

ICT-driven interactions: On the Dynamics of mediated control

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Abstract

Interactions driven by Information Communications Technologies (ICT) have gained significant acceptance and momentum in contemporary organisational settings, this is illustrated by their massive adoption and varied deployment across the various levels of an organisation's hierarchy. ICTs such as mobile telephones, Personal Digital Assistants (PDA), videoconferencing, BlackBerries and other forms of portable and immovable computing technologies provide enduring bases for mediated interactions in human activities.

This thesis looks into the dynamics of ICT-driven interactions and, distinctively, focuses on the manifestations and implications of mediated control in a collaborative environment. The study draws on the concept of administrative behaviour which leads to the observation that the nature of mediated control is not static, but evolutionarily dynamic that springs from highly unpredictable contexts of work. Thus, interactions driven by ICTs influence and change the dynamics of mediated control against the background of the rhythm, structure and direction of an organisation's purposeful undertakings.

Findings indicate, quite paradoxically, that networks set up through the instrumentality of technology mediated interaction discourage domination and inspire individual discretion in spite of their promise of electronic chains. The analysis reflects the notion that mediated control is not only about the predetermination of targets that are attained at the subordinate level. Indeed, the study advocates a fundamental conceptualisation of mediated control as double-sided concept, integrating the use of discretion that, occasionally, makes subordinates drive and initiate key control techniques that steer organisational life. Therefore, through the application of philosophical hermeneutics for a rigorous data interpretation, this study develops an innovative and holistic understanding of mediated control which not only adds to, but also extends, the current organisational perception of control by the incorporation of discretion and, in the process, makes a distinctive contribution to scholarship.

‘The mind is not a vessel to be filled but a fire to be ignited’ –*Plutarch, a follower of Socrates*

*To my family,
Paapa and Maame, thank God your sacrifices have been gracefully rewarded*

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CHAPTER ONE: RESEARCH ISSUES, FOCUS AND MOTIVATION

If we knew what it was we were doing, it would not be called research, would it?

– Albert Einstein (1879-1955)

1.1 Preliminary matters

The advent of Information Communication Technologies (ICT) and the techniques of interaction and processing of information have expanded the possibilities of their application in controlling organisational and business processes (Beniger, 1986). As contemporary organisations continue to survive on information, innovative methods of control are required to cope with the challenges that characterise the dynamics of information processing. Indeed, control and information are rapidly turning to allies (Ibid); hence the ability of individuals to exercise influence in orchestrating behavioural changes may demand an equal measure in information processing and interaction. The rising differentiation and specialisation massively characterising modern-day organisations call for an effective coordination function which, could in turn, necessitate augmented information communication abilities that can be provided in the realm of ICT (Beniger, 1986, cf. Weber, 1978).

Information Systems are fundamental to mediated control (Ciborra and Associates, 2000) and technology mediated interaction¹ between formal organisational configurations and activities and are, by extension, significant for the harmonisation of contemporary work practices (Earl and Feeny, 1994, Nutt *et al.*, 2000). Information Communication Technology driven interaction has gained significant acceptance and momentum as is evidenced in their massive adoption and varied deployment and application in many organisations (Morgan, 1997, Pfeffer, 1992). Indeed, to date, almost ‘three quarters of all employees use computer or ICT in the workplace’ (Nathan *et al.*, 2003). Relying on ICTs to mediate interaction between working colleagues in different

¹ It should be pointed out that at some point, ‘technology mediated interaction’ would be used interchangeably with ‘computer mediated interaction’ in this study since the two terms fundamentally mean the same.

sections and locations within, and sometimes outside, the layout of an organisation demands an appreciable degree of control and collaboration from the entire organisational machinery. It should be stated ahead of time that control in this work draws on the notion of

a co-ordinating mechanism based on asymmetric relations of power and domination in which conflicting instrumental interests and demands are the overriding contextual considerations (Reed, 2001, p. 201).

In other words, the study sees control from laid-down structural guidelines, policies, procedures, rules and set out by the top organisational hierarchy in context-specific situations to achieve stated organisational goals. To this end, control emphasises the unequal balance of power that reinforces the relationship between superiors and subordinates which characterise their day-to-day legitimate organisational rapport and undertaking. Undoubtedly, the advances in technology have had unusual and insightful effects on widening the scale and utility of computing in technology mediated interaction in collaborative work. Technological artefacts have been drawn into the worldwide technological innovation resulting in multifaceted technology mediated interaction activities that could have been imagined only in course books. Technology mediated interaction continues to significantly gain popularity in organisations and among the professionals within them resulting in their mass and wide adoption and utilisation and consequently mounting academic attention from Information Systems (IS) researchers (Hinds and Kiesler, 1995, Belanger et al., 2001, Walther, 1997, Green, 2002, Ngwenyama and Lee, 1997).

A key component of technology mediated interaction is the flexibility and the dynamism particularly associated with the many modes of its expression. Part of their flexible nature is demonstrated by their capacity of establishing interaction and exchange relations with others not collocated; what can conveniently be described as ‘virtual collaboration’(Olson and Olson, 2000 p.141). Secondly, these technologies continue to influence, shape and inform the manner groups and individuals have come to initiate control strategies to regulate their technology mediated interaction in their everyday working practices. Therefore Dahlbom and Ljungberg (1998 p.228) are right when they reason that

A rapidly increasing use of electronic mail, more adequate telephone services like voice mail and mobile phones quickly change the conditions of work. You are no longer tied to your office and, with increasing communicative interaction, the pace of work increases. There is a shift from bureaucratic document management to the bustle of the market of its many meetings. The old factories for office work, education, research and health care may very well be disintegrated and be replaced by meeting places for mobile services exchange.

The pressure to go global, the demand to reduce operational costs, the growing need for adaptability and prompt response to the ever-changing, unstable world of commerce and business (Kim and Mauborgne, 2005) have phenomenally activated the quest for flexible organisational configurations (Smithson, 1994). Consequently, organisations continue to adopt innovative practices, including varying the modalities of their technology mediated interactions, in an attempt to offer high degree of customer service (Mowshowitz, 1997, Snow et al., 1996) as a means of sharpening their competitive edge (Porter and Millar, 1985). ICT-driven interaction continues to spearhead and influence the way we interact in the workplace, home or any other place that may occasion an appropriate setting for interaction to be consummated. The many complex technology mediated devices that make it possible for non face-to-face encounters or communication to be consummated conveniently illustrate this view.

Of the many possible factors that have activated the 'interaction society' (Wiberg, 2005b) are such technological mobile architecture as videoconferencing, teleworking, BlackBerries (mobile email devices) and internet-activated mobile phones (Kakihara *et al.*, 2005). Again the supporting infrastructure such as the internet and mobile telecommunication network (Hanseth, 2000) laptops, Bluetooth technology, application, and its burgeoning critical mass have equally been instrumental in spearheading the interaction society. The culminating effect has been the transformation and modification of our behaviour and work culture. In a similar vein, human behaviour has, in turn, impacted and informed the design, architecture and functionalities of these technologies. This mutual effect between technology and human agency is observed elsewhere with the claim that 'whatever effect technology may have on social forms is heavily shaped by the social, cultural and institutional relations in which the technology is embedded' (Kallinikos, 2007 pp. 278 - 279). The technologies have as a result, in no small measure,

moulded and shaped our pattern and mechanics of mediated interaction in diverse work activities, both at the individual and group levels.

Emphasis is speedily being shifted away from purely centralised to moderately decentralised business processes (Malone et al., 1987). To a greater extent work arrangements are being organised from locations other than where the centre of activity is (Shapiro, 1999). Control in ICT-driven interaction is crucially necessary for organisations whose operations are not only concentrated in the organisation but also sometimes transcend their immediate geographic boundaries. An idea clearly brought out is the fact that the pattern of work in such organisations is particularly rife in inadequacy of local knowledge, differences in idiosyncratic experiences, situational priorities, threatening deadlines, risks, disparities in cultural orientations, values and norms (Lane, 1998).

Technology mediated interaction is getting increasingly popular in response to the challenges posed by the concept of 'disembedded front'(Giddens, 1990). In this sense social systems and work arrangements in contemporary times are taken from the local context and distributed across space and time. Advanced technological artefacts have then become vital for pumping life and vitality into the emerging organisational work arrangements for information generation and sharing, communication, coordination collaboration and control. Today, ICTs have not only expanded the scope by which they are implicated in mediating interaction and influencing organisational configuration, but they have also formed and transformed the circumstances and conditions in which interaction is mediated across an entire organisation.

It is widely claimed that technology-driven information systems are profoundly involved in the practices that incorporate, redesign, reconfigure and restructure organisations (Orlikowski, 1996, Markus and Benjamin, 1997, Scott Morton, 1991); the same information systems institutionalise work, work relationships and work life (Berger and Luckmann, 1966). Indeed, technology mediated interaction can scatter the controlling influence of the top hierarchy that could be instrumental for mutual information exchange, knowledge sharing and work collaboration. The reason for this claim is premised on the presupposition that distance, implied in technology mediated interaction, introduces many challenges such as unfamiliarity of local experience that make direct control of individual and group activities a tricky mission to accomplish

(O'Leary et al., 2002). In other words, mediated interaction, in a way, pushes the centre of organisational authority to be more reliant on the members distributed across both defined settings and emerging contexts. Such members have their behavioural patterns unpredictable and contingent which may not be under direct managerial scrutiny and observation.

Legitimately, one wonders how the organisational top hierarchy initiates moves to control both individual and group tasks and activities to bring about a coordinated, joint and collaborative action within the organisational set-up. Part of the answer to this query may be found in Courpasson's (2000) notion of *soft bureaucracy* which emphasises a situation where 'flexibility and decentralization co-exist with more rigid constraints and structures of domination' (p.157). Control in this study is not restricted to the 'informating' power of Information Technology (IT) alone in which Zuboff (1988 pp. 9-10) recounts that apart from its automating power, ICT

... simultaneously generates information about the underlying productive and administrative processes through which an organization accomplishes its work. It provides a deeper level of transparency to activities that had been either partially or completely opaque....Activities, events and objects are translated into and made visible by information when a technology informs.

The path-breaking work associated with the above quotation and many others in that category provide us with a significant collective overview on the application of Information Systems (IS) in contexts where the controller is commissioned and entrusted with the authority over the controlled. However, these studies specifically fail to account for a situation where the controller uses assortments of mediated technological artefacts to control both the individuals and groups on one hand and the activities they are involved in on the other (Kirsch, 2004).

Arguably, control continues to be a central part of, and essential challenge to, organisational sociology and management philosophy (Simons, 1995). Control is needed to monitor, set targets, regulate and even motivate people to channel their disparate group or individual activities in the interest of the stated objectives of the organisation (Beniger, 1986, Courpasson, 2000). Again, control in technology mediated interaction is vital in directing conflicting personal and organisational objectives and group motivations to be

channelled in a synergistic fashion for the total benefit of the organisation. The purpose of this study, therefore, is to appreciate control – driven by different means both technology and human – from diverse organisational perspectives. The study is also set to understand the extent to which control, through mediated interaction, informs organisational loyalty.

1.2 Motivational relevance

The recent past has witnessed a burgeoning number of research interests and activities in computer mediated interaction in the IS community. The lingering challenge that technology mediated interaction poses has informed and inspired the birth of various forms of tools with varying degrees of complex, embodied intentionality to make technology mediated interaction as real-time as practicable. The reason, obviously, is to permit interaction beyond spatial, contextual, shifting, transitory frontiers and limitations. Consequently, manoeuvrable technology artefacts like Personal Digital Assistants PDAs, mobile phones, laptops, computers etc., have regimented functionalities that allow for Instant Messaging (IM), videoconferencing among others to provide flexible, dynamic and pragmatic support for distributed collaboration and mediated interaction.

Studying mediated control from the standpoint of technology driven interactions in a collaborative setting could prove a fascinating endeavour as it could provide some useful insights into the dynamisms and mechanisms involved in mediated control. Such dynamics and mechanisms could range from how much control, for instance, is taken away from the organisational top hierarchy in technology mediated interactions? Does any other factor like trust replace mediated control or does top management lose some degree of their administrative control in the process of mediating the interactions of subordinates from the fringes of the organisation. Besides, technology mediated interaction could be essentially crucial, as its very essence may be characterised by unpredictable complexities, nascent and situational predicaments that sometimes challenge the very foundations on which mediated control is erected.

The drive to study ICT-driven interaction vis-à-vis mediated control stems from its relevance to the province of IS and its sometimes hidden implications for both practice

and research. For, it reveals the various stakeholders, such as top management, middle-level management and those at the lower echelons of the organisation, with varying and incessantly shifting degrees of interests, individual motivations, personal preferences and preoccupation in technology use. Further contemporary work is becoming increasingly characterised by distribution instead of centralisation, flexibility rather than rigidity and a higher degree of independence and interdependence rather than hierarchical control.

It is necessary that a study devoted to ICT-driven interaction incorporates mediated control as well, especially when the activities involved occur in a collaborative, interdependent environment. This view reflects a ‘coordinative arrangement’ (Kallinikos, 2007 p. 274) which reinforces the idea of functional interdependence in spite of the presence of a centralised authority appropriately described by Kallinikos as ‘coordination centres’. The key role of the coordinative centres is to maintain an awareness of the activities within a network of disparate entities. The following statement epitomises a fundamental function undertaken by the central administration to oversee the assortment of operations that take place among other entities with a shared operational interest.

To accomplish their task, coordination centres must remain both dissociated and detached from local engagements and seek to obtain a bird’s-eye view of the actors and operations they coordinate, a task that is substantially aided by the control and management of information processes (Ibid. p. 283).

This simple yet seductive statement seems to suggest, by extension, that there is more to control than that which is usually assumed and subsequently taken for granted as is expressed by the phrase ‘...management of information processes. In this sense, control in its various dimensions such as codified rules, regulatory norms and procedural guidelines, is vital as technology mediated interaction could be occasioned by shared context, joint interpretive cognition of social norms, interdependence, common experiences and trust. Even the sophistication that accompanies the functionalities in current, distance-bridging communication mediation tools, such as computers, Blackberries, PDAs, laptops, mobile phones, among others can hardly make up for the significant role that distance plays in technology mediated interaction. Naturally, control in technology mediated interaction can present one of the major challenges for

professionals in contemporary rising flexible work settings characterised by varied types of organisational structures.

1.3 ICT-driven interaction: research domain and question

Interaction mediated by technology continues to demand significantly more than advanced technological objects or artefacts could possibly offer. ICT-driven interaction in this study identifies the decisive role and crucial involvement of technology artefacts in undertaking common and personalised organisational activities; not merely as ‘maps but remarkably as scripts (Schmidt, 1997). ICT-driven interaction requires social mores and conventions, norms, folklore, organisational structure and institutional arrangements to be mutually fulfilling, from the standpoint of the social agents and the organisation concerned. For ICT-driven interaction to achieve a greater measure of being mutually beneficial and fruitfully effective,

there have to be signs, objects of some sort that are about some thing, objects whose function is reference rather than presence (Borgmann, 1999 p.17).

In light of the foregoing, money, for instance, was once upon a time employed as a token, or a ‘boundary object’ for transmitting aims and intentions across heterogeneous working social entities (Bowker and Star, 1999, Star and Griesemer, 1989, Star, 1995) to mediate interaction. Put differently, objects were used as ‘immutable mobiles’ so that the transportation of such objects across distance and space simultaneously preserved their cognitive content and intended significance (Latour, 1990) to convey ideas, messages, or information from one interaction partner to another.

History reminds us that coins were influential in mediating interaction of people from distant geographical locales (King and Frost, 2002). The aesthetic features on the coin illustrated by, for instance, the emperor’s face on it and the ease of handling the coin (money) served as a commanding state-supported device for disambiguating decisive facets of the interaction process. In this vein such objects served as interaction mediation tools for carrying out the wishes and desires of authorities at a distance.

