational impact: The role of infomediaries and the infomediary process', *Journal of Business Ethics*, vol. 86, no. 4, pp. 541–553.

Delmas, M. A. and Toffel, M. W. (2008) 'Organizational responses to environmental demands: Opening the black box', *Strategic Management Journal*, vol. 29, no. 10, pp. 1027–1055.

Denrell, J., Fang C. and Winter, S.G. (2003) 'The Economics of Strategic Opportunity', *Strategic Management Journal*, vol. 24, pp. 977-990.

Dierickx, I. and Cool, K. (1989) 'Asset Stock Accumulation and Sustainability of Competitive Advantage', *Management Science*, vol. 35, no. 12, pp. 1504–1511.

DiMaggio, P.J. and Powell, W. W. (1983) 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, vol. 48, no. 2, pp. 147–160.

Duncan, R.B. (1976) 'The ambidextrous organization: Designing dual structures for innovation'. In: Kilmann, R. H., Pondy L.R. and D. Slevin (eds.) *The management of organization design: Strategies and implementation*, New York: North Holland, pp. 167-188.

Eisenhardt, K. M. (1989) 'Building theories from case study research', *The Academy of Management Review*, vol. 14, no. 4, pp. 532–550.

Eisenhardt, K.M. and Graebner, M.E. (2007) 'Theory building from cases: opportunities and challenges', *Academy of Management Journal*, vol. 50, no. 1, pp. 25-32.

Eisenhardt, K. M., and Martin J.A. (2000) 'Dynamic capabilities: What are they?', *Strategic Management Journal*, vol. 21, no. 10-11, pp. 1105-1121.

Elsbach, K.D. and Sutton, R.I. (1992) 'Acquiring Organizational Legitimacy through Illegitimate Actions: A Marriage of Institutional and Impression Management Theories', *Academy of Management Journal*, vol. 35, no. 4, pp. 699–738.

Fast, N. D. (1981) 'Pitfalls of corporate venturing', *International Journal of Research Management*, vol. 14, no. 2, pp. 21-24.

Fiorina, C. (2000) 'Reinvention in the New Economy - We see discontinuous change everywhere', *Executive excellence: the magazine of personal development, managerial effectiveness, and organizational productivity*, vol. 17, no. 12, p. 5

Flick, U. (2009) An introduction to qualitative research, 4th edition, London: Sage.

Floyd, S. W. and Lane, P. J. (2000) 'Strategizing throughout the organization: managing role conflict in strategic renewal', *Academy of Management Review*, vol. 25, no. 1, pp. 154-177.

Garud, R., Jain, S. and Kumaraswamy, A. (2002). 'Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java', *Academy of Management Journal*, vol. 45, no. 1, pp. 196–214.

Gaskell, G. (2000) 'Individual and group interviewing'. In: Bauer, M. W. and Gaskell, G. (eds.) *Qualitative Researching: With Text, Image and Sound*, London: Sage, pp. 38-56.

Gaskell, G. and Bauer, M.W. (2000) 'Towards public accountability: Beyond sampling, reliability and validity'. In Bauer, M. W. and Gaskell, G. (Eds.) *Qualitative Researching: With Text, Image and Sound*, London: Sage Publications, pp. 336-350.

Gatignon, H., Tushman, M. L., Smith, W. and Anderson, P. (2002) 'A structural approach to assessing innovation: Construct development of innovation locus, type, and characteristics', *Management Science*, vol. 48, no. 9, pp. 1103-1122.

Ghemawat, P. (1991a) *Commitment: The Dynamic of strategy*, 2nd edition, New York: The Free Press.

Ghemawat, P. (1991b) 'Market Incumbency and Technological Inertia', *Marketing Science*, vol. 10, no. 2, pp. 161-171.

Ghemawat, P. (1997) *Games Businesses Play: Cases and Models*, Cambridge, MA: MIT Press.

Gibson, C.B. and Birkinshaw, J. (2004) 'The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity', *Academy of Management Journal*, vol. 47, no. 2, pp. 209-226.

Glasmeier, A. (1991) 'Technological discontinuities and flexible production networks: The case of Switzerland and the world watch industry', *Research Policy*, vol. 20, no. 5, pp. 469-485.

Golden, B.R. (1992) 'Research Notes. The Past is the Past -- Or is it? The Use of Retrospective Accounts as Indicators of Past Strategy', *Academy of Management Journal*, vol. 34, no. 4, pp. 848-860.