Research on technology mediated interaction has, for a considerable amount of time, occupied two ends of a continuum. On one side is human-computer interaction with

particular emphasis on engineering, computer science and design of mobile devices and equipment that mediate human interaction in diverse organisational engagements and application (Jacko and Sears, 2003, Schmidt *et al.*, 1999). The other end of the continuum goes as far as exploring the patterned emotional instabilities associated with mediated communication encounters or interaction in its minutiae form (Goffman, 1983a, Walther, 1994, Heath and Luff, 2000). Continua like these present a dichotomous situation that sometimes translates into a dilemma.

The reason stems from the observation that attention, in this connection, is divided between the technical elements of mobile artefacts and the widely assumed social implications spawned by such technology such as their harmful and green house effects on society at large (Arnold, 2003). However, and surprisingly, least attention, if any, is given to mediated control in these research works; given the fact that mediated control plays a pivotal role in constituting the processes needed for the elicitation and maintenance of shared and collective action (Layder, 1997). Broadly speaking, control has not only caught the attention of researchers but the subject has equally occupied them for decades now. Yet we know little of studies that pin their focus on and direct their attention on the dynamics of mediated control in an environment where interaction is largely driven by ICTs.

It should however be made clear that several studies treat control from divergent epistemological and ontological perspectives. For instance Ouchi (1979b) provides a conceptual framework for understanding the plan and aim of organisational control mechanisms. Vivid description is given as to how organisations manage the contentious issues of evaluation and control. Eisenhardt (1985) on her part adopts the agency theory to explore different control variables like reward schemes and job features to deepen our knowledge in organisational design and its implications for reward structures and compensation packages in 54 United States (US) retail stores. Writing on corporate control structures, Walsh and Seward (1990) maintain the importance of coupling internal organisational control-oriented structures with external market informed control mechanisms to operate side by side with varied aspirations of both shareholders and managers. Last, but by no means least, Davis and Thompson (1994) devote their attention to control from purely a political perspective, by employing a framework based on social

movement to elucidate the drifting capacities of shareholders and managers. Quite recently, and still on control, Kohli and Kettinger (2004) relate and set out to probe how illegitimate principals enforce behavioural conformance on agents. These academic endeavours seem disjointed so far as mediated control of technology-driven interaction is concerned.

It would be fair, at this point, however, to recall the work of Yates (1989) in which she details and highlights the distribution and dissemination of information by managers to control and coordinate institutional activities. A comprehensive account is given of innovative managerial skills in the use of various mediated interaction techniques in the propagation of information both within and outside the organisational setting. Mention is made, specifically, of letters, telegraphs, memoranda and copying as some of the instances of managerial communication regarding interaction within and outside the organisation. A space can also be reserved for Yates and Orlikowski's (2002) account of 'Team Room', a platform that enabled the scheduling of different patterns of group collaborative habitually arranged interaction. Six distinct underlying incentives of 'purpose – why, contents – what, participants – who, form – how, time – when and place – where' (Ibid. p.32) characterised this particular interaction activity, though no special place was retained for the element of control in any conceivable form. However, the sort of general perspectives that motivated the use of certain technology (in this case email) establishes some kind of link with this particular study.

Admittedly, it has to be revealed that Yates' work has a certain amount of relevance for this study; though it even predates the discovery and the subsequent introduction of the Internet Explorer in 1995 by Microsoft® (Castells, 2001). As expected, Yates' work least anticipated the variance in the modes of technology mediated interactions. This variance includes electronic mail (Email), videoconferencing, among others that depend heavily on the architectural foundations of the Internet which are significant in today's organisational and interorganisational exchanges. This notwithstanding, there is a dearth of research endeavours that holistically look at ICT-driven interaction from mediated control perspective. Indeed very little is known of academic works that genuinely and consciously look and integrate mediated control in technology-driven interaction in one complete unit.

This compendium intends to take up this challenge and move the work in this research area further forward. This academic enterprise is worth pursuing on at least two counts. Firstly, it would seek to bring out the issues pertaining to the controlling capabilities of people and technology in their respective areas of strengths and limitations in ICT-driven interaction. Secondly, such a study could help mould our reconceptualisation of ICT-driven interaction and its practical application to diverse situational contingencies, such as the administration of mediated control in organisational behaviour.

Control – as a concept – has been studied from multiple perspectives due to different motivations and interests researchers have reposed in the subject. Indeed, research on control has occupied intellectuals for years now, except that its application in the domain of information systems is still, relatively speaking, at the burgeoning stage. And academic interest in such studies continues to gather investigative storm, except to say that empirical, real-life endeavour is, on many counts, lacking in detailed existential undertaking. In this connection, it would be fair to suggest that until quite recently, there is a disproportionate study of the various manifestations of control in the use of ICTs. This notwithstanding their massive implication in enterprise-wide and interorganisational practices as exemplified in our everyday work experiences. The aim of this study as delineated earlier, among other things, is to get insights into mediated control in ICT-driven interaction. The achievement of this ambition requires a reorientation to the entire realm of technology mediated interaction, drawing heavily on an empirically informed research undertaking. Both the contextual and pragmatic use of movable and immovable ICTs are then highlighted under mobile and stationary working environments.

In the exercise of mediated control in technology-driven interaction in a collaborative work, there are likely to be moments of apparent tension, conundrum and even a dilemma. For when do human control strategies and tactics begin and when does technology take over control responsibilities from humans in such ICT-driven interactions? A query like this provides us with a launching pad for, and subsequently sensitises us to, the dominant research question of this study. How does mediated control manifest and how is it ensured in ICT-driven interaction in an organisation's collaborative work? The exploration of differing issues to address this challenge, directs

the research to seek captivating responses to the following matters as well. What mechanisms constitute control in technology mediated interaction? To what extent can we better understand the rationalities and motivations that drive technology mediated interaction in collaborative environment? How adequate are control structures (both human and technology) instituted by the organisational top hierarchy to bring about the expected form of behaviour in ICT-driven interaction?

One disclaimer would suffice for now before this study goes any further. This study looks at ICT-driven interaction from a multi-dimensional, all-inclusive approach, in which different types of technology mediated objects or tools for diverse modes and forms of interaction are considered. This is a step further than what has generally been discussed in the growing body of literature on ICT-driven interaction. The reason stems from the fact that such research efforts have concentrated, and in the process limited their focus on, only fixed personal computers (PC) to the exclusion of other mediating tools like mobile phones, fixed telephone, Personal Digital Assistants (PDAs), laptops and others, see for example (Walther, 1995, Walther, 1996a, Vrasidas and Zembylas, 2003, Alavi and Leidner, 2001). The list is not exhaustive, but at least it provides a relation to, and a sense of direction of, the context under consideration and the claim being put forward to justify the need for this study.

The apparent limitation to these tools of interaction, for example the PC, is its reduced social presence; it is generally text-oriented and particularly asynchronous in its mechanics (Sproull and Kiesler, 1986, Wellman *et al.*, 1996). The current reconstruction of ICT-driven interaction in organising collaborative work equally requires a crucial reconsideration of the fundamental characteristics of the strategies that proved successful in mediated interaction and social as well as commercial exchanges in ancient times.

1.3.1 Empirical investigation

The empirical body of this study sets itself to investigating the application of both mobile and immobile ICTs in an organisation within the food services industry. Easyway

Food Services Ltd,² hereafter referred to as EFSL, sells semi-prepared food and food related items to small and medium-size fast food shops and restaurants in and around London. The food logistics industry in London is highly competitive and customers are very sensitive not only to price but also, crucially, to the way and manner their unpredictably capricious demands are met and satisfied. The least error – however inadvertently – human or technology, on the part of the organisation could trigger a significant shift of their customers to their competitors. EFSL has recently, through the use of technology, automated greater proportion of the processes involved in commercial exchanges with its customers from order processing to delivery. Automation has, as a result, meant that greater aspects of control and decision-making abilities have been structured and assigned to technology, with people having little room for the use of discretion. Two distinctive services are provided: order processing by telesales representatives (hereafter referred to as telesales reps) and order delivery by delivery drivers. The telesales reps are made up of about 12 different teams of roughly 5, headed by a team leader each, while delivery is carried out by a fleet of approximately 200 vehicles.

For an organisation like EFSL, the aspiration to satisfy customers with an appreciable degree of efficiency and effectiveness is a daunting challenge. This implies telesales reps have to demonstrate professional alertness and alacrity together with unwavering proficiency in processing customers' orders, while delivery drivers have to be smart and attentive to the details of computer generated invoices. Demonstrating the appropriate telephone conduct, which involves tempering large dose of restraint with an equal measure in respect of pleasant disposition, is required of every telesales rep. This behavioural expectation, on the backdrop of mediated interaction, is intended to encourage and enhance both employee and customer loyalty.

The research is contextualised around order processing and delivery activities which prominently feature telesales reps and delivery drivers in their use of portable, mobile and stationary ICTs in carrying out their respective duties. The telesales reps and

² Easyway Food Services Ltd is an anonymous name being used here to protect the true identity of the organisation where this study took place.

delivery drivers have been especially selected because both represent the organisation to the outside world in two differing but complementary ways. The telesales perform what can be described as *back-end* activities while the delivery drivers undertake *front-end* functions. The back-end activities refer to the series of functions that characterise the duties of the telesales reps in the form of taking customers' orders on the phone and its allied activities in the office prior to loading. Front-end functions identify all the processes that involve transporting packaged orders from the company's site to the delivery addresses of the customers with the aid of mobile phone. The delivery drivers are supposed to use the mobile phone in different emerging situations to mediate their interaction with the head office in the course of delivering customers' orders.

The choice of telesales reps and delivery drivers as the scope around which this thesis explores and probes is partly due to their particular use, and heavy reliance on ICTs to drive interaction in all its stripes. Secondly, the resolve to concentrate on ICT-driven interaction takes into due consideration the issues of administrative behaviour, control, discretion and emotional repercussions that are significant in demarcating the context of this study. Consequent upon these key issues, the writer decided to adopt a case study research as a means of gathering the relevant data which provides the foundation for critical analysis. The underlying motivation is to 'observe the ...process in real time as it unfolds in the field of setting. This approach maximises the probability of discovering short-lived factors and changes that exert an important influence' (Van De Ven, 2007 p. 208).

1.4 Objectives and anticipatory contributions of the study

In pursuance of convincing answers to the searching, key research question just delineated above, this study hopes to achieve the following set of objectives:

- To do an extensive explication of the concept of mediated control within collaborative work environments;
- To understand not only why control and other regulatory practices are laid out but also how they manifest within the framework of administrative behaviour;

- To intensely explore the possible substitutes and or ancillaries of control, if any, in ICT-driven interaction;
- To develop a theoretical template that would better shape our appreciation of ICT-driven interaction from the standpoint of mediated control in contemporary organising; and
- To form a common, integrated and practical outlook on the establishment of mediated control in collaborative activities.

Given this set of objectives, this research anticipates to make particular contributions in respect of the following areas.

1.4.1 Expected Theoretical contribution

As indicated earlier, the concept of control is not new, especially, in the field of administrative behaviour. However, discussions on the concept hardly ever treat it from a mediated standpoint. One of the primary aims of this dissertation, therefore, is to make a contribution to the ongoing debate about control by theorising the means by which ICTs can shape control in new and often unexpected ways. Also, the study seeks to make meaningful contribution to concepts like organisational loyalty and discretion against the background of mediated control in administrative behaviour. The lessons drawn from the application of these theories, with respect to introspection, of their shortcomings could be instrumental in facilitating how these concepts conceive reality.

The study, additionally, aims to provide organisational researchers the opportunity to cultivate a more meaningful and enhanced conceptualisation of the implications of technology-driven interaction on mediated control in diverse work environments. The research aspires to foment some level of understanding of the relationships between administrative behaviour and how it informs and impacts mediated control. In the process, the study intends to make conclusions, however incipient and tentative they may seem, about the influential role of ICTs in controlling the behaviour of social agents in organisations. By this, the study anticipates to make a legitimate contribution to social theories in contemporary organisations.

1.4.2 Expected Practical contribution

Given the focus of this study, the final product is expected to deepen and broaden the understanding of mediated control in interactions largely inspired by ICTs for professionals, particularly those in the logistics industry. This work also wishes to alert professionals to the importance of shedding their rooted and taken-for granted assumptions they may have on the traditional notions of control. To this end, the study hopes to sensitise practitioners to the reality that it is about time they recognised the need for pragmatic approach in their administrative relationship with people whose situation they can hardly or fully anticipate and appreciate but with whom they should interact for their mutual and corporate benefit. Since this study focuses on an organisation that supplies food logistics, it can possibly contribute towards discussions on the future of the industry, however impermanent it may seem.

1.4.3 Anticipatory Methodological contribution

By studying an organisation that uses a combination of portable, mobile and stationary ICTs in its daily enterprise-wide operations, creative methods are used, through which penetrating examination and consideration promise to convey a methodological contribution. To this end, the particular use of faith as an addendum to methodological research inquiry marks a productive contribution.

1.5 Outline of Dissertation Structure

Chapter 1: This chapter sets up the research agenda, demarcates the research boundaries of the study and points out the various components that are constitutive of the research. It anticipates the strings of issues that fall within the purview of mediated control in ICT-driven interaction in the organisation and administration of collaborative work. Subsequently, the chapter rounds-up with the significance of this whole academic endeavour by summarising three specific areas of contributions that the study hopes to make.

Chapter 2: This part of the study looks backward into general interaction studies, mark out the trajectory of technology mediated interaction with an illustration on the paradigmatic nature of mediated interaction as a dispensational innovation, contingent on the dynamics of the time. The chapter invariably witnesses the exercise of independent critical judgement to provide a focused, analytical and balanced outline of issues that have much relevance to mediated control in technology driven interaction, especially within a collaborative environment. The distinctive 'selling point' of this work is made abundantly clear at this stage.

Chapter 3: The methodological appropriateness of the study receives the highlights in this section of the work. The different divergent routes that lead to the elicitation and solicitation of the data are emphasised and discussed. In the end, an explanation is provided to support how the different approaches befit the overall purpose and integrity of the study.

Chapter 4: An outline of the theoretical underpinning of the research takes the centre stage in this chapter. It is against this background that administrative behaviour as a lens is applied to understand the various dimensions of mediated control within the confines of technology driven interaction in an organisation. Again, the key features, underlying principles of the theory of administrative behaviour are noted, and their implications for mediated control in technology driven interaction explored to enrich our appreciation of the concept of control in both theorising and application in the field of practice.

Chapter 5: This chapter introduces the context of the case study, with an introductory background to the key highlights of the main activities that pertain to the fundamental mission of the organisation under study. The chapter captures the vital segments of the many activities of mediated control and interaction inspired by technology in a collaborative environment.

Chapter 6: The data gathered from both personal observation and the series of interviews is subjected to detail analysis to signpost the thematic directions against the background of the aims and significance of this study. Multi-dimensional approaches are applied to layout the major blocks of issues that come to the fore in the consideration of mediated control against the backdrop of technology supported interaction in

collaborative work. In addition the paradoxes, conundrums and dilemmas involved in mediating control in technology mediated interactions get the attention in this portion of the study in the light of the research aspirations.

Chapter 7: This chapter seeks to bring out the simmering tensions and repercussions of mediated control with detailed discussions that reflect the consequences of the use of technology to facilitate interaction. The chapter endeavours to link the emerging themes in chapters 2, 3, 4, 5 and 6 together by invariably, drawing on philosophical hermeneutics. The aim is to bring out a personal appreciation of matters pertaining to both the observed and conceptual facets of the research in order to arrive at some wide-ranging reflections and specific propositions.