Granovetter, M. (1985) 'Economic action and social structure: The problem of embeddedness', *American Journal of Sociology*, vol. 91, no. 3, pp. 481-510.

Greenwood, R. and Hinings, C.R. (1996) 'Understanding Radical Organizational Change: Bringing together the Old and the New Institutionalism', *Academy of Management Review*, vol. 21, no. 4, pp. 1022–1054.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. and Lounsbury, M. (2011) 'Institutional Complexity and Organizational Responses', *Academy of Management Annals*, volume 6, no. 5, pp. 317-351.

Greve, H.R., Palmer, D., and Pozner, J. (2010) 'Organizations Gone Wild: The Causes, Processes, and Consequences of Organizational Misconduct', *Academy of Management Annals*, vol. 4, no. 1, pp. 53–107.

Gulati, R. and Puranam, P. (2009) 'Renewal Through Reorganization: The Value of Inconsistencies Between Formal and Informal Organization', *Organization Science*, vol. 20, no. 2, pp. 422-440.

Gupta, A.K., Smith, K.G. and Shalley, C.E. (2006) 'The Interplay between Exploration and Exploitation', *Academy of Management Journal*, vol. 49, no. 4, pp. 693-706.

Güttel, W.H. and Konlechner, S.W. (2009) 'Continuously Hanging by a Thread: Managing Contextually Ambidextrous Organizations' [Online] Available: <u>http://www.sbr-online.de/pdfarchive/einzelne pdf/sbr 2009 apr 150-172.pdf</u> [11 August 2014].

Halevi, M.Y., Carmeli, A., Brueller, N.N. (2015) 'Ambidexterity in SBUs: TMT Behavioral Integration and Environmental Dynamism', *Human Resource Management*, n/a–n/a. doi:10.1002/hrm.21665.

Hall, P. and Soskice, D. (eds.) (2001) *Varieties of capitalism*, 1st edition, Oxford: Oxford University Press.

Hammond, A. L., Kramer, W. J., Katz, R. S., Tran, J. T. and Walker C. (2007) *The Next Four Billion: Market Size and Business Strategy at the Base of the Pyramid*, Washington, DC: World Resources Institute and International Finance Corporation.

Han, M. (2005) 'Achieving Superior Internationalization through Strategic Ambidexterity', *Journal of Enterprising Culture*, vol. 15, no. 1, pp. 43-77.

Han, M. and Celly, N. (2008) 'Strategic ambidexterity and performance in international new ventures', *Canadian Journal of Administrative Sciences*, vol. 25, no. 4, pp. 335-349.

Harrison, S.H. and Rouse, E.D. (2015) 'An Inductive Study of Feedback Interactions over the Course of Creative Projects', *Academy of Management Journal*, vol. 58, no. 2, pp. 375–404.

Hart, S.L. and Christensen, C. M. (2002) 'The great leap: Driving innovation from the base of the pyramid', *Sloan Management Review*, vol. 44, no. 1, pp. 51–56.

Hart, S.L. and London, T. (2005) 'Developing native capability: What multinational corporations can learn from the base of the pyramid', *Stanford Social Innovation Review*. vol. 3, no. 2, pp. 28–33.

Hart, S. L. and Sharma S. (2004) 'Engaging fringe stakeholders for competitive imagination', *Academy of Management Executive*, vol. 18, no. 1, pp. 7-18.

He, Z. and Wong, P. (2004) 'Exploration vs. Exploitation: An Empirical Test of the Ambidexterity Hypothesis', *Organization Science*, vol. 15, no. 4, pp. 481-494.

Henderson R. M. and Clark, K. B. (1990) 'Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms', *Administrative Science Quarterly*, vol. 35, no. 1, pp. 9-30.

Hermann, C.F. (1963) 'Some Consequences of Crisis which Limit the Viability of Organizations', *Administrative Science Quarterly*, vol. 8, no.1, pp. 343-358.

Hermann, C.F. (1969) *Crisis in Foreign Policy: A Simulation Analysis*, Indianapolis: Bobbs Merrill.

Hidenori, S. (2012) 'Routine-Based View of Organizational Learning and Mechanisms of Myopia', *Annals of Business Administrative Science*, vol. 11, pp. 45–54.

Hill, C.W.L. and Rothaermel, F.T. (2003) 'The Performance of Incumbent Firms in the Face of Radical Technological Innovation', *Academy of Management Review*, vol. 28, no. 2, pp. 257-274.