Chapter 8: Ultimately, this aspect of the study summarises the entire work by presenting the significance of the study in view of the key ideas and arguments advanced in the whole research exercise. It then pinpoints the limitations of the study, highlights its unique contributions and presents the way forward in terms of future research directions in a related study.

1.6 Chapter in review

The section has so far outlined the agenda for this study by teasing out contemporary work within which the study is posited. The motivational factors driving the study, together with the specific objectives and the general significance have been highlighted to mark out the research question that provides the guiding trajectory for the whole exercise. A summary of each chapter has also been delineated to indicate the overall structure and organisation of the entire research activity.

CHAPTER TWO – TECHNOLOGY MEDIATED INTERACTION AND CONTROL: A CRITICAL REVIEW

2.1 Introduction

Section I

Patterns of contemporary societal interaction have taken on a new dimension, marking a dramatic departure from what used to pertain in the past, succinctly described as arm's length or close, proximal interaction or better still, face-to-face interaction (Goffman, 1974). Reflecting this thought might have influenced Wiberg (2005a) to label today's world as *The Interaction Society*. A description that well captures Collins' observation that 'a lifetime is, strictly speaking, a chain of interaction situations' (Collins, 1981 p.998). Interaction Society should not be construed in any way to imply that interaction, regardless of how we understand it today, did not occur in the past. Indeed, interaction society illustrates the technological component and dimension that have become the very fabric of today's multivariate interaction activities with its continuously transforming manifestations, either at the individual, group or organisational level.

Contemporary interaction in commercial milieus and private environments are characterised by mediated gadgets, even in circumstances which otherwise would have occasioned face-to-face encounters. Nowadays, the use of mobile telephones, PDAs, videoconferencing facilities, BlackBerries and other forms of portable and immovable computing technologies to interact with working colleagues, either in close range or long distance situations, is on an unparalleled ascendancy.

This chapter takes an epistemological look into general interaction studies. The specific focus is on technology driven interaction, highlighting the paradigmatic character of interaction as hinging on pragmatic exigencies, business imperatives, organisational strategising and demands of the moment. The chapter customarily witnesses the application of independent critical judgement to provide a focused, analytical and balanced outline of issues that have much relevance to technology mediated interaction with regard to control, especially within a collaborative environment. The distinctive research direction of the study is made abundantly clear at this stage.

To achieve this, I draw heavily on the mainstream interaction literature and zero in on technology mediated interaction with a view to bringing to light the connections between these concepts and their practical relevance to the study. Essentially, the review process consciously separates technology mediated interaction from control in two different sections. Therefore while the first body of the literature review largely occupies technology driven interaction and its current dimensions and sociological implications, the domain of the second section indicates the implication of control in current ICT-enabled organisational activities.

The initial section on 2.2 seeks to explicate the concept of interaction while the subsequent subsections trace the historical patterns of interaction to its present expression and structure. The concept of mediation finds space in section 2.3 while the subsections discuss the theories of mediated interaction and rationale behind their implication in organisational communication. Emphasis is placed on social presence and media richness theories in explaining the role played by both transportable and immovable ICTs such as mobile phones, PCs, and other handheld devices in the adoption of mediated interaction at different spatial contexts. The purpose is to reveal how the dawn of ICT-driven interaction continues to inform the pattern and mechanics of individual and group communication in various organisational regimes.

The latter part of the review, mainly, 2.6, would delve into control as it pertained in earlier organisational dispensations and how it is implicated in contemporary work practices. Here, control is positioned within social and sometimes psychological contexts. The purpose is to demarcate human-base control regulations in organisational strategising from control devices inspired and monitored by non-human elements.

2.2 Interaction explained

It is appropriate to build and develop a systematic understanding of interaction that aligns itself with the objectives of this study and addresses the particular issues raised in the research question. To this end, we need to embark on a careful endeavour to set the parameters for the clarification of the term ‘interaction’ so that the concept is limned as precisely and concisely as possible to reflect the thematic direction of this research. It is

not easy to chance upon a generally acceptable referent for interaction in the conventional literature. Some authors who approach the subject from both theoretical and practical dimensions (Nasrallah et al., 2003, Zack and McKenney, 1995, Clair et al., 2005, Perlow et al., 2004) do little to offer a definition for interaction. In fact such studies only go as far as providing detailed descriptions and general features of the notion of interaction. An exception can however be provided in terms of the pioneering works on interaction by Goffman (1974, 1983b) and, later, Collins (2004) who offer analytical explanation of interaction from the standpoint of its ritual activities in the form of chains. For instance, drawing on Goffman and Durkheim, Collins presents a specific meaning of interaction as ‘a mechanism of mutually focused emotion and attention producing a momentarily shared reality, which thereby generates solidarity and symbols of group membership’ (Ibid. p. 7).

To be sure, Goffman (1981) and Collins (2004) have had occasions to describe interaction as one dimensional human activity, what can be illustrated, appropriately, as *micro interaction*. In this sense, interaction is understood to be a private individual engagement such as can be expressed when a person is thinking aloud or talking to himself or herself. Interaction then becomes personalised conversations and expressions that ‘do not mark a flooding of emotion outward, but a flooding of relevance in’ (Goffman, 1981 p. 121). Interaction considered in this narrow form tends to overlook many crucial elements, by means of ‘mutual accreditation’ (Gregory, 1994 p. 497), that finds expression in the sphere of the mechanics of information exchange, sharing, storage and interactivity for widening the scale of our understanding on the concept.

It could be right to suppose that at the time of Goffman, interaction had not assumed such a diversified form as is evidenced in the revolutionary manner in which ICTs have transformed the phenomenon. This notwithstanding, we find a glimmer of hope in the definition ventured by Simpson and Galbo (1986 p. 38) that views interaction as:

...behaviour in which individuals and groups act upon each other. The essential characteristic [of interaction] is reciprocity in actions and responses in an infinite variety of relationships: verbal and nonverbal, conscious and unconscious, enduring and casual. Interaction is seen as a continually emerging process, as communication in its most inclusive sense.

Due to its essential elements of reciprocity and mutuality, the following has been purposefully chosen as a definition that holds much promise and significance for the integrity of this research exercise. Conceptualising interaction in its reciprocal fashion restricts any possibility to attribute to it a unidirectional perspective as sometimes obtains in communication. Interaction therefore seeks to identify ‘reciprocal events that require at least two objects and two actions. Interaction occur when these objects and events mutually influence one another’ (Wagner, 1994 p. 8). It is the interactive character of interaction as exemplified in the just quote that provides the frame for parties to interconnect in a meaningful number of ways to engage in an all-inclusive communicative behaviour.

The definition lays down the foundation for understanding the many possibilities in which interaction can be consummated and expressed between and among people. These possibilities include communication, collaboration, co-operation and coordination. Interaction then, enables the establishment of networks for reaching out to contacts without necessarily their body presence (Peters, 1999) by means of the mediating capabilities of ICTs. The application and use of mediation tools in getting in touch with one’s interaction partner broadens the meaning and scope of interaction, which can be appropriately referred to as macro interaction; interaction activities that extend beyond the identity of an individual. It is thus characterised by ‘continuous reciprocity of expressive acts...’ (Berger and Luckmann, 1966 p. 29).

Interaction, then, implies reciprocity (Vrasidas, 2001) and mutuality of action or ‘meta communication’ between or among actors in their determination to commit themselves to a technological or sociological intercourse for a determined purpose. An activity that leads to ‘mutual tuning-in relationship’ (Schutz, 1971) because it is predicated on shared dependency, common identity, mutual experience and joint context that is captured in a collective purpose directed toward common objectives (Schmidt and Bannon, 1992).

2.2.1 Perspectives on interaction

Undoubtedly, interaction is the engine that keeps the wheels of society running. Indeed, in Boden's (1994) opinion, interaction could be construed as an adhesive that binds modern organisations. Though this description falls short of providing any indication on how interaction fastens organisations and societies, it nevertheless makes allusion to the instrumentality of interaction in bringing communities together. Interaction reflects the very embodiment of human life in any society. Luckmann (2005 p. 4) recognises this position with the assertion that 'the traditions of life by which human societies are organised are the cumulative result of long chains of interaction'. In this vein, Luckmann soundly but forcefully argues that, irrespective of its situational stride and application mode, interaction is not a one-off event; since it sets the tone for the possibilities of future engagements.

The crucial significance of interaction cannot therefore be overemphasised in any society be it organised or otherwise. Much credence is given to this view by Hughes (1958) who stresses the point that interaction lies right at the core of an organisation's life. This view suggests that interaction leads people to initiate strategic moves, develop routines, cultivate practices and procedures that give birth to organisations and provide the means for their vital sustenance (Hughes, 1971). By way of amplification, interaction is the life of an organisation; a life that should not be seen as a detached component of human activity but as an integrated, continuous, ongoing process. In line with the symbolic interactionist (Blumer, 1969), the ongoing and recurring nature of interaction does not only exist in a context but it also configures the context. This reflexivity then implies that interaction is inextricably linked with the context of its occurrence which generates a relationship that precludes any attempt to keep the two experientially apart.

It is interesting to note that the series of activities undertaken by the instrumentality of interaction do not take place in a vacuum or come about automatically. In fact they happen as a result of cognitive, thoughtful, and experiential processes of individual, group or organisational action. It is least surprising then that Kakiyama and Sørensen (2002a) mainly link the building process of the phenomenon of knowledge with the notion of interaction. The reason for this, they assert, is that the emergence of knowledge draws its origin from interaction. And this interaction constitutes the very foundation of complex exchanges intrinsically meshed in human society.

Goffman (1967) divides interaction into two main categorical pillars: focused and unfocused interaction. Focused interaction illustrates the agreement people come to, to continue their concentration on a particular cognitive and ocular awareness as it pertains to conversation. Unfocused interaction on the other hand reflects the situation where an individual, qua interactant, within an auricular distance is less obligated to connect to a joint focus of attention. Social gatherings, individuals waiting their turn on a queue to check-in at the airport and an ordinary man walking on the street are appropriate instances of unfocused interaction. Put simply, unfocused interaction, according to Goffman, involves 'decorous individual noninterferingly going about his proper business' (Ibid p. 133). In short, while focused interaction demonstrates intentionality and preparedness on the part of the interaction parties to commit themselves to a shared sense of purpose; unfocused interaction expresses lack of obligation and involvement to commit to a mutual engagement. Focused interaction invites the parties to adjust their personal deportment under the presumption that they are under each other's scrutiny. While these categories provide the sense by which we can appreciate interaction, there is barely nothing in its mechanics to inform us of the necessity of the 'durability, intelligibility and portability of the information' (Sproull and Keisler, 1991 p. 3) exchanged between the parties.

In a dramatic point of departure, Thompson (1995) provides three categories of interaction that reflect not only many of the circumstances which such exchanges become feasible but also the tools that make the conduct of interaction meaningfully rich. Face-to-face interaction, mediated interaction and mediated quasi-interaction constitute the structure of Thompson's categorisation of interaction. In the face-to-face mode, participants are in the immediate presence of each other with a shared spatial-transitory reference scheme. Hence participants take deictic elements as 'here', 'that', 'now', 'that', among others for granted with the presumption that they would be comprehended automatically. In this sense the speaker could clear any ambiguities when the referent is clumsy by pointing to the object under discussion. Face-to-face interaction is then dialogical in orientation as recipients can respond (in theory) and get feedback to messages by initiators or senders and vice versa.

Mediated or ICT-driven interaction recognises the use of technical objects to function as the medium or the platform by which interaction can be established. Thompson recounts that technical medium such as “paper, electrical wires, electromagnetic waves, etc.” (p. 83) facilitates the transmission of symbolic and information contents to parties who are either separated by time or space or sometimes both. Due to distinct spatial context that usually characterise ICT-driven interaction, participants can barely take the accompanying deictic expressions for granted. As a result, participants reconsider the extent of the contextual information to be added to a message. A typical example is when someone identifies himself at the start of telephone conversation or the indication of a date and address on top of a letter. This notwithstanding, mediated interaction provides the interactants with very limited symbolic tokens for the reduction of uncertainty.

Mediated quasi-interaction, according to Thompson, is the use of mass communication tools such as books, radio, television, newspapers to build social relations. In this situation mediated quasi-interaction involves the extended accessibility of information and symbolic messages across space and, or, time with a decreasing degree of symbolic devices as compared to, say, face-to-face interaction. There are a couple of senses in which mediated quasi-interaction is ontologically different in mechanics and application from both face-to-face interaction and mediated interaction. First, while face-to-face and mediated interactions are oriented towards a specific person or persons and for whom immediate or postponed responses such as utterances or words are expected, mediated quasi-interaction is meant for indefinite variety of recipients. Second, while face-to-face and mediated interactions are dialogical in character, mediated quasi-interaction is monological; because the channel of information is chiefly unidirectional as obtains in reading a book. For, the sender of the information (author) does not receive immediate response from the recipient (reader). In short, there is lack of ‘reciprocity and interpersonal specificity’ (p. 84) in mediated quasi-interaction.

It is unlikely for the parties in mediated quasi interaction to directly monitor the manner in which their messages are received, and so cannot take any immediate corrective action. In other words there is lack of immediate feedback in the form of

response for mediated quasi-interaction. The above categories of interaction can be represented in the following table:

Interactional characteristics	Face-to-face interaction	Mediated interaction	Mediated quasi-interaction
Space-time Constitution	Context of co-presence; shared spatial-temporal reference system	Separation of contexts; extended availability in time and space	Separation of context; extended availability in time and space
Range of symbolic cues	Multiplicity of symbolic cues	Narrowing of the range of symbolic cues	Narrowing of the range of symbolic cues
Action orientation	Oriented towards specific others	Oriented towards specific others	Oriented towards an indefinite range of potential recipients
Dialogical/monological	Dialogical	Dialogical	Monological

Table 1: Types of interaction

[Adapted from *'The Media and Modernity: A Social Theory of the Media'* by JB Thompson (1995)]

It bears pointing out that interaction involves the use of cues and symbolic tokens or 'typificatory schemes' (Berger and Luckmann, 1966 p. 45) as well as 'conceptual schemes and knowledge representations' that encourage the articulation of work conducive to control at the local or individual level (Schmidt, 1993 pp. 21, 91). These symbolic tokens or structures are erected on a template that may be familiar and common to the parties enrolled in the interaction process. The generation of these symbolic structures possibly spruces up the interaction process and makes the behaviour and conduct of the interactants more meaningful.

The situational reality, that constitutes the platform for the parties, does not compel the definitions and meaning of objects on people. Rather, there is a negotiation process towards the attainment of a common ground of shared interpretive and cognitive

understanding so as to make such objects socially real (McClland, 2000). Interaction thus provides the means by which structures are constituted, making it feasible for several actors to establish experience and understanding in parallel ways. With this, mutual frames of cognition could be mounted which would enable individuals and groups to set up, manipulate and transform the structure and the prevailing reality to a certain degree of joint and mutual understanding.

2.2.2 Direction of current interaction studies

Modern-day research on interaction marks a radical point of departure from the study of close range communication that used to dominate the literature about half a century ago. Nowadays, improvements in ICTs have significantly resulted in the growth of information (Kallinikos, 2006) and the expansion of computer networks (Vrasidas, 2000) thereby opening up opportunities and possibilities for both penetrative organisational and interorganisational network and connectivity (Fountain, 2001). Institutional interconnectedness and the work of nomadic Information Technology (IT) experts in the sphere of information sharing, application, exchange, systematisation and the transferability of specialised IT knowledge (Voutsina et al., 2007) could be carried out by the instrumentality of technology mediated interaction. Scholars these days have had their interests propelled to flights of curiosity in both their theoretical and practical investigations and understanding on the subject of mediated interaction.

In studying group members for instance, Mulder et al. (2002) outline the extent to which an assessment of shared understanding can be carried out in a virtual team that thrives on synchronous and asynchronous modes of interaction to facilitate group learning. Synchronous interaction seeks to identify a situation where interactants have the opportunity to access, modify or share information on real-time basis; while asynchronous interaction concerns itself with the situation where sharing, modification and transmission of information take place at various times without any restrictions (Bentley et al., 1997). Though the study leaves out the crucial element of control in the structural design of an organisation, it does not leave us in doubt of the procedures of coming to a common understanding of the series of interactions that transpire among the

members. In a similar development, there have been comparative analyses of the respective strengths and weaknesses between face-to-face interaction and other forms of mediated communication (Vrasidas and Zembylas, 2003, Fortunati, 2005). Vrasidas and Zembylas for instance maintain that in certain instances, (especially in an online environment) mediated interaction is far superior to face-to-face interaction in spite of its inherent disadvantage of being dawdler and devoid of richness, continuity and immediacy. Mediated interaction is however not altogether unpleasantly restricted because technology makes it socially present (Short et al., 1976b).

Reporting on the theories and methods of mediated technology, Whittaker (2003) submits that the advent of ICT-driven interaction was to overcome the power of distance over the audibility of speech and visual cues like gazes and facial gesticulations. This is not to fully endorse the claim of the obituary of distance (Cairncross, 1997); neither is it to succumb totally to the unbridled assertion that distance has lost its 'enchantment' (Mee, 1898). To be sure, distance still counts (Olson and Olson, 2000) especially in technology mediated interaction, as far as factors like time, space, context, et cetera are concerned (MaCarthy and Miller, 2003, McCullough, 2004). The rising popularity of 'anytime anywhere' (Kleinrock, 1996) expressed in the redefinition of ephemeral, situational, flexible and spatial limitations of the context of work has significantly liberated many a modern organisation from the worries of the rigidities that typically characterise centralised organising (Malone, 2004).

The anytime anywhere syndrome likely to result from some of the consequences of ICT-driven interaction is sometimes problematic, as it tends to impinge negatively on work performance and productivity (David, 2002) due to needless intrusions and unpredictable interferences. The reason stems from the fact that sometimes the initiator of such interaction could not be in a position to tell if the other party is available and ready to engage with him. A situation that indicates a possible lack of prior arrangement between the parties involved. This could result in a situational inconvenience which may influence a person to deliberately restrict personal access to any possible future interaction (Perry et al., 2001) when communication is especially mediated at a distance.

In this regard control could be more difficult to enforce to bring even subjects in line with group or organisational aspirations. However, interaction at a distance is

increasingly providing people the opportunity to have control over how to make themselves ready for interaction and how to avoid others request for interaction. Similarly, the functional differences between places and spaces present a thorny challenge to the idea of any place, which in turn can erode the frontiers between private and work life (Gant and Kiesler, 2002).

In a dramatic portrayal of ‘Janus-faces’, Arnold (2003) presents the contradictory manifestations of technology use in ICT-driven interaction with particular reference to mobile phones. Revealing as it is in its philosophical submissions, the study does little to orient the IS community as to how people manipulate mobile phones to mediate their interaction with others. Nonetheless, the central argument of the research postulates both the liberating and constricting capability of mobile phones for engaging in interaction. To be sure, interaction via mobile technologies facilitates control on one hand and empowerment on the other (Sherry and Salvador, 2001); contributes to decentralisation on one hand while directing opportunities for centralisation (Calhoun, 1986) on the other. In this sense, ICT-driven interaction may become mobile, flexible and independent while at the same time pinning individuals to a personalised geographic unit or cell. Indeed, ICT-driven interaction enables individuals and groups to conduct their interaction in both synchronous and asynchronous modes (Kakihara and Sorensen, 2001).

Applying the benefits that organisations derive due to ICT interactions among its members, Nasrallah, Levitt et al. (2003) explain the rationale behind the use of motley levels of control by organisations to direct and determine who interacts with whom within its functional and structural administration. The paper exaggerates the real life of organisations because it presupposes an exclusive interaction in which only the members of an organisation engage with one another without a hint of external links with any other entity. This yields a picture of an idealised organisation. No references are made to the kind of exchanges that occur between organisations and those outside of its periphery without whom an organisation would struggle to obtain its life, vitality and activity. It can hardly be satisfactory to underscore the significance of social relationships that go with organisational undertakings with this narrow and parochial view of interaction.

ICT-driven interaction generates social relationships that form the basis of community integration (Calhoun, 1992) as various degrees of social relationships are

likely to emerge from the ongoing exchanges. In fact, Calhoun (1986) has suggested four distinctive levels of social relationships owe their societal recognition to interaction. These are primary, secondary, tertiary and quaternary social relationships. The primary relationship is typically interpersonal and it primarily involves face-to-face communication. According to Calhoun, secondary relationships demand the mediation of a sophisticated communication system, while in the specific case of tertiary relationship, one never has the opportunity to interact at a face-to-face level though mediation is achieved through a communication system. An Internet Relay Chat (IRC), Multi Object Oriented (MOO) and Multi User Dimension/Dungeon (MUD) come as worthy examples of tertiary relationships. Last, by no means least, is formation of quaternary relationship. In this relationship, the individual(s) is/are unaware of the fact that he or she is the focus of attention. A scenario of this might be eavesdropping or wire tapping.

Apart from the primary level, all the others are mediated in one form or another. It may be difficult to clearly draw a line, in terms of the mechanics between the second and the third levels, though the probable relationships that result from these various designations of interaction activities can hardly be missed. Ling (2000, and 2008) emphasises the instrumentality of ICT in the creation, sustenance and preservation of social relationships and cohesion as people nowadays adopt the internet to find their soul-mates, and also use the mobile phone to coordinate their social life.

ICT-driven interaction can give rise to certain psychological and emotional implications that may impact negatively or positively on the individual(s) depending on the prevailing circumstance. Wastell and Newman (1996) for example draw on Turner and Karasek's (1984) integrated framework of system of computer design, task execution and welfare to appreciate how interaction, supported by technology, lessens the rate of heartbeat and stress of emergency workers during peak operating hours. In a related development, Stéphane Coté (2005) uses interaction to discuss the correlation between the regulation of emotions and strain. Her contention may be established against the background of the concept of good-cop, bad-cop; an interrogation technique in which a team of two interrogators take diametrically opposing stance towards an individual. On the one hand, the good-cop adopts a favourable and sympathetic approach towards the subject with the view to gaining the subject's cooperation and trust by which a confession

could be elicited. The bad-cop on the other hand aims at putting fear in the subject by issuing threats and appearing aggressive towards him, thereby making the subject confide in the good-cop (Rafaeli and Sutton, 1991).

Closely related to the foregoing is research that has gone as far as to suggest the psychological ramifications of interaction in the learning process of individuals. Exemplifying the learning process, Sutton (2001), examines the social and psychological features that conspire to influence individuals' keen and enthusiastic, though indirect, participation in interaction. Sutton calls this 'vicarious interaction'; a situation that involves a second hand experience in which an individual observes – rather than direct participation in – the exchanges between at least two other people. The effectiveness of vicarious interaction, Kearsley (1995) contends, is contingent on individual and group preferences, and that the determining factor in interaction is the level at which an individual prefers to engage in. This view fails to account for the preparedness and willingness by which individuals set themselves up to engage with one another – irrespective of the distance between them – in a shared sense of purposeful interaction activity (Knorr Cetina and Bruegger, 2000, Heath and Luff, 2000). Kearsley interestingly presents interaction as if the individual lacks self-control and direction against his power. Vicarious interaction, as can be implied, is forced on people, possibly against their express will.

In spite of the many forms of interaction and the mechanics of their application, the foregoing review brings to light one distinguishing, recurring theme of how interaction is mediated between parties not within each other's immediate vicinity. Mediating interaction to enhance the social presence of interactants effectively demarcates the borders between interaction as was known predominantly in the first half of the 20th century and its equivalent at the dawn of the 21st century. Currently, mediation constitutes a major block that accommodates the exchanges and relationships upon which ICT-driven interaction not only thrives but also flourishes due to factors like social presence and communication dynamism.

2.3 The concept of mediation

The notion of mediation needs to be fleshed out because ICTs have made it possible for mediated experience to assume meaningful and overwhelming role in the activities of our everyday lives to the extent that we now reside in a 'mediated world' (Thompson, 1995 p. 233). It is intriguing to realise from the literature however that in spite of the much talked about mediated interaction the concept of mediation has received a disproportionate conceptualisation (Tang, 2007, Orlikowski and Schultze, 2004, Pickering and King, 1995, Geer, 2006, Bos et al., 2002, Sutton, 2001, Walther, 1996b, Alavi and Leidner, 2001). It is however fair to admit that Dey, Mankoff et al. (2002) shed some light on mediation even though in a very limited sense as the definition only gives account of interface design in relation to context aware applications. It is apropos then, that we familiarise ourselves with the concept so that its usage and application is put into proper perspective in line with the aims of this study. Again, there is the need to explain the meaning of mediation in order to emphasise its significant role in technology-based interaction as obtains between individuals and groups. Understanding the notion of mediation would also be helpful in arriving at an entirely novel way of thinking about ICT-driven interaction.

Latour (1999) advocates four distinctive meanings of mediation, namely, interference, composition, the folding of time and space and crossing the boundary between signs and things. But for the second meaning of mediation, all the others have a tremendous application to this study. The reason is not far-fetched. Mediation does not only dissolve the distance between time and space but also possesses the potential to bridge the frontiers of signs and things, coupled with its interference with the content and context of the interaction process. Mediation entails the process of enrolling, enlisting and organising participants for interaction. For interaction to be effectively mediated there have to be devices, tools or artefacts their functions of which should be the provision of the sense of presence rather than the presence itself. Mediation emphasises the functionality and capability of the artefact to provide links that join two or more disparate entities for a shared action.

The sense of presence gives meaning to immediacy, the perception that makes the parties seem closer to each other as if they are in each other's presence. Mediation also indicates the affordance that induces interaction between parties. Affordance, according

to Gibson (1979) expresses the avenue provided by the environment that enables action to be accomplished by the other party. Ortega y Gasset (1941) then provides a two-way, near-diametrically opposite account of an affordance; that it both ‘facilitates and frustrates’ the manner we interact with the world.

The concept of mediation can hardly be explained to any appreciable degree of understanding without a reference to Vygotsky’s (1978) account of what mediation truly stands for. Vygotsky’s postulation of mediation implies the concept is inseparably related to both the activity and the individual(s). Mediation is thus an all-inclusive, simultaneous engagement of three elements, namely, the individual(s), the activity they engage in and the object that connects the activity with the individuals who perform it. For Heidegger (1969), mediation simply entails ‘...a connection, a synthesis: the unification into a unity’ (p. 25). The unity not only creates a space but also connects two or more people together to share contexts however dissimilar they may be for carrying out either a planned or unplanned task with the aim of achieving a specific outcome.

2.4 Theories of mediated interaction

Two different but analytically complementary theories, social presence theory and media richness theory, have been propounded to explain the concept of mediated interaction ever since the phenomenon caught on with both researchers and practitioners. The motivation appears to have resulted from the attempt to juxtapose face-to-face communication with technology-mediated interaction (see, for instance, Burke and Chidambaram, 1996); and the overly positive and optimistic vision that mediated interaction could be a potential surrogate for face-to-face communication (Short et al., 1976a) in a virtual sense.

Accordingly, variations in the concept ‘virtual’, such as *virtual learning* (Piccoli et al., 2001) *virtual community* (Jones, 1997a), *virtual culture* (Jones, 1997b), *virtual collaboration* (Hossain and Wigard, 2004, Paul and McDaniel, 2004), *virtual society* (Castelfranchi and Tan, 2002) *virtual organisation* (Handy, 1995), *virtual teams* (Montoya-Weiss et al., 2001), *virtual relating* (Merkle and Richardson, 2000), *virtual rape* (McKinnon, 1997) among a host of others have been broached to indicate a closer

sense of the presence of one's interaction partner. Research indicates that technology mediated interaction can trigger changes in the way people interact, which in turn, can inform and affect social networks and patterns of communication (Fulk and Collins-Jarvis, 2001). Simply put, technology mediated interaction induces social effects and unintended implications. Social presence theory and media richness theory have been outlined to illustrate the processes that give rise to certain social outcomes such as virtual reality and the ability of communicated information to change understanding within a given period. In spite of their notable analytical distinctions both theories converge on the definite idea of the disparities in the media with regard to the volume and nature of information processing capability of the media (Trevino et al., 1990, Daft and Lengel, 1986).

2.4.1 Social presence theory

Social presence is the notion that mediated interaction has the potential to mimic the characteristics and advantages of face-to-face interaction and reflects the degree to which one senses the immediate presence and importance of his or her interaction partner (Kayany et al., 1996). The immediacy, or the presence induced by mediated interaction, is potential for enhancing the relational aspect of the communication; hence Short, Williams et al (1976b) by extension, argue that certain media transmit superior presence in comparison with others. Social presence is crucial for building our knowledge and perception of other people's behaviour and attitudes. A greater degree of presence leads to a superior perception. Social presence relies on both the words communicated during interaction and a multiple of nonverbal indicators such as facial expressions, tonal inflections, posture, etc., (Argyle, 1969, Birdwhistle, 1970). Social presence is usually judged by the differences in meaning that borders on emotions or the suitability of different media for a variety of similar organisational communication tasks.

2.4.2 Media richness theory

The origin of the theory of media richness is traceable to Daft and associates (1986, 1987) when they made enquiries into managers' proclivity to appropriate oral

form of interaction even when mediated interaction is practically feasible. This informed their categorisation of media into ‘richness and leanness’(Ochsman and Chapanis, 1974). The media richness theory suggests the ability of communicated information via a medium to limit the extent of equivocality on four counts, namely, the ‘speed of feedback, cue multiplicity, language variety, and personal focus’ (George and Carlson, 1999 p. 3). Equivocality simply recognises the situation of ascribing more than one interpretation to a given information or message. Richness is directly related to the power of the medium to facilitate learning; thus the ability of information to transform understanding within a specific time span. By implication media that take a long period to engender or enhance learning is lower in richness. Central to media richness is the hypothesis that there is a variation between tasks and certain features; various media differ in the degree to which they can relay the forms of information required and the motley task characteristics. The order of degree of richness can be ranked in the following table below:

Medium	Position	Degree of Richness
Face-to-face	1	Very high
Telephone	2	High
Personal documents	3	Moderately high
Impersonal documents	4	Low
Numeric documents	5	Very low

Table 2: Illustration media richness based on Daft and Lengel’s 1986 Organizational Information Requirements, Media Richness and Structural Design.

It is obvious from the above table that at the time of the categorisation of media richness there was lack of foresight on the part of the authors to foresee that videoconferencing would become an integral part of today’s technology mediated interaction (Rice, 1992). Videoconferencing equally offers a richness in mediated interaction as illustrated by the fact that ‘it provides voice as well as visual cues in addition to synchronous feedback’ (Rice, 1992 p. 483). In view of this, the media richness table can be diagrammatically reconstructed to reflect the inclusion of videoconferencing as a component of contemporary mediated interaction.

Medium	Position	Degree of Richness
Face-to-face	1	Very high
Videoconferencing	2	High
Telephone	3	Moderately high
Personal documents	4	Low
Impersonal documents	5	Moderately low
Numeric documents	6	Very low

Table 3: Reconstruction of the media richness table, based on Rice’s (1992) exposition on media, richness in relation to task analysability, media richness and effectiveness.