Hoffman, A.J. and Ocasio, W. (2001) 'Not All Events Are Attended Equally: Toward a Middle-Range Theory of Industry Attention to External Events', *Organization Science*, vol. 12, no. 4, pp. 414–434.

Hofstede, G. (1980) *Culture's consequences: International differences in workrelated values,* Beverly Hills, CA: Sage.

Hofstede, G. (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, 2nd edition, Thousand Oaks, CA: Sage.

Huy, Q. (2002) 'Emotional balancing of organizational continuity and radical change: the contribution of middle managers', *Administrative Science Quarterly*, vol. 47, no. 1, pp. 31-69

Ingram, P. and Silverman, B. S. (2000) 'The New Institutionalism in Strategic Management'. In: Ingram P. and Silverman B. S. (eds.) *Advances in Strategic Management, Vol. 19*, pp. 1-30.

Inkpen, A.C. (2005) 'Learning through alliances: General Motors and NUMMI', *California Management Review*, vol. 47, no. 4, pp. 114–136.

Jackson, G. (2005) 'Contested Boundaries: Ambiguity and Creativity in the Evolution of German Codetermination'. In: Streeck W. and Thelen K. (eds.) *Beyond Continuity: Explorations in the Dynamics of Advanced Political Economies*, Oxford: Oxford University Press. pp. 229-254.

Jansen, J. J.P., George, G., Van den Bosch, F. A. J. and Volberda, H. W. (2008) 'Senior team attributes and organizational ambidexterity: the moderating role of transformational leadership', *Journal of Management Studies*, vol. 45, no. 5, pp. 982–1007.

Karnani, A. (2007) 'The mirage of marketing to the bottom of the pyramid: How the private sector can help alleviate poverty', *California Management Review*, vol. 49, no. 4, pp. 90–111.

Karrer D. and Fleck D.L. (2013) '-Theoretical Explorations into Organizational Ambidexterity: Enabling the Construct's Exploitation in Practice', Working Paper [Online] Available <u>http://www.anpad.org.br/admin/pdf/2013 EnANPAD ESO762.pdf</u> [15 October 2014]

Katila, R. and Gautam, A. (2002) 'Something old, something new: A longitudinal study of search behavior and new product introduction', *Academy of Management Journal*, no. 45, no. 6, pp. 1183-1194.

Katz, R. (1982) 'The Effects of Group Longevity on Project Communication and Performance', *Administrative Science Quarterly*, vol. 27, no. 1, pp. 81-104.

Kennedy R. and Novogratz, J. (2013) 'Innovation for the BoP: The Patient-Capital Perspective'. In: London T. and Hart, S.L. (eds.) *Next Generation Business Strategies for the Base of the Pyramid: New Approaches for Building Mutual Value,* New Jersey: FT Press, pp. 45-76 [Electronic] Available: <u>http://acumen.org/content/uploads/2013/03/Innovations-for-the-BoP.pdf</u> [17 September 2014]

Khanna, T. and Palepu, K. (1997) 'Why focused strategies may be wrong for emerging markets', *Harvard Business Review*, vol. 75,no. 4, pp. 41-51.

Khanna, T., Palepu, K.G. and Sinha J. (2005) 'Strategies that fit emerging markets', *Harvard Business Review*, vol. 83, no. 6, pp. 63-76.

Kim, T.-Y., Shin, D., Oh, H., and Jeong, Y.-C. (2007) 'Inside The Iron Cage: Organizational Political Dynamics and Institutional Changes in Presidential Selection Systems in Korean Universities, 1985–2002', *Administrative Science Quarterly*, vol. 52, no. 2, pp. 286–323.

Kostova, T. and Zaheer, S. (1999) 'Organizational legitimacy under conditions of complexity: The case of the multinational enterprise', *Academy of Management Review*, vol. 24, no. 1, pp. 64–81.

Kraatz, M. and Block, E. (2008) 'Organizational implications of institutional pluralism'. In: Greenwood R., Oliver C., Suddaby R. and Sahlin K. (eds.) *The SAGE handbook of organizational institutionalism*. London: Sage. pp. 243-276.

Lavie, D. and Rosenkopf, L. (2006) 'Balancing Exploration and Exploitation in Alliance Formation', *Academy of Management Journal*, vol. 49, no. 4, pp. 797–818.

Lavie, D., Stettner, U. and Tushman, M.L. (2010) 'Exploration and exploitation within and across organizations', *The Academy of Management Annals*, vol. 4, no. 1, pp. 109–155.