Given the application of critical social theory in analysing the extent of richness afforded by a specific communication act, it is difficult to sustain the logic that underlies the categorisation of the media richness table. Indeed, Ngwenyama and Lee (1997) contend that the process of transmission or the “conduit” imagery (Contractor and Eisenberg, 1990) and the subsequent sense-making of communicated message do not rely so much on the medium. For this would in effect, make the actors in interaction seem like passive social agents, acting as electronically joined senders and recipients. As a result, Ngwenyama and Lee argue for the need to move mediated interaction beyond the restricted scope of media richness and consider the concept from the standpoint of its wide-ranging perspective. This would provide the opportunity to see mediated interaction as

... rich, multi-layered, contextualized formulation of communicative interaction in electronic media. When people communicate, they do not send messages as electronically linked senders and receivers. They perform social acts in action situations that are normatively regulated by, and already have meaning within, the organizational context (Ngwenyama and Lee, 1997 p. 164).

In this sense, constructing meaning from a communicated message is not dictated by the particular medium adopted, rather it entails a sense-making process of formulating and reformulating the communicated message against other contextual factors until a preferred meaning is attained.

2.5 ICTs and the dawn of mediated interaction

For a long time, interaction was only possible because people could see each other and hence be in immediate presence of their interaction partners (Goffman, 1963b). Long distance of travel had to be covered before people could converge to carry out joint

transactions (Collins, 2004). Interaction was as a result mainly *unimodal*. It is a fact that technology has instigated and considerably changed our life over the last two or three decades (Castells, 2001). The increasing popularity of ICTs implies their pervasiveness and intense application for various personal and organisational commitments. Mediated interaction implies relying on ICTs for contact negotiation when situational circumstances between people usually remain practically diverse. Today, ICTs offer alternative options like the internet, mobile phones, PDAs by which people could interact with one another in the real world in almost countless number of ways. The advent of the internet continues to offer expanding possibilities of mediated interaction. People can engage in interaction while on the move, travelling on the aeroplane, in the office, at home, on the train, in restaurants, among a host of other real life scenarios (Agre, 2001). This does not however mean people are always ready and prepared to engage in interaction (Wiberg and Ljunberg, 2001).

Stressing the power of ICTs to reinvigorate the social relationships, Wellman testifies to the significant contribution of the internet to the effect that “complex social networks have always existed but recent technological developments in communications have afforded their emergence as a dominant form of social organization” (Wellman, 2001 p. 1). People continue to organise their life not only around social networks but also in technology mediated social networks. Thus ICTs grant the necessary logistical backing for the propagation of networks, described as ‘networked individualism’ (Castells, 2001 p. 130) as a central mechanism for building communication relationships. The networks provide a gateway for individuals to share communication principles both ‘on-line and off-line, on the basis of their interests, values, affinities, and projects’ (Castells, 2001 p. 131) due to the inherent flexibility and the communicating potentials of ICTs.

ICT-enabled interaction incorporates information generation, processing and propagation, which according to Sorensen and associates, culminates in the provision of services characterised by uncertainty and complexity (Wiredu and Sorensen, 2006, Mathiassen and Sorensen, 2008). The instrumentality of human activity in the tasks of information processing is contingent on the fleeting conditions of time, space, context, the architecture of the ICT, the type of work to be performed among other things.

2.5.1. Regulating mediated interaction

Occasionally, technology mediated interaction leads to situations where the *context* and *mode* through which interaction could be expressed are practically diverse and may be a source of inconvenience to both the initiator and the recipient of an interaction activity. Managing interaction as a result becomes a challenge to both parties in the exchange. Reflecting on this interaction challenge, Ljunberg and Sorensen (1998) appropriate the concept of interaction modality to capture and highlight the elements of desirability and undesirability of mediated interaction. In so doing, Ljunberg and Sorensen recount three main factors under which the context of interaction can be categorised, namely the content, actors and the situation (Ljunberg, 1996, Ljunberg and Sorensen, 2000). The ‘content’ identifies the messages that are exchanged between the interactants, the ‘actors’ refers to the initiator and recipient and the ‘situation’ is synonymous with the circumstance within which interaction takes place.

Another crucial categorisation of the modality in which mediated interaction can be said to take place lies in its nature of obtrusiveness and persistence (Schmidt, 1993). Interaction modality in a sense demonstrates the idea of convenience and flexibility that epitomises certain aspects of ICT-driven interaction in particular and interaction in general. While certain modes indicate the situational desirability, intentionality and readiness of an exchange partner, others reveal a circumstance that portrays disinclination and sometimes, even an aversion of the other to engage in interaction. The varying degrees of the modes presuppose the richness in the diversity in which ICT-driven interaction could offer.

Certain of the modalities are obtrusive, in that they distract the intended interaction partner in order to get their attention for a response irrespective of their situational orientation. The arrival of an e-mail could, for instance, give a bleep sound depending on specific configurations of the mediating device to alert the intended recipient of a new mail. In this instance the e-mail also passes for persistent interaction since it leaves traces in its trail. A faxed document that is silently placed in a printer’s tray can be classified as persistent and unobtrusive, whereas talking or shouting to someone illustrates obtrusive though ephemeral mode of interaction is implicated.

Ljunberg and Sorensen have a special way of representing the interaction modalities in the following diagram.

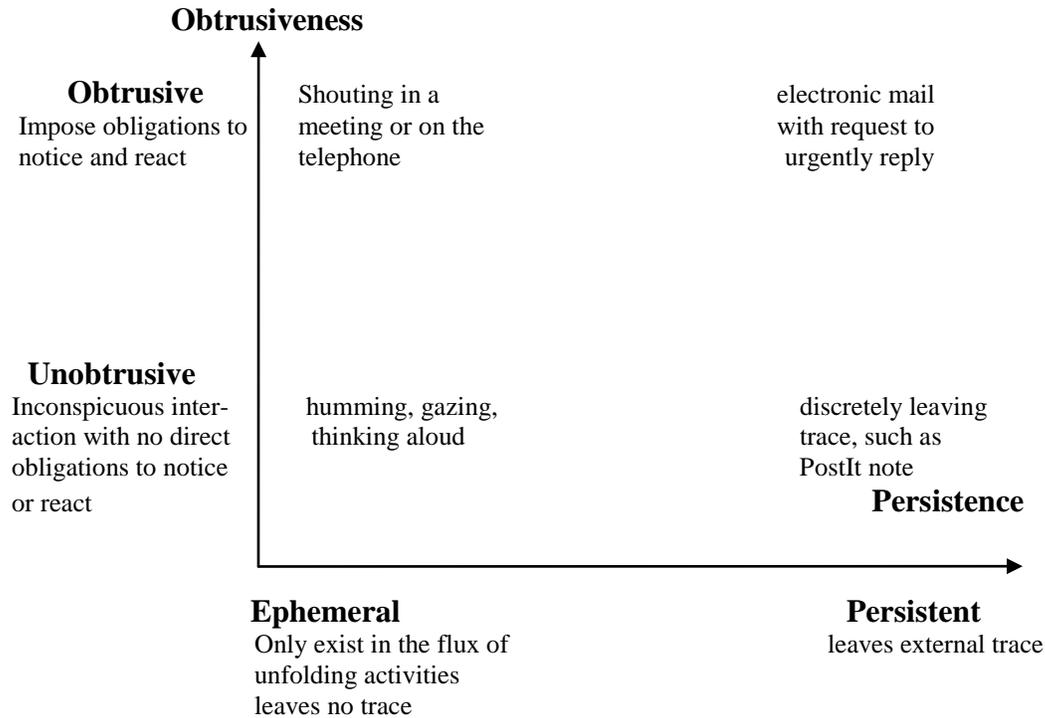


Figure 1: Interaction modality: unobtrusive versus obtrusive, and ephemeral versus persistent interaction³

[By Fredrik Ljungberg and Carsten Sorensen (2000): *Overload: From Transaction to Interaction*. In Planet Internet, eds. K. Braa, C. Sorensen, and B. Dahlbom. Lund, Sweden: Studentlitteratur, pp. 113-136

The diagram illustrates the point that interaction modality could, on the one hand, be ephemeral while at the same time manifesting the signs of obtrusiveness as pertains in shouting or meeting people. An interaction modality may also be persistent and simultaneously obtrusive as in the case of an electronic mail with a pressing demand for immediate feedback or attention. There could be times when unobtrusive modality of mediated interaction would exhibit persistence by leaving traces as obtains in Post-it-note.

³ This diagram is based on categories of interaction developed by Schmidt, K (1993): Modes and Mechanisms of Interaction in Cooperative Work. In Computational Mechanisms of Interaction for CSCW, ed. C. Simone and K. Schmidt. Lancaster, England: University of Lancaster, pp. 21-104. [COMIC Deliverable 3.1].

Mobile ICTs can play an influential role in the control of technology mediated interaction. In this case, it is feasible to reorient to certain crucial aspects of control in organisations. Control does not only constitute a major bloc but also a running theme of this research. And by this, I seek to recognise the importance of control in relation to interaction by reverberating Wrong's admission that 'people exercise mutual ... control over one another's behaviour in all social interaction' (Wrong, 1968a p. 673). The essential control literature would be the subject of review in the second half of this chapter.

2.6 The advent of call-centres

The past three and half decades have seen a rise in the design of call-centres as essential and integral part in ensuring effective customer care strategies in most profit-motive organisations. The origin of call-centres is traceable to the development of the foremost automated call distributor designed by the former Rockwell Collins, a division of Rockwell International (currently Rockwell Automation) at the request of Continental Airlines in 1972. The aim of the automated call distributor was to handle only customer enquiries. However, there was a radical shift in use and purpose from the 1990 as the integration of software-driven routing and customer relationship management (CRM) applications meant a rise in the marketing potentialities and possibilities of call-centres. The ever-increasing popularity dwells on the overarching concerns of these organisations to offer satisfying response to customer queries and, by extension, to generate and retain business. Call-centre operations have been embraced by telecommunication, financial, Internet, as well as digital and cable television businesses. The significance of call-centres cannot be underestimated as they are regarded as 'strategic assets' (Lovelock and Wirtz, 2007). Most of the interactions at call-centres are technology mediated implying a swing from increased-contact to reduced-contact services as growing number of call-centre reps carry out their duties via fixed telephone, mobile phone or email with a slim possibility of any encounter with customers on a face-to-face level (Ibid.).

2.6.1 Call-centre management and administration

The management of call centres can be both rewarding and frustrating. It is characterised by flexible working hours, a good number of part-time staff as well as high rate of employee turn-over. It is with little surprise that it is observed elsewhere that half of call-centre staff are single mothers or students (op. cit.). Call-centre management has a horizon of tensed moments hanging over it with significant number of agents being victims of customer stress (Mahesh and Anand, 2006). In fact one researcher describes it luridly in the following words:

‘Even in the best-managed call centers..., the work is tense...with CSRs expected to deal with up to two calls a minute (including trips to the toilet and breaks) and under high level of monitoring. There is also significant stress from customers themselves, because many are irate at the time of contact’ (Lovelock and Wirtz, 2007 p. 316).

Indeed, researchers have had the opportunity, given the stressful nature that sometimes characterise the functions of the call-centre agents, to identify call-centre job as ‘electronic sweatshop’. Their view is supported by the often harsh targets for the agents on the floor of the call-centre. It is least surprising that call-centre is characterised with high labour turnover which is attributable to the ‘challenging nature of the job and the demographics of the workforce’ (Ibid. pg. 350, quoted from McKinsey Quarterly, 2005). Certain scholars have also blamed the high turnover rate on poor pay and largely demotivated staff. Again, the unbending dual-demand on call-centre agents to sell and promote products simultaneously coupled with long call queues or waiting times is enough to make customers add to the hectic nature of the job. In relating this scenario, Vance notes that

‘Ill-planned promotions cause staffing levels to not accommodate the longer talk times, and thus customers were mostly dissatisfied with the length of time they needed to wait on the phones. Plus after the long wait, they weren’t in the most receptive of moods to hear a pitch for a new product or service’ (Vance, 2004 p. 3).

Efficient administration of call-centres, in Gilson and Khandelwal’s (2005) view, demands adherence to three strategic imperatives. First, organisations outline a customer service plan that offers satisfactory service at a minimal cost. Second, organisations need to put in place a customer service mechanism that runs on rigorous but sensible technology infrastructure. Lastly, there is the need to invest in both time and financial resources to guarantee continuous training and performance-management structures. Part

of the administration of call-centre is screening prospective agents with the view to imbuing in them telephone handling and communication skills and providing them with careful training coupled with properly designed working atmosphere. The different dimensions to call-centre work revolve around recruitment, training and development, choice of site, job design, compensation packages, and career enhancement opportunities. The standard working environment in most call centres involve call routing systems, custom-manufactured operational system packages (for recording orders and making delivery schedules) together with the reps' largely networked computer systems. Call-centres are often established in favourable geographic locations as part of strategic organisational configuration.

Section II

2.7 Control: historical rendition and current considerations

For centuries control has been a central part of organisational sociology and is still considered a fundamental constituent of management theory and organisational studies (Simons, 1995, Yates, 1989) This could be due to its significance in the administration of organisations as Filipetti (1946 p. 260) contentiously argues the point that control is the 'most important factor in organisation'. Control constituted the focus of attention in Taylor's path-breaking experimental studies on Scientific Management, and in addressing the American Society of Mechanical Engineers he observed the significance of:

... taking the control of the machine shop out of the hands of the many workmen, and placing it completely in the hands of the management, thus superseding "rule of thumb" by scientific control (Taylor, 1906 p. 39).

In spite of its widespread application, control is deficient on a common platform of understanding, as a result, the concept maintains 'scarcely any generally accepted principles and everyone in the field, therefore, works by intuition and folklore' (Anthony, 1965 p. vii). The contextual malleability of control nonetheless makes it an attractive

stream of research since time immemorial in the spheres of philosophy, finance, management and economics literatures (Hofstede, 1978, Hunt and Rubin, 1973, Khandwalla, 1973, Eisenhardt, 1985, Hoskisson and Turk, 1990). More recently control has become a fertile ground for research in the field of Information Systems (IS) (Orlikowski, 1991, Nidumolu and Subramani, 2003, Kirsch, 2004, Graham, 2005, Wiredu and Sorensen, 2006).

Key to the majority of research on control is the indication of potential conflict of interests between superiors on one hand and subordinates on the other. To make any commendable sense of an organisation is to trace the various alliances and coalitions that control a greater percentage of the people (Caplow, 1964, Cyert and March, 1963) and the material resources in realising corporate objectives. A historical analysis of control is frequently linked with the inventive studies by Weber (1974) who saw control as the creation and setting up of structures for monitoring rules by means of a system of hierarchical authority. Thus, Weber's view on control as implying the confinement and the influence of the activities and behaviour of subordinates and the patterns of their interaction in sync with laid-down methodologies unfortunately fails to account for any feedback element. It is however encouraging to note that subsequent works on control provide detailed analysis of diverse feedback instruments and strategies as part of the entire control picture (see, for example, Ouchi and Maguire, 1975, Ouchi, 1977, Eisenhardt, 1985).

The inclusion of feedback in the notion of control marked a radical extension on the popular understanding of the concept since the birth of management theory and organisational sociology. These notwithstanding, acclaimed management enthusiasts and researchers such as Drucker, Fayol, Urwick and Taylor (1954, 1949, 1928, 1911b) respectively, all produced greater elucidation of control without touching on the central issue of feedback. Their respective investigative work on industrial management was riveted on the all too general understanding of control: the supervision of individual behaviour, monitoring procedures and measuring set standards against attained results. Latter management writers did not veer considerably from their earlier contemporaries. In fact, supervision, measurements of planned targets, performance monitoring and

discipline continued to be a dominant and recurring theme in successive work on management approach to the notion of control.