Lawrence, T.B. and Phillips, N. (2004) 'From Moby Dick to Free Willy: Macrocultural discourse and institutional entrepreneurship in emerging fields', *Organization*, vol. 11, no. 5, pp. 689–711.

Leblebici, H., Salancik, G.R., Copay, A. and King, T. (1991) 'Institutional change and the transformation of the U.S. radio broadcasting industry', *Administrative Science Quarterly*, vol. 36, no. 3, pp. 333–363.

Leonard-Barton, D. (1990) 'A dual methodology for case studies: synergistic use of a longitudinal single site with replicated multiple sites', *Organization science*, vol. 1, no. 3, pp. 248-266.

Leonard-Barton, D. (1992) 'Core Capabilities and Core Rigidities: A Paradox in Managing New Product development', *Strategic Management Journal*, vol. 13, pp. 111–125.

Levinthal, D. A. and March, J. G. (1993) 'The Myopia of Learning', *Strategic Management Journal*, vol. 14, pp. 95–112.

Levitt, B. and March, J. G. (1988) 'Organizational learning', Annual Review of Sociology, vol. 14, no. 1, pp. 319–338.

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*, Beverly Hills, CA: Sage.

Linna, P. (2013) 'Bricolage as a means of innovating in a resource-scarce environment: a study of innovator-entrepreneurs at the BOP', *Journal of Developmental Entrepreneurship*, vol. 18, no. 3, pp. 1-23.

London, T. and Hart, S.L. (2004) 'Reinventing strategies for emerging markets: beyond the transnational model', *Journal of International Business Studies*, vol. 35, pp. 350-370.

London, T. and Rondinelli, D.A. (2003) 'Partnerships for learning: Managing tensions in nonprofit organizations' alliances with corporations', *Stanford Social Innovation Review*, vol. 1, no. 3, pp. 28–35.

Lubatkin, M. H., Simsek, Z., Ling, Y. and Veiga, J. F. (2006). 'Ambidexterity and Performance in Small- to Medium-sized Firms: The Pivotal Role of Top Management Team Behavioral Integration', *Journal of Management*, vol. 32, no. 5, pp. 646–672.

Mair, J. and Martí, I. (2009) 'Entrepreneurship in and around institutional voids: A case study from Bangladesh', *Journal of Business Venturing*, vol. 24, no. 5, pp. 419-435.

Mair, J., Martí, I. and Ventresca, M.J. (2012) 'Building Inclusive Markets In Rural Bangladesh: How Intermediaries Work Institutional Voids', *Academy of Management Journal*, vol. 55, no. 4, pp. 819–850.

March, J. G. (1991) 'Exploration and exploitation in organizational learning', *Organization Science*, vol. 2, pp. 71–87.

March, J.G. (1994) A primer on decision making: how decisions happen, New York: The Free Press.

March, J.G. and Shapira, Z. (1987) 'Managerial Perspectives on Risk and Risk Taking', *Management Science*, vol. 33, no. 11, pp. 1404-1418.

March, J. G. and Simon H. A. (1958) Organizations, New York: Wiley.

Mariotto, F.L., Zanni, P.P. and De Moraes, G.H.S.M. (2014) 'What is the use of a single-case study in management research?', *Revista de Administração de*

Empresas vol. 54, no. 4, pp. 358-369 [Electronic], Available at <u>http://www.scielo.br/scielo.php?pid=S0034-</u> <u>75902014000400358&script=sci arttext</u> [26 March 2015]

Markides, C. and Charitou, C.D. (2004) 'Competing With Dual Business Models: A Contingency Approach', *Academy of Management Executive*, vol. 18, no. 3, pp. 22-36.

Markides C. and Oyon D. (2010) 'What to do against Disruptive Business Models: When and How to Play two games at once', *Sloan Management Review*, vol. 51, no. 4, pp. 25-32.

Martin, J. A. and Eisenhardt, K.M. (2010) 'Rewiring: Cross-business-unit collaborations in multibusiness organizations', *Academy of Management Journal*, vol. 53, no. 2, pp. 265-301.

McPherson, C.M. and Sauder M. (2013) 'Logics in Action: Managing Institutional Complexity in a Drug Court', *Administrative Science Quarterly* vol. 58, no. 2, pp. 165-196.

Mellahi K. and Wilkinson A. (2004) 'Organizational failure: a critique of recent research and a proposed integrative framework', *International Journal of Management Reviews*, vol. 5-6, no. 1, pp. 21-41.

Meyer, J.W., Boli, J., Thomas, G.M. and Ramirez, F.O. (1997) 'World society and the nation-state', *American Journal of Sociology*, vol. 103, no. 1, pp. 144-181.

Meyer, J.W. and Rowan, B. (1977) 'Institutionalized organizations: Formal structure as Myth and Ceremony', *American Journal of Sociology*, vol. 83, no. 2, pp. 440–463.

Michel J.G. and Hambrick, D.C. (1992) 'Diversification posture and top management team characteristics', *Academy of Management Journal*, vol. 35, no. 1, pp. 9–37.

Miles, M. B. and Huberman, A.M. (1994) *Qualitative data analysis: An expanded sourcebook*, Thousand Oaks CA: Sage.

Miller, D. (1991) 'Stale in the Saddle: CEO tenure and the Match Between Organization and Environment', *Management Science*, vol. 37, no. 1, pp. 34-52.

Miller, D. and Friesen, P. H. (1980) 'Momentum and Revolution in Organizational Adaptation', *Academy of Management Journal*, vol. 23, no. 4, pp. 591-614.

Miner, A.S., Bassoff, P. and Moorman, C. (2001) 'Organizational Improvisation and Learning: A Field Study', *Administrative Science Quarterly*, vol. 46, no. 2, pp. 304-337.

Mintzberg, H. and Waters, J.A. (1985) '**Of strategies, deliberate and emergent',** *Strategic Management Journal*, vol. 6, no. 3, pp 257–272.

Mukasa, S.G. (1990) 'African Telecommunications Network Development: Leapfrogging Progress?' The Ohio State University Center for Advanced Study in Telecommunications (CAST) Working File 1990-012. November.

Nelson, R.R. and Winter, S.G. (1982) *An Evolutionary Theory of Economic Change*, Cambridge: Belknap Press/Harvard University Press.

North, D. (1990) Institutions, Institutional Change, and Economic Performance, New York: Norton

O'Reilly, C.A. and Tushman, M.L. (2004) 'The ambidextrous organization', *Harvard Business Review*, vol. 82, no. 4, pp. 74-81.

O'Reilly, C.A. and Tushman, M.L. (2008) 'Ambidexterity as a dynamic capability: Resolving the innovator's dilemma', *Research in Organizational Behavior*, vol. 28, pp. 185-206.

Oliver, C. (1991) 'Strategic responses to institutional processes', Academy of Management Review, vol. 16, no. 1, pp. 145–179.

Oliver, C. (1997) 'Sustainable competitive advantage: Combining institutional and resource-based views', *Strategic Management Journal*, vol. 18, no. 7, pp. 679–713.

Ozcan, P. and Eisenhardt, K.M. (2009) 'Origin of alliance portfolios: Entrepreneurs, network strategies, and firm performance', *Academy of Management Journal*, vol. 52, no. 2, pp. 246-279.

Pache, A. and Santos, F. (2010) 'When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands', *Academy of Management Review*, vol. 35, no. 3, pp. 455–476.

Peng, M.W. (2000) *Business Strategies in Transition Economies*, Thousand Oaks, CA: Sage.

Peng, M.W. (2003) 'Institutional Transitions and Strategic Choices', Academy of Management Review, vol. 28, no.2, pp. 275-296.

Peng, M. W., Lee, S.-H. & Wang, D.Y.L. (2005) 'What determines the scope of the firm over time? A focus on institutional relatedness', *Academy of Management Review*, vol. 30, no. 3, pp. 622–633.

Powell, W. and DiMaggio, P. (eds.) (1991) *The new institutionalism in organizational analysis,* Chicago: University of Chicago Press.

Powell, W. W., Koput, K.W. and Smith-Doerr, L. (1996) 'Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology', *Administrative Science Quarterly*, vol. 41, no. 1, pp. 116-145.

Prahalad, C.K. (2005) *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits*, Upper Saddle River, NJ: Wharton School Publishing.

Prahalad, C.K. and Bettis, R.A. **(**1986) 'The dominant logic: A new linkage between diversity and performance', *Strategic Management Journal*, vol. 7, no. 6, pp. 485-501.

Prahalad, C. K. and Hammond A. (2002) 'Serving the World's Poor, Profitably', *Harvard Business Review*, vol. 80, no. 9, pp. 48-57.