Newman (1951) advanced three essential elements of control as the institution of standards, performance monitoring and effecting remedial action to ensure actions conform to plans. A similar view characterised Brech's delineation of control afterwards; where control was seen to incorporate 'obverse' of setting out 'standards of performance', 'continuous comparison of actual achievement or results against these predetermined standards' (Brech, 1965 p. 14). He later broadened this perspective by stating that control involves:

...checking current performance against objectives and targets in terms of predetermined standards contained in the plans, with a view to ensuring adequate progress and satisfactory performance whether physical or financial; also contributing to decision in continuing or changing the plans, as well as "recording" the experience gained from the working of these plans as a guide to possible future operations (ibid p.13-16).

The general orientation of the various explications of control has been intimately towards human behaviour (Powers, 1973). In spite of the contested notions of control (Ouchi, 1979b) it is least surprising to note that 'the word control has the serious shortcoming of having different meanings in different contexts' (Jerome, 1961 p. 42) to the extent that researchers have had the occasion to supplant control with power (Etzioni, 1965). Powers champions the view that humans are self-regulating control systems with an inherent nature to seek goals and resist disturbances that run against the achievement and preservation of their goals. Powers (1973) develops perceptual control theory (PCT) to highlight and demonstrate how people attain consistent results in a capricious environment. The main thrust of Powers' argument is philosophically grounded and inspired by his belief that perception is the vehicle that carries us onto the land of knowledge. To this end, our action is not geared towards controlling the world but controlling our perceptions of the world. By implication, then, our behaviour is informed by how we control our perceptions (Powers, 1973).

The foregoing illustrates the ease with which researchers relate control to behaviour; giving an unmistakable impression that control has a direct relationship with behaviour. There are occasions when inflexible behaviour is seen to directly result from a

centralised source that aims at reliable and error free operations (Merton, 1957). Turcotte (1974) notes that the considerable emphasis on deviation avoidance leads the organisational top hierarchy to focus on high performance and increased output. To this end, there is the likelihood for the installation of what can be described as a *cyclical control*; since failure to achieve planned expectations calls for increased control and specific parameters of action for every possible occurrence (Crozier, 1964). It should be noted these researchers while trumpeting the importance of control in the prevention of error inevitably lost sight of the instrumentality of agency in ensuring the effectiveness of control (Anthony, 1965, Eisenhardt, 1989c). Agency in control is vital for resolving role conflict, monitoring behaviour and risks sharing (Eisenhardt, 1989c).

To establish the background of this research there is the need to throw a caution on the occasionally turbulent and troubling phenomenon: control. I do not take control in this study only to mean the restrictive characterisation of observable supervision proposed by Foucault (1979) neither do I remotely submit to Tannenbaum (1968) who has merely treated control to mean ‘to direct’. The study would rather extend Thompson (1967) and Reeves and Woodward’s (1970) articulation of the view that control is a cybernetic process that incorporates testing, measuring, and the provision of feedback against the background of a definite goal scheme. Additionally, control should be understood to encompass the application of information and ICTs to organise and coordinate social endeavours. The formulating work by Ouchi (see, for example, Ouchi, 1979a, Ouchi, 1978, Ouchi, 1977) on control would serve as further delineations on the dimensions of control. In this case we revisit Reed’s viewpoint on the concept of control as

...a co-ordinating mechanism based on asymmetric relations of power and domination in which conflicting instrumental interests and demands are the overriding contextual considerations’ (Reed, 2001 p. 201).

With the foregoing notion on control, this study would perceive control as involving a wilful determination on the part of an individual(s) or group(s) – superiors – to influence the activities of others – subordinates – in the interest of organisational objectives. For it is in this light that control could be understood from different dimensions, from the

viewpoint of the controller and from the perspective of the controlled in terms of their structured and emergent organisational engagements.

2.7.1 The control conundrum

Organisational scholars have come out with the idea that illustrates the need for a continual process of engagement and negotiation to handle the problems and controversies associated with control (Coombs et al., 1992). Their concerns happen to reflect the basic tension between strengthening of managerial surveillance of the appropriate work behaviour while concurrently aiming to achieve an appreciable level of voluntary conformity (Crompton, 1978). Hence Rathe (1960) clearly declares control as 'one of the thorniest problems of management today' (p. 30). Nonetheless the key test in the life of any organisation, and which practically demonstrates the significance of control, is when individuals have, as a matter of necessity, to surrender their wishes and aspirations for the shared interest of the organisation (Barnard, 1956). In order to achieve set targets individuals must be prepared to sacrifice some amount of independence in organisational involvement; herein lies the fundamental dilemma or the problematic nature of control in organisations.

Control however, acknowledges the logic that individuals and groups by their very nature are often given to evading accepted mode of practice for certain personal desires. Boland (1979) observes that control manifests two primary characteristics: one enables while the other restrains. Orlikowski amplifies this thought by suggesting the implantation of control strategies that pull both constraining and enabling strings (Orlikowski, 1991) as a means of dealing with behavioural challenges. To the extent that 'commitment' instead of 'conformity' remains a necessary issue, superiors and managers might be prepared to shift gears and orient towards conditions of 'high trust' (Fox, 1974) as a control strategy. The likely result, Friedman (1987) suggests, would be the temperance of autocratic control schemes that may give rise to trust-developing mechanism like improved job discretion.

2.8 Control and the design of organisations

Control has been promoted as the agent for ensuring structural adjustment and necessitating change in organisational configuration and reinforcing stability (Jaeger and Baliga, 1985). This instrumental dimension of control motivated Beniger's (1986) *control revolution* which points to the transformation and the advancement in transportation, production, service as well as distribution facilities all of which demand fresh innovations in the methods of control. A situation may arise when corporate strategy sometimes moves in tandem with the direction of certain types of control in organisations (Hill and Snell, 1988). Storey (1987) recounts the interesting revelation that control is instrumental in the determination of the destiny of organisations and the overall direction of organisational change. The obvious impression seems to be the all-important powerful influence of control in shaping the outlook of organisations. Indeed, control is crucial to guaranteeing '...a stable structure of internal relations and stable mechanisms for structural adaptation and change' (Jaeger and Baliga, 1985 p. 116). Terrien and Mills (1955), Caplow (1957) and Anderson and Warkov (1961) have long observed and made it unequivocally clear that the system of control in an organisation is implanted within its structure.

The design of organisations has often been informed by control, giving rise to structures like divisionalisation, centralisation, decentralisation and matrix (Galbraith, 1977, Mintzberg, 1983); control also influences the establishment of certain administrative mechanisms in relation to task characteristics, reward schemes, information systems, and performance satisfaction packages (Turcotte, 1974, Courpasson, 2000). Specifically, Eisenhardt unites organisation theory with economics to investigate incentive packages, performance evaluation schemes and reward systems that prevail in organisational life as an instrument of control. Her exploration leads to the hypothesis that increased tasks programmability demands behaviour-driven controls while reduced tasks programmability necessitates outcome-driven controls and detailed information systems (Eisenhardt, 1985).

Two structural properties of control increasingly dominate the organisational literature; these are control systems driven by behaviour and outcome-based control packages. On this score, one is inclined to agree with Ouchi (1977) in the context of administration of control, where the work of people and technologies are involved, two

observable phenomena show up: output or outcome and behaviour. The former correlates with the evaluation of the required result of tasks and the initiation of steps to effect corrective action when and where necessary, while the latter relates to influencing and directing the activities of subordinates to achieve effective control. The dominant manifestation of the two phenomena is behaviour control, presumably, because it is behaviour that induces output control even though certain measurements are purposefully designed to govern output. The administration of control in certain organisations, especially in a sizeable number of software institutions, is designed towards two specific, although contradictory, approaches (Nidumolu and Subramani, 2003). One such design reveals the centralisation of control and a prescriptive form of standardisation of operations; the Software Engineering Institute's Capability Maturity Model and the Software Factory provide a ready example (Herbsleb et al., 1997, Humphrey, 1989). The other design manifests team-driven structure as is expressed in self-regulated teams which indicates a greater degree of delegation of authority to groups to enhance set targets (Manz and Sims, 1993).

The demonstrable key elements of behaviour control and outcome control is summarised by Reeves and Woodward (1970 p. 38) thus:

Precisely defined control refers solely to the task of ensuring that activities are producing the desired results. Control in this sense is limited to monitoring the outcome of activities, reviewing feedback information about this outcome, and if necessary taking corrective action.

The behaviour/outcome control dichotomy constitutes the main structural orientation for inducing organisational configuration, influencing relationships, team performance, effective communication, collaborative undertakings and conflict resolution approaches. While behaviour control is directed by a common philosophy of management, outcome control is determined by mutual norms of performance (Jaeger and Baliga, 1985). Both control systems are expressed in organisational processes, an indication of a practice that can easily be examined. Reflecting on these themes, I would highlight the viewpoint of the disparate literature on control that discusses both behaviour and outcome control as a major structure in organisational design due to their complementary dispositions in organisational strategising (Ouchi and Maguire, 1975, Kim, 1984). Another reason for

their emphasis at this point is to reverberate Porter, Lawler et al., (1975) theoretical observation that the simultaneous combination of behaviour and outcome control constitutes the finest material of an organisation's course of action.

2.8.1 Behaviour-driven control

The ossification and codification of procedures to regulate human conduct is grounded in behaviour-driven control mechanisms. Generally, control mechanisms are designed towards human conduct; what Ouchi (1982) specifically branded 'people treatment' quoted in (Jaeger and Baliga, 1985 p. 117) but also in terms of the structural arrangements for the process of work transformation. Work transformation is informed by Perrow and Thompson's (1967, 1967), respectively, conceptualisation which denotes the conversion of inputs to outputs. Organisational strategies for people treatment are the inculcation of values and skills as is manifested in the process of selection, training and the monitoring of performance of work.

Behaviour control stipulates conditions for suitable behaviour and improper conduct (Kirsch, 1996) in line with programmable tasks and the degree of requisite information for diverse behaviour options (Nidumolu and Subramani, 2003) that underscore effective management process. The value of behaviour control lies in its ability to achieve superior standardisation as it enables the execution of uniform job performance (Kim and Umanath, 1992-93). The degree of standardisation informs the scope of management's mandate by way of procedures and methods to direct those in the lower ranks. Nidumolu and Subramani conjecture the point that greater standardised procedures demand more elaborate systems of performance criteria as standardisation encourages knowledge management that traces its source to experience in standard performance methods.

Child (1972) identifies two different yet seemingly complementary strategic devices for controlling human behaviour of organisations. One such device is to depend on laid-down procedures and documentary materials for decreasing subordinate discretion and for supervising events. He labels this indirect control as it involves the delegation of control influence to the lower echelons of the organisational hierarchy to

enforce conformance to predetermined arrangements. The other alternative device is to embark on a strategy that directly entrusts responsibility and decision making powers to relatively senior members in the organisation. This view connects with the Weberian idea of bureaucratic control which links structure and decentralisation as a strategic tool (Child, 1972). Controlling behaviour in this manner delimits the need for specific aspects of specialisation which represents a cut on the requirement for detailed systems of formalities and complex procedures. Behaviour control then allows for less negotiation as instructions for the administration of job roles and performance of allocated duties become more structured (Weber, 1978).

Once control turns rigid and allows inhuman structures to enforce rules, authority is passed onto a system that most invariably leaves members in the organisation to fit quite well into Weber's description of 'specialists without spirit, sensualities without heart' (Weber, 1958 p. 182). To this end, Weber concludes that an individual member in the organisation 'cannot squirm out of the apparatus into which he has been harnessed' (Weber, 1978 p. 987-988). In other words, workers have their knowledge shaped up to engage, relate and behave *in the right way*, thereby having minimal level of control on their own in matters of decision making. Edward (1981) thinks that the knowledge shaping process is achieved in a way that makes control appear subtle to the extent that subordinates are least aware of the fact that their actions are motivated by directions and instructions from their superiors. The reason stems from the point that the directives become so much enmeshed in the social life of the members in the organisation (Tompkins and Cheney, 1985). As a result members scarcely notice both the source of such directives and the influence carried by the instructions that dictate their actions. Weick specifically draws on the work of Vinacke et al (1996) and recounts the interesting revelation that 'subordinates often do not realize the amount of control they actually have' (Weick, 1979 p. 16).

Earlier, Bannister (1969) had recognised that the controlling influence of the superior could be indiscernible to the controlled and for that reason there is less likelihood for resistance to instructions on the part of the subordinate. Paralleling this notion with the all-too familiar metaphorical idea in economic activities about the invisible hand, Wrong (1968b) draws our attention to the point that an individual can

control another 'even if they do not intend to do so' (Jacobs, 1974 p. 48). In this sense, the causative aspect of control may not be evident nonetheless its manifestations in the actions of the controlled cannot be overlooked.

To be sure, norms backed by both positive and negative sanctions constitute the overriding rules of conduct within the organisational context in matters of behaviour control. Monitoring and personal surveillance systems constitute a bane to behaviour control due to their likelihood of diminishing the span of managerial control especially in a condition where additional yields from control are undercut or offset by a sizeable proportion of monitoring expenditures (Eisenhardt, 1985). Similarly, Hit et al (1990) speculate the fascinating idea that as behaviour control homogenises work procedures, subordinate discretion is heavily restricted, the end result of which is inflexible and cautious behaviour. Cautious behaviour could be costly in the sense of its being a key ingredient for stifling subordinate sense of initiative and confidence in the specific duties and challenges related to his/her assigned job.

2.8.2 Outcome-driven control

The demand for measurable output invokes the use of outcome-based control mechanisms via the clarification of elaborate outcomes of task performance. In this connection, Nidomulu and Subramani claim the criteria of performance hinge on the 'specification of benchmarks, quality metrics, and performance criteria, such as productivity standards, budgets, and schedules' (Nidumolu and Subramani, 2003 p. 163). *Management by objectives*, connecting with the idea of 'congruence prevailing between employers' work rules and work-group values and norms' (Goldthorpe, 2000), typifies outcome control (Lawler and Rhode, 1976). The evaluation of performance is embedded in a knowledge structure that embodies benchmarks, milestones, reference points and blueprints. The mechanisms for the determination of outcome are linked to subjective judgement. Outcome control emphasises the measurability of targeted results, either in qualitative or quantitative dimensions (Eisenhardt, 1985). Quantitative control mechanisms such as budgetary specifications, cost accounting procedures or a rise in the number of managerial levels induced by outcome control may be necessitated by agency

considerations as a possible result of inadequate surveillance systems (Eisenhardt, 1985). In the realm of the contract of employment, outcome control can be accomplished in a situation where there is a straight connection between ‘work and pay ...through piece rates of some kind... First, so that output can be clearly attributed to particular individuals or at most to small work groups and, secondly, so that the employer – as well as employees – can have reliable knowledge of how quickly the work can be done’ (Goldthorpe, 2000 p. 214 - 215). A suitable rate of pay can consequently be determined based on this understanding.

It is therefore tempting or even plausible to agree with Snell (1992b) that numerical documentation is often the basis and major indicator of effectiveness. Since outcome control ensures the achievement of goals at the lower level, it leaves a lot of control in the hands of subordinates which encourages decentralised form of organising. Once control becomes decentralised as a result of specialisation (Hofstede, 1978), information gap or information asymmetry tends to expand between subordinates and superiors due to a probable lack of close monitoring which could translate into a potential ‘control loss’ (Williamson, 1975a p. 296). The loss of control, at least from the standpoint of the employer, can be expected to culminate in any of the following two scenarios as indicated by Goldthorpe (2000 p. 213):

the degree of difficulty involved in monitoring the work performed by employees: that is, the degree of difficulty involved both in measuring its quantity and also in observing and controlling its quality; and
the degree of specificity of the human assets or human capital – skills, expertise, knowledge – used by employees in performing their work: that is the degree to which productive value would be lost if these assets were to be transferred to some other employment.