Prahalad, C.K. and Hart, S.L. (2002) 'The Fortune at the Bottom of the Pyramid' *Strategy+Business*, vol. 26, pp. 1-14.

Prahalad, C.K. and Lieberthal, K. (1998) 'The end of corporate imperialism', *Harvard Business Review*, vol. 81, no. 8, pp. 109-117.

Prange, C. and Verdier, S. (2011) 'Dynamic capabilities, internationalization processes and performance', *Journal of World Business* vol. 46, no. 1, pp. 126-133.

Prasad R. and Ramesh R. (2007) 'India's Missing Girls,' *The Guardian*, 28 February 2007 [Online]. Available at <u>http://www.theguardian.com/world/2007/feb/28/india.raekhaprasad</u> [13 March 2015].

Purdy, J.M. and Gray, B. (2009) 'Conflicting logics, mechanisms of diffusion, and multilevel dynamics in emerging institutional fields', *Academy of Management Journal*, vol. 52, no. 2, pp. 355-380.

Raisch, S. (2008) 'Balanced Structures: Designing Organizations for Profitable Growth', *Long Range Planning*, vol. 41, no. 8, pp. 483-508.

Raisch, S. and Birkinshaw, J. (2008) 'Organizational ambidexterity: Antecedents, outcomes, and moderators', *Journal of Management*, vol. 34, no. 3, pp. 375-409.

Raisch, S., Birkinshaw, J., Probst, G., and Tushman, M. L. (2009) 'Organizational Ambidexterity: Balancing Exploitation and Exploration for Sustained Performance', *Organization Science*, vol. 20, no. 4, pp. 685-695.

Raisch, S. and Hotz, F. (2010) 'Shaping the context for learning: Corporate alignment initiatives, environmental munificence, and firm performance'. In: Wall S., Zimmermann C., Klingebiel R. and Lange D. (eds.), *Strategic reconfigurations: Building dynamic capabilities in rapid-innovation-based industries*. Cheltenham, UK: Edward Elgar [Online]. Available <u>http://www.elgaronline.com/view/9781847204769.00012.xml</u> [Accessed 7 October 2014]

Reinganum, J. F. (1983) 'Uncertain Innovation and the Persistence of Monopoly', *American Economic Review*, vol. 73, no. 4, pp. 741-748.

Revilla, E. and Rodríguez, B. (2011) 'Team vision in product development: How knowledge strategy matters', *Technovation*, vol. 31, no. 2, pp. 118-127.

Ricart, J. E., Enright, M. J., Ghemawat, P., Hart, S. L. and Khanna T. (2004) 'New frontiers in international strategy', *Journal of International Business Studies*, vol. 35, vol. 3, pp. 175-200.

Ruef, M. and Scott, W. R. (1998) 'A Multidimensional Model of Organizational Legitimacy: Hospital Survival in Changing Institutional Environments', *Administrative Science Quarterly,* vol. 43, no. 4, pp. 877–904.

Saka-Helmhout, A. and Geppert M. (2011) 'Different Forms of Agency and Institutional Influences within Multinational Enterprises', *Management International Review*, vol. 51, no. 5, pp. 567-592.

Sato, H. (2012) 'Routine-Based View of Organizational Learning and Mechanisms of Myopia', *Annals of Business Administrative Science*, vol. 11, pp. 45–54.

Schmitt, A., Probst, G. and Tushman M.L. (2010) 'Management in times of economic crisis: Insights into organizational ambidexterity', *Management*, vol. 13, no. 3, pp. 128 -150.

Schulman P.R. (1989) 'The "Logic" of Organizational Irrationality', Administration and Society, vol. 21, no. 1, pp. 31-53.

Scott, W.R. (2008) *Institutions and organizations*, 3rd edition, Thousand Oaks, CA: Sage.

Selznick, P. (1996) 'Institutionalism "Old" and "New"', *Administrative Science Quarterly*, vol. 41, no. 2, pp. 270–277.

Siggelkow, N. and Levinthal, D. A. (2003) 'Temporarily Divide to Conquer: Centralized, Decentralized, and Reintegrated Organizational Approaches to Exploration and Adaptation', *Organization Science*, vol. 14, no. 6, pp. 650-669.