It is almost tempting to perceive that the category of work to which output can be measured belong to the area of menial or blue-collar types. This line of reasoning is consistent with a situation where, for instance, professionals, administrators or those at the upper level of an organisational hierarchy may perform duties in which payment can barely be connected with all the facets of a given job (Goldthorpe, 2000).

Given this scenario, monitoring specific output can be expected to be highly unpredictable or difficult to undertake in respect of people who occupy managerial positions within an organisation. It would be partially illogical to, then, attempt a claim

that those at the lower or operational level staff, even if their work is characteristically unskilled, could be monitored with least difficulty. For ‘even workers who are usually considered “unskilled” often acquire important knowledge of the production process...making direct control difficult’ (Weakliem, 1989 p. 205).

Kerr (1985) notes that detailed information systems are crystallised and tied up with reward schemes as an attempt to minimise opportunistic tendencies and the pursuit of aims not directly linked with set targets which Snell labels ‘myopic behaviour’ (p. 296). In a comparative fashion, Kirsch (1996) submits to the supposition that outcome control is easier to formulate and execute than its functional counterpart of behaviour control, for which reason organisations depend on in times of greater uncertainty and inchoate information (Nidumolu and Subramani, 2003). Against this background, Govindarajan and Fisher (1990) suggest outcome control is favourable in a situation where existing understanding and knowledge of a planned activity are low, and that effective outcome control calls for specifiable criteria in judging the process of performance (Snell, 1992a).

Outcome control has ex post facto connotations. There is lack of fault-detecting mechanisms to raise an alarm until they actually take place (Flamholtz, 1979) which Kirsch (1997) suggests could be attributable to the deadline pressures invariably incorporated into the set targets. This is in spite of the fact that outcome control can be relied upon as an indicator of objective yardstick for evaluating performance (Hoskisson and Hitt, 1988). Quite related to the idea of inconsistent monitoring is Turcotte’s allusion that outcome control restrains the necessity of strategic decisions to meet and match the variations in organisational contingencies (Turcotte, 1974).

Despite obvious functional diversities manifested by the two forms of control – behaviour and outcome – they converge on the joint assumption that both subordinates and superiors have dissimilar motives. Both groups on each side of the organisational hierarchy divide are under pressure to seek various avenues to submerge their idiosyncratic goals by aligning their interests in an appropriate way to suit organisational objectives. These control mechanisms should not be viewed as a dogma fitted into watertight compartment within organisations, however, their application to organisational

experience should be sympathetic to Thompson (1967) and Ouchi's (1979b) precaution of a given information characteristics in relation to a named assignment.

2.9 Chapter Summary

This chapter has outlined and delineated the changing conceptualisations of interaction and traced its tracks and various dimensions from Goffman to its current perception in organisational studies. The course of discussion perceived interaction as a basic human activity that involves individuals, groups and organisations in various periods of human history. Portions of the chapter were devoted to the instrumentality of mediation in facilitating technology-based interactions at both close and distant settings, which necessarily made some reflections on theories related to media richness and social presence.

In addition, the chapter has attempted to bring the main epistemological understandings of the key ideas and dominant issues of organisational control. Specifically, it has used the leading literature on the subject to highlight the distinguishing characteristics of behaviour and outcome control as originally designed by Ouchi and Maguire (1975). The crystallisation of the notable differences between outcome control and behaviour control only goes to indicate and manifest the pragmatic approach necessary to apply these control categories in their specified areas of strengths in organisational sociology. However the chapter did not intentionally seek to exhaust the various applications of control in the social life of organisations. Nevertheless, for now, it would suffice to suggest that the partial treatment of control in this chapter would be able to provide a flavour and build us up as to what can be expected in chapter 6 and 7 on the different ramifications of mediated control.

CHAPTER THREE – RESEARCH METHODOLOGY

This portion of the study deals with the *ways and means* of the entire research activity. The methodological approach is fundamental for setting out the strategy for grounding the various constituents and procedures of the overall research (Grunow, 1995). This is vital for substantiating both the internal validity and external integrity of the research results. The preliminary research questions posed earlier (see chapter 1) require a longitudinal empirical study of workers whose work patterns are diversely collaborative and so crucially depend on mediated technological gadgets to interact with one another. I particularly see the methodology as crucial because it shapes and informs the destiny of the research study which the researcher would finally come to conclude. In view of this, I share a similar concern with Bernstein (1983a) and Delanty (1997) that setting out the ontological and epistemological designations are of paramount concern to social science. In sum, the methodology goes a long way to establishing a sturdy and robust validity of the outcome of the whole research endeavour (Yin, 2003b).

The route to this methodological inquiry is pursued with the aid of the three fundamental devices of human perception, namely, rationalism, empiricism and faith (Thieme, 2003). Rationalism establishes reality by means of reason. Empiricism does so through a reliance on the senses of sight, touch, taste, smell and sound. And faith determines reality via the confidence in the authority or trustworthiness of another person. While faith is a nonmeritorious system of perception in which case the subject has no merit in the knowledge acquisition process; in both instances of rationalism and empiricism the merit goes to the subject for the efforts towards comprehension and the mechanics of building cognition. At some point in life, everyone relies on all three tools of perception for appreciating his or her world and field of reality. However one's grasp of reality is shaped by the most frequently used and heavily dependent system of perception.

Using all three systems in a methodological process would ensure a demonstration of consistent and logical thinking thereby effectively limiting the researcher from going arbitrary with his decisions; so that the conclusions would not be

treated 'as a figment of my imagination'(Thieme, 2003 p. 2). Again, applying all three systems of perception in the data-collection activity would be helpful in the sense that 'rational proof and instruction do not fully exhaust the sphere of knowledge' (Gadamer, 2004 p. 21). Hence the application of other systems of understanding events around us makes an important and indispensable complementary contribution.

The chapter resumes with the rationale behind the conduct of the research from interpretive IS standpoint in section 3.1, after which the major philosophical blocks on positivist and interpretivist distinctions is discussed in section 3.2, which emphasises the validity and explanation for favouring interpretive epistemology in line with the objectives of the study. Section 3.3 considers the research design strategy, followed by the unit of analysis in 3.4. The remaining sections dilate on the major components of the data collection techniques beginning in section 3.5 on case study as a preferred research technique, mechanics of data interpretation in 3.6 with a round-up on the chapter in 3.7.

3.1 Research Philosophy and Orientation

Clarifying the philosophical orientations that guide the conduct of research marks a crucial stage in the entire methodological enquiry in the study of a social phenomenon. The specific standpoint of a researcher is manifested in, and reinforced by, his or her philosophical convictions informed by both ontological and epistemological experiences. While the ontological experience of the researcher is based on the perception of the nature of reality, epistemological experience indicates a knowledge acquisition and building process (Creswell, 2003 p. 25).

This study is founded on interpretive philosophy informed by a phenomenological process of logical thinking. Phenomenology acknowledges that knowledge of reality is socially informed and constructed via the instrumentality of the researcher, and that the determination of truth is subjective (Myers, 2004). To this end, the researcher becomes inextricably connected with the events that unfold as 'the object...cannot be adequately described apart from the subject, nor can the subject be adequately described apart from the object' (Crotty, 2003 p. 79). The research philosophy and orientation influence and give meaning to the manner in which the research is undertaken as the exercise

transforms and takes shape from the original design to the completed results the researcher would finally arrive at. Two fundamentally distinctive philosophical orientations to social research have been the focus of attention in scientific investigations for some time now. These happen to be the positivist and interpretivist research traditions in organisational research. Social science scholars have distinguished positivist and interpretivist paradigms along the lines of nomothetic as against idiographic (Luthans and Davis, 1982), qualitative as opposed to quantitative (Van Maanen, 1979), etic – the insider’s account – in contrast with emic – the researcher’s perspective – (Morey and Luthans, 1984), subjective versus objective (Burrell and Morgan, 1979), outsider as against insider (Evered and Louis, 1981b) and other such similar conceptually opposing designations. Whereas the positivist claims that the approach to natural science is one inspired by value-free, unbiased examination for achieving control and predictability in society, the interpretivist relies on ‘culturally derived and historically situated interpretations of the social life-world’ (Crotty, 2003 p. 67).

None of the associations of these distinctions between positivist and interpretivist philosophies can claim superiority over another or the claims of one be viewed as true with and the other untrue. Therefore the adoption of a positivist or interpretivist philosophy in the context of, and application to, any social enquiry may be legitimate, depending on the research traditions and orientations that are applied. Nevertheless, the ever-opposing position seems to have taken entrenched stance as is reported in the conventional literature between the two approaches: positivist (for instance, Daft, 1983, Lee, 1989) and interpretivist (see, for example, Suchman, 1987, Boland, 1989).

Many scholarly efforts towards their reconciliation have been fruitless, though an exception can be taken to Lee’s (1991) attempt at integrative approach aimed at accommodating the two perspectives. This development has motivated Morey and Luthas (1984 p. 29) to describe as ‘the widening gap between the two major orientations to organizational research’ to the extent that certain scholars have advocated a compromise position between the two research perspectives (see, for example, Evered and Louis, 1981a, Luthans and Davis, 1982). The purpose of the next subsections is to juxtapose these seemingly diametric approaches to scientific and social research, with a justification

for the rationale behind the choice of interpretivist research orientation for this current research effort.

3.1.1 Positivist research tradition

The positivist epistemology gained currency through the instrumentality of August Comte's *Société Positiviste* established in 1848, though it is fair to admit that phrases such as *positive philosophy* and *positive science* had long been in the academic circles centuries earlier (Crotty, 2003). Fundamentally, the positivist orientation to research leans towards the testing of hypothesis, the design of experiments, inferential statistics, chemical analysis and mathematical investigation. The primary aim of the positivist paradigm is to test hypothesis and enhance calculation of observable facts (Crotty, 2003). The positivist, influenced by such thinking as '*logical empiricism*' and '*logical positivism*', champions the view that the techniques in natural science are the only valid means for its application in social science research. Both logical empiricism and logical positivism converge on the basic 'thesis of the unity of science' (Kolakowski, 1968 p. 178).

The positivist observer perceives reality as something that exists without his interference. In other words, to the positivist, reality is a 'package out there' to be grasped or experienced independent of the person doing the observation. The positivist approaches a phenomenon by presumably setting aside his individual judgement, emotions, beliefs, and personal sentiments. The presumed accuracy and certainty in scientific knowledge could be used to explain the confidence and conviction that belies positivist philosophy. The major success of the positivist has been in the areas of biology, physics, mathematics, chemistry and other scientific disciplines for which repetitive experimentations can yield almost identical results. Bolstered by the idea of precision that characterise scientific investigations, the positivist believes it is only by the application techniques of natural science that organisational researchers can compete with natural science in the specific areas of control, forecast and rationalisation.

Positivist orientation to the study of phenomena deals with the manoeuvrability of theoretical hypothesis by appealing to the prescribed rules of logic in order to fulfil four

main theoretical propositions of ‘falsifiability, logical consistency, relative explanatory power, and survival’(Lee, 1991 p. 343-344). This observation notwithstanding, the positivist tradition has attracted a good number of enthusiastic followers in organisational and social science research alike (Behling, 1980, Daft, 1983, Lee, 1989, Schon et al., 1984, Schutz, 1954). However, organisational scholars, and by extension social scientists, have lagged behind their natural science counterparts due to the failure of the former group to perceive reality in quantitative terms and develop structural propositions in support of their investigations (Lee, 1991). In sum, the positivist mode of establishing reality rests on the ontology of objective materiality in which there are already existing regularities to undertake empirically testable theories to figure out the principles that dictate the social and natural world (Orlikowski and Baroudi, 1991). To this end, positivist research is noted for being both more replicable and generalisable (Lee, 1989).

3.1.2 Interpretivist research orientation

Max Weber (1864-1920), frequently tied to the interpretivist philosophy, submits that human sciences are preoccupied with understanding. The underlying idea behind the concept of interpretivism is the inadequacy of positivist methods to determine social reality at a significant level. This stems from the recognition that humans create both social and material artefacts that are radically different from those used by natural science. Silverman (1990 p.126) claims that interpretivism ‘rests on the emphatic denial that we can understand cultural phenomenon in causal terms’. This postulation sharply contrasts with Weber’s, who is interested in ‘exploratory understanding’ together with a ‘correct causal interpretation of a concrete course of behaviour’(Weber, 1949 p. 35, 40).

Whiles the natural scientist aims to explain material objects and processes, the social scientist focuses on understanding psychological and intellectual patterns of thought (Schutz, 1954). Interpretivist philosophy of thinking draws its strength from subjectivism and constructivism to which Goodman (1978) contends any one category of social reality can be expressed in one of several ways. To that extent, the interpretivist school of thought is premised on the idea that reality is not given, and that it is a negotiation process motivated and shaped by an individual’s beliefs, practices borne out

of routinisation and personal biases. Presumably, the interpretivist position recognises the diversity of viewpoints towards any particular social reality. Meaning construction in the interpretivist domain is an exercise that embraces and incorporates common cognitive devices for the determination of individual reality (Searle, 1995).

Identical phenomena, similar or the same human activity can have multiple meanings and discordant interpretations for diverse human entities and the social scientist. Berger and Luckmann (1966) exemplifies this thought with the title *The Social Construction of Reality* which happens to be in tune with how people, and for that matter social scientists, make meaning of the events of everyday life they encounter. Interpretivist approach to research has been implicated in studies connected with ethnography (Geertz, 1983), phenomenology (Natanson, 1963), case studies (Darke et al., 1998, Walsham, 1993) and hermeneutics (Bernstein, 1983b). Interpretive research usually relies on qualitative techniques of understanding (Myers, 1997), against the backdrop of the fact that there has been a rising call for the interpretation of quantitative data by interpretive researcher in recent years (Bryne, 2002).

3.2 Choosing Interpretive Research in IS

Given the background of both the positivist and the interpretive research traditions, this study resolves to pursue and orient to the ideals of the interpretive research agenda. It remains my conviction that the IS interpretive tradition can provide richer and added situational appreciation of the concerns and challenges that would emerge from a broad spectrum of matters regarding mediated control in ICT-driven interaction. This would allow for a reflexive pattern to be developed in the process which is indicative of Walsham's (1993 pp. 4-5) assertion that interpretive IS research strategies are directed at

producing an understanding of the context of the information system, and the process whereby the information system influences and is influenced by the context.

It is now evident that the issues and interests surrounding control and technology mediated interaction are too diverse and complex to solicit a solitary, inflexible and thinly defined perspective. Technology mediated interaction and control are embedded in a

complex web of varied personal, group and organisational predicaments and expectations that we encounter in our everyday, mundane activities.

Increasing diffusion of portable communication technologies such as PDAs, mobile phones, BlackBerries, among others is instrumental in driving this ICT-driven interaction trend as was pointed out in chapter 2. Similarly, I think (as I am informed by the literature, see chapter 2) the study of control has for a long period, skewed heavily towards the social school which largely treats control in psychological, philosophical and sociological theoretical discourses. The focus of these studies has been generally the monitoring of behaviour and institution of criteria for measuring outcome as was highlighted in chapter 2. Equally, research on ICT-driven interaction has been chiefly mechanistic in outlook. Greater concentration has been devoted to the study of the architectural make-up of the artefact, while overlooking the rather equally important, complex imbrications of both human and non-human issues that surface at the intervention or involvement of ICTs in the life of an organisation. These matters come to light by the reality of the reciprocal shaping and vibrant reinforcement between technology and human actors in their combinatorial fields at the level of their operational engagement (Bijker et al., 1987, Grint and Woolgar, 1997, MacKenzie and Wajcman, 1999, Silverstone and Haddon, 1996).