Simanis E. (2012) 'Reality Check at the Bottom of the Pyramid', *Harvard Business Review* [Electronic], Available: <u>https://hbr.org/2012/06/reality-check-at-the-bottom-of-the-pyramid</u>, [13 March 2015]

Simanis, E., Hart, S., DeKoszmovszky, J., Donohue, P., Duke, D., Enk, G., Gordon, M. and Thieme, T. (2008) *The base of the pyramid protocol: Toward next generation BoP strategy*, 2nd edition [Electronic], Available <u>http://bop-protocol.org/docs/</u> [6 January 2015]

Simanis E. and Milstein M. (2012) 'Back to Business Fundamentals: Making "Bottom of the Pyramid" Relevant to Core Business', *Field Action Science Reports* [Electronic], Issue 4, 2012. Available: <u>http://factsreports.revues.org/1581</u> [26 March 2015]

Simsek, Z. (2009) 'Organizational Ambidexterity: Towards a Multilevel Understanding', *Journal of Management Studies*, vol. 46, no. 4, pp. 597-624.

Sirmon, D.G., Hitt, M. and Ireland, R.D. (2007) 'Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box', Academy of Management Review, vol. 32, no. 1, pp. 273-292.

Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P. and Scully, J. A. (1994) 'Top management team demography and process: The role of social integration and communication', *Administrative Science Quarterly*, vol. 39, no. 3, pp. 412–438.

Smith, W. K. and Tushman, M. L. (2005) 'Managing strategic contradictions: a top management model for managing innovation streams', *Organization Science*, vol.16, no. 5, pp. 522-536.

Sosna, M., Trevinyo-Rodríguez, R.N. and Velamuri, S.R. (2010) 'Business model innovation through trial-and-error learning: The Naturhouse case', *Long range planning*, no. 43, no. 2, pp. 383-407.

Staw, B.M., Sandelands, L.E. and Dutton J.E. (1981) 'Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis', *Administrative Science Quarterly*, vol. 26, no. 4, pp. 501-524.

Sull, D.N. (1999) 'The Dynamics of Standing Still: Firestone Tire & Rubber and the Radial Revolution', *The Business History Review*, vol. 73, no.3, pp. 430-464.

Tallman, S.B. (1991) 'Strategic management models and resource-based strategies among MNEs in a host market', *Strategic Management Journal*, vol. 12, no. 1, pp. 69-82.

Teece, D. J. (1986) 'Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy', *Research Policy*, vol. 15, no. 6, pp. 285–305.

Thornton, P. H. (2002) 'The rise of the corporation in a craft industry: Conflict and conformity in institutional logics', *Academy of Management Journal*, vol. 45, no. 1, pp. 81–101.

Tripsas, M. (1997) 'Unraveling the process of creative destruction: Complementary assets and incumbent survival in the typesetter industry', *Strategic Management Journal*, vol. 18, pp. 119-142.

Tripsas, M. and Gavetti G. (2000) 'Capabilities, cognition, and inertia: Evidence from digital imaging', *Strategic Management Journal*, vol. 21, no. 10-11, pp. 1147-1161.

Tushman, M. L. and Anderson, P. (1986) 'Technological discontinuities and organizational environments', *Administrative Science Quarterly*, vol. 31, no. 3, pp. 439-465.

Tushman, M. L. and O'Reilly, C. A. (1996) 'Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change', *California Management Review*, vol. 38, no. 4, pp. 8-30.

Tushman, M.L. and O'Reilly, C.A. III (1997) *Winning Through Innovation*, Boston, MA: Harvard Business School Press.

Tushman, M.L. and Romanelli, E. (1985) 'Organizational Evolution: A Metamorphosis Model of Convergence and Reorientation', *Research in Organizational Behavior*, vol. 7, pp. 171-222.

Tushman, M., Smith, W., Wood, R., Westerman, G. and O'Reilly, C. (2004) Innovation streams and ambidextrous organizational designs: on building dynamic capabilities, Social Science Research Network (SSRN) working paper.

Vermeulen, F. and Barkema, H. (2001) 'Learning through acquisitions', Academy of Management Journal, vol. 44, no. 3, pp. 457–476.

Vermeulen, F. and Barkema, H. (2002) 'Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation', *Strategic Management Journal*, vol. 23, no. 7, pp. 637–653.

Volberda, H.W. (1996) 'Toward the flexible form: How to remain vital in hypercompetitive environments', *Organization Science*, vol. 7, no. 4, pp. 359-374.

Volberda, H.W. and Lewin, A. Y. (2003) 'Co-Evolutionary Dynamics within and between Firms: from Evolution to Co-Evolution', *Journal of Management Studies*, vol. 40, no. 8, pp. 2111-2135.

Walrave, B., van Oorschot, K.E. and Romme, A.G.L. (2011). 'Getting trapped in the suppression of exploration: A simulation model', *Journal of Management Studies*, vol. 48, no. 8, pp. 1727-1751.

Washington, M. (2004) 'Field approaches to institutional change: The evolution of the National Collegiate Athletic Association, 1906–1995', *Organization Studies*, vol. 25, no. 3, pp. 393-414.

Weick, K.E. and Roberts, K.H. (1993) 'Collective Mind in Organizations: Heedful Interrelating on Flight Decks', *Administrative Science Quarterly*, vol. 38, no. 3, pp. 357-381.

Weick, K.E., Sutcliffe, K.M. and Obstfeld, D. (2005) 'Organizing and the Process of Sensemaking', *Organization Science*, vol. 16, no. 4, pp. 409-421.

Westphal, J.D. and Zajac, E.J. (2001) 'Decoupling Policy from Practice: The Case of Stock Repurchase Programs', *Administrative Science Quarterly*, vol. 46, no. 2, pp. 202–228.

Whetten, D. A. (1978) 'Coping with Incompatible Expectations: An Integrated View of Role Conflict', *Administrative Science Quarterly*, vol. 23, no. 2, pp. 254–271.

Whetten, D. A. (1980) 'Organizational decline: A neglected topic in organizational science', *Academy of Management Review*, vol. 5, pp. 577-588.

Wiersema, M. and Bantel, K. A. (1992) 'Top Management Team Demography and Corporate Strategic Change', *Academy of Management Journal*, vol. 35, no. 1, pp. 91-121.

Yin, R. K. (1994) *Case study research: Design and methods*, 2nd edition, Newbury Park, CA: Sage.

Yin, R. K. (2003) *Case study research: Design and methods* (3rd ed.), Thousand Oaks CA: Sage.

Zeng, Y., Shenkar, O., Lee, S.-H. and Song, S. (2013) 'Cultural differences, MNE learning abilities, and the effect of experience on subsidiary mortality in a dissimilar culture: Evidence from Korean MNEs', *Journal of International Business Studies*, vol. 44, no. 1, pp. 42–65.

Zilber, T. B. (2002) 'Institutionalization as an interplay between actions, meaning, and actors: The case of a rape crisis center in Israel', *Academy of Management Journal*, vol. 45, no. 1, pp. 234–254.

Zollo, M. and Winter S.G. (2002) 'Deliberate Learning and the Evolution of Dynamic Capabilities', *Organization Science*, vol. 13, no. 3, pp. 339-353.

APPENDICES

APPENDIX 1 – Topic guide

<u>**Critical Initial interviews:**</u> Head of the PBO, Head of Strategy (sponsor), MD, other members of the TMT.

Identify other informants via snowballing across three dimensions -

- <u>Exploration (informants involved in PBO)</u>, <u>Exploitation (informants involved in the Core Team)</u>;
- the different levels of hierarchy heads to middle managers to sales force, and
- the different functional areas (R&D, Marketing, Sales).

INTERVIEW TOPIC GUIDE

PART A – Informant's background/ role/historical knowledge of the PBO

- Can you tell me about the reasons why you joined the project? When did you join?
- What is your role in XXX? / What do you understand as the role of project outbreak?
- How heavily involved were you?

PART B – General Knowledge (real time or historical knowledge about the PBO/ localisation).

- Why did XXX initially enter the BOP?
- What led to that decision?
- What do you see as the potential for Tier B/C?

- What are the challenges the organisation is facing with regard to the Tier
 B/C market? (prompts: Head office, competitive, internal)
- What advances are being made with respect to tier b/c market?
- Can you explain by giving a specific example?

PART C – Learning related questions:

- What did you do to try to understand the Tier B/C market? (types of learning);
- What did you learn from that? (content of learning);
- Describe the process break it down for me step by step? (sequence of learning); What exactly happened in each step?;
- Who were important?
- How did you use that information/What was the result? (learning outcome);
- What changed as a result of that learning? (learning output);
- What additional insights did you gain? (learning output).

PART D - intra-operative risk related questions

The sources of, and reasons for, intra-operative risk-taking:

- What are the most important things that frustrated your attempts to tackle the BOP market?
- What established rules/protocols/routines placed major restrictions on the PBO agenda?

To help identify the *type of intra-operative* risk-taking utilised, for e.g., skirting rules:

- How did the organisation deal with that hazard?
- When there were challenges what did you do? Why was that considered the best option?