Moreover, a section of the international IS research community has over the years been making efforts at circumventing the mechanistic, deterministic tendencies that used to feature prominently on discussions on human and non-human dichotomy. Indeed, the international IS community has become sensitive to social concerns in IS development, implementation and appropriation of technological tokens and objects. Boland and Hirschheim (1985) offer a lucid description of research within the IS domain thus as:

a combination of two primary fields: computer science and management, with a host of supporting disciplines e.g. psychology, sociology, statistics, political science, economics, philosophy and mathematics. IS is concerned not only with the development of information technologies but also questions such as: how they can best be applied, how they should be managed and what their wider implications are (p. vii).

The IS scholar can, with considerable amount of ease, associate himself with the above statement because it appears to be a more appropriate and feasible route that favours, and

can accommodate, other research orientations. These research orientations might prove collaboratively beneficial in capturing the emerging complexities and contingencies in technology mediated interaction that can inform subsequent reconfiguration of organisational activities and routines. Anything short of this could amount to reinforcing the polarised state of affairs that has characterised the IS discipline over the years. The research is therefore grounded in current IS perspective that is supposed to strengthen and provide a realistic support for the full range of the studies on ICT-driven interaction as well as the pragmatic strategies for effective and efficient control.

Taking an IS stance should not be presumed, however, to be immune to some possible challenges that the IS field has been exposed to. As an applied research field that takes its roots from management studies and computer science, IS research has since its inception in the 1970s been subject to various categories of attack. The rationale of its very existence, and by extension, its identity as an academic discipline readily exemplifies the threat that the field has had to grapple with. Among the notable onslaught is the contested claim that IS research lacks a universal or familiar paradigm. No wonder Checkland and Holwell (1998) branded IS research as ‘fragmented adhocracy’ with such traits as:

- Easy barrier entry to the field;
- Standards which can be influenced by lay people
- Ordinary language rather than specialised, technical nomenclatures and
- Individual and disjointed streams of research

The overriding basis for this description is attributable to the fast development of ICTs matched by its massive, large scale diffusion implicated in our daily situations which IS researchers have to come to terms with. The realisation of this glaring reality of ICTs has gone a long way to make IS researchers find a method of coping with the trends by enthusiastically engaging in methodological discourses in general and epistemological underpinnings of IS research agenda (Boland and Hirschheim, 1987, Galliers, 1985, Galliers and Land, 1987, Klein and Myers, 1999, Lyytinen, 1987).

Broadly speaking, the positivist idea is grounded in the assumption that reality is objectively given from the observers' standpoint which can be explained by the measurability of variables. The realm of Orlikowski and Baroudi's (1991) support for positivist IS research is premised on the foregoing proposition. Orlikowski and Baroudi's conviction is inspired by their observation that if evidence exists on formal propositions, variables can be measured and quantified and hypothesis can be extracted from a phenomenon, then a positivist perspective is in focus. This entrenched support for positivist-driven research notwithstanding, IS researchers are beginning to adopt an interpretive methods, and sometimes some approach towards traditional positivism (Lee, 1999). Walsham (1993) offers a reflective and succinct outline of interpretive research:

Interpretive methods of research start from the position that our knowledge of reality, including the domain of human action, is a social construction by human actors and this applies equally to researchers. Thus there is no objective reality which can be discovered by researchers and replicated by others, in contrast to the assumptions of positivist science. Our theories concerning reality are always making sense of the world and shared meanings are a form of intersubjectivity rather than objectivity (p. 5).

Klein and Myers (1999) cogently submit that research can be categorised as interpretive

if it is assumed that if our knowledge of reality is gained only through social constructions such as language, consciousness, shared meanings, documents, tools and other artefacts (p. 69).

Drawing on the work of Gadamer (2004) and Ricoeur (2004), Klein and Myers (p. 72) advance seven fundamental principles for pursuing interpretive IS research. These are as follows: the principles of hermeneutic circle; contextualisation; interaction between the researchers and the subjects; abstraction and generalisation; dialogical reasoning; multiple interpretations and suspicion. Through a pragmatic application of Klein and Myers' hermeneutically inspired precepts for interpretive IS research, I shall specifically focus on the following issues:

- the situational context in which professionals appropriate technology ICT objects in their daily work experience;
- how actors (superiors) initiate control strategies as they routinely interact with each other (subordinates) in both close and distanced settings;

- the extent to which ICT-driven interaction inform and shape actors' process of mediated control as they interact with one another in multiple situational circumstances;
- how emerging ICT-based interaction is implicated, influence and inform mobile technological redesign and use;
- how does this affect the pattern of ICT-driven interaction and influence mediated control and its subsequent contingent manifestations; and
- The extent to which contexts, emotions and situation manifest themselves in the process of controlling both humans and the activities they perform.

In light of the foregoing, the critical research agenda as put forward by Chua (1986) can hardly be relied upon to furnish us with the kind of desired enlightenment needed to appreciate the complexities inherent in the requirements of the intended study. Critical research philosophy is founded on the supposition that social reality is historically constructed which is enacted and re-enacted by people. The idea of historical constitution finds expression in such structures as social, cultural and political authority and restraint formed via language, awareness and joint interpretive meanings (Myers, 1997). Since the study under examination is an ongoing phenomenon, this work seeks to adopt an interpretive philosophy, bearing in mind that the researcher engaged in no deterministic presuppositions. This declarative stance is accounted for by the fact that the phenomenon under study has got its own peculiar, cultural and social conditions prevailing within a particular context. This is exemplified, for instance, by the unique operating circumstances of telesales reps in their order processing activities; delivery drivers in dispatching customers' ordered items and their allied working colleagues in handling different corporate affairs in a coordinated fashion. To this end, there is lack of prearranged hypothesis to be tested against the background of conditioned experiments to arrive at a certain theoretical viewpoint.

3.3 Research design strategy

Yin (2003b) clearly declares that the constitution of a research design requires a systematic flow of evidence that offers the researcher the unique position to draw implications in respect of the fundamental connections that link the examined variables. In this regard, Yin emphasises the point that the quality of a case study is invariably dependent on a patterned orientation towards succinctly demarcated research questions, the focus of the research and the unit of analysis. These, Yin suggests, should be carefully integrated to create propositions carved out of the data to produce findings informed by a criteria for proper interpretation.

In order to better appreciate phenomena-in-context investigations against the background of certain professionals' in their natural, operationally distinct but electronically connected milieus and their cross-subjective predispositions, this work largely employs qualitative data. Scholars agree to the notion that qualitative research is a more decisive research option where 'the researcher is an instrument of data collection ... analyzes them inductively, focuses on the meaning of participants...' and relate them in a comprehensible manner (Creswell, 1998 p. 14). Adopting qualitative data would allow for a minimum degree of 'retrospective distortions' (Miles, 1979 p. 590); a situation where the researcher is unduly influenced by biases of the past.

With qualitative data, the researcher is in a favourable position to constrict his prejudice in the face of openness and as a result produce a report with an unimpeachable deniability (Smith, 1978). Diverse and multiple data collection strategies are adopted to address the delineated research issues concerning the current study. The aim is to gather and solicit informed responses from participants on the phenomena being investigated. In this regard, quantitative methods of enquiry would be primarily subdued in the process. For Kaplan and Maxwell (1994) note that the aim of getting an appreciable feel of a phenomenon from the viewpoints of participants in relation to their idiosyncratic settings is missed when textual data is quantified.

3.3.1 Case Study

The preferred research technique for this longitudinal research endeavour is a case study. Case study permits the exploration of a modern phenomenon in its natural, realistic

context especially ‘when the boundaries between phenomenon and context are not clearly evident’ and the subject under study is a ‘contemporary phenomenon within some real-life context’(Yin, 1981 p. 13). The obvious advantage of this kind of research lies in its ability to give the researcher the opportunity to develop their own concepts from the observation at the completion of the study (Scott, 2000). Further, Walsham (1995) underlies the significance of case study in an interpretive work as it gives the researcher the freehand to synthesise and integrate both the methodological design and interpretation epistemology in such a manner as to arrive at a certain socially constructed position. Hence it is believed that the adoption of this strategy is suitable for capturing the first-hand knowledge and experience of professionals in the field (Benbasat et al., 1987b).

Given the research questions posed earlier, a case study would be more appropriate in designing correspondingly searching queries to address the implications such issues raise. For instance, *why* and *how* queries on diverse operational regimes could provide beneficial insights into the repercussions of control in administrative behaviour. This would facilitate exploratory undertaking to generate emerging themes from a wide range of complex but interesting matters. A situation like this enables the research to provide a contextual account on the recurring events which form the basis for analysis and interpretation.

Second, the choice is to discover reality in a more coherent, consistent and considerable detail, thereby sanctioning the application of sufficient amount of variables to be included during the analysis stage of the study (Galliers, 1990, Yin, 2003b). Case study would encourage the inclusion of multivariate sources of evidence in the area of interviews, direct observation, documentary proofs, physical artefacts, audiovisual resources, among other equally beneficial sources of evidence (Creswell, 1994).

Last, but equally important, the researcher has almost a negligible control over the unfolding events on the subject under study. These factors provide the obvious opportunity for the researcher to have rich and diverse analytical orientations (Yin, 2003a). Subsequently, this would provide the basis for explicating such issues as mediated control, challenges of distributed work and ICT-driven interaction in both mobile and stationary work activities, in this case mediated control. It would also offer a

tool for exploring such issues as emotions, loyalty and training in administrative behaviour.

It should be pointed out at this juncture that with the possible exception of the last factor, this study could be equally conducted by adopting an action research strategy. Action research, according to the pioneer of this investigative strategy, Kurt Lewin, fundamentally involves an investigation process of both taking part in and intervening in an organisation's social environment (Lewin, 1945). However, the phenomenon under study rules out all possibility of any direct and active involvement of the researcher in finding satisfactory responses to the issues motivating the research questions raised earlier (see chapter 1). Direct participation and involvement on the part of the researcher in an attempt to find solution to the problem(s) that led to the research is the hallmark of an action research technique.

In line with the research aim and purpose, case study is more appropriate. The choice is highlighted by the fact that ICT-driven interaction is a current phenomenon in which theory and research are in their early, embryonic stage in several respects (Roethlisberger, 1977). From a different perspective, mediated control in ICT-driven interaction entails tight practice-oriented matters in which actors' familiarity with the context of activity are considerably vital (Bonoma, 1985) for making sense of the available data.

The application of case study is also to reinforce Pettigrew's (1987) submission that the contingencies of organisational life could well be captured and significantly reflected in an iterative manner which characterise the process of data collection. Gathering data in case studies is a combination of a planned site visits, real-time premises engagement with interviewees as to how they carry out the daily routines of their operational endeavours and a series of sporadic but scheduled and arranged site appointments (Huber and Van De Ven, 1995). Consistent with this, various data collection techniques are used, some of which involve interviewing and unobtrusively observing staff at the administrative level at EFSL going about their work in their natural setting during December 2006 and October 2007.

3.4 Unit of analysis

The case study primarily focuses on the routine and daily activities of telesales reps and delivery drivers with control and ICT-driven interaction as the unit of analysis of the entire investigation. It is hoped that concentrating on these categories of workers at EFSL provides the opportunity for detailed discussions on the key issues of mediated control in interactions largely driven by technology. Choosing a large food services organisation with an employee capacity of about 300 and focusing on how control is administered in its technology mediated interaction activities make contextualism essentially appealing (Edward, 1985). Contextualism continues to be captive to the capricious observation of the object of study; and thus concentrates on its outside and inside emergent and conditional relations.

The familiarity with which an organisation's members become associated with the conditions of their work provides them the inclination to ascribe and assign meanings to their activities borne out of diverse motivations based on planned activity and contingent decisions and operations. In addition, my objective to understand and make sense of how control is accommodated in ICT-driven interaction draws on organisational actors' creative adoption and application of the resources which make their work meaningful and purposeful. The 'why' and 'how' questions are keen on making sense of the apparent unpredictability that controlling actors in a contingent and contextual organisational life entails. Essentially this validates the analysis to be focused on ICT-based interactions that facilitate, challenge or undercut mediated control.

3.5 Data collection technique

Before the commencement of the data collection exercise, an initial meeting was scheduled between my supervisor and me on one hand and the Business Operations Manager (BOM) and the Human Resource Manager (HRM) of EFSL on the other. Later, the BOM introduced me as research student to the managers in the various sections of the organisation. The BOM said to the staff that I was interested in understanding how they used technology tools to mediate their interactions in multiple situations. He then

suggested and encouraged me to move about in the various departments as I wanted. Apart from marking out the key areas for collecting data in the investigation process, the initial meeting was crucial insofar as it laid the groundwork for all the subsequent site meetings, observations and interviews.

In setting out the agenda for the data gathering exercise, Miles and Haberman's (1984) admonition to qualitative researchers in four specific areas was observed. These areas border on:

- the activities on which the site observations and interviews would be based
- the setting for the conduct of the research
- the interviewees and respondents and
- the stages essential to the changing nature of the activities that the actors engaged in within the purview of the study setting.

Mindful of the need to solicit qualitative data, several sources of data collection techniques are used. The purpose is to attain a rich diversity of information that well addresses both the research questions and intentions as a means of teasing out the situational dynamics of the study (Benbasat et al., 1987a). The diversity of the information does not discount a background study that would have otherwise been difficult to obtain through secondary sources of evidence (Darke et al., 1998). The following outlines the diversity in the evidential materials and their respective sources.

3.5.1 Direct Observation

The use of direct observation method allows the researcher to focus on the aspects of the research that are of particular interest to him without the possibility of being biased or influenced by 'second-hand' information from the participants of the study. As a result, this motivated the intention not to interfere with the activities of my informants. Learning directly from the practices and activities of the social agents grants the writer the ability to generate insights on organisational loyalty, the dynamic application of mediated control and how it gives rise to discretionary behaviour, especially in emerging

situations of work. It also provides the environment for forming different perspectives and understandings on the conditions for the application of certain artifacts rather than others in ICT-driven interaction.

Doing this necessitated long hours of sitting beside telesales reps, customer service reps, delivery drivers and team leaders as they handle both incoming and outgoing calls. There were instances where I was fortunate enough to have been offered the opportunity by a telesales rep to listen in to incoming telephone conversations from customers. I should admit that this ‘privilege’ was not officially sanctioned by top management; it was nonetheless made possible as a result of courteous and tactful arrangement between a particular telesales rep and me. I also had the opportunity to travel to most delivery areas in the South-East of London with some of the delivery drivers. Our normal day would resume, when I met a driver at a London address early in the morning and begin the day’s delivery programme with him. This took place during the early period of the research. The driver’s duty was to park the delivery van on arrival in front of a customer’s shop and place the customer’s order on a trolley to a designated area in the shop.

Following delivery drivers to deliver orders in this manner greatly influenced my understanding of how the whole work fits together in a coordinated fashion. Based on the problems and challenges experienced during the delivery periods, I posed certain questions to the delivery drivers on our way to the next delivery points. Queries such as, for example:

- Why a delivery driver decided not to telephone the head office for particular instructions before he returned a customer’s order?
- How does a telesales rep readily know if an incoming call is a regular customer or not?
- How does a telesales rep tell if a customer prefers the telephone conversation to be conducted in Turkish or English?
- How do telesales reps know and point out to customers on the telephone that they have been missed by a delivery driver in a delivery attempt?

Probing these questions enabled an immediate and appropriate explanation that related directly with the just encountered situation. Part of my direct observation was also to sit alongside ‘routers’ as they determine the various routes the drivers had to take in getting customers delivery to them. Routers are EFSL staff who schedule and arrange for the delivery of customers’ orders after telesales representatives have taken those orders and processed them on the database during the day.

During my observation, I learned that customers’ postcodes, the location of their shops and familiarity of a driver with a route informed the router as to what driver should carry out which delivery slots. I also learned that drivers could be contacted on their mobile phone late in the night, sometimes, to inform them of last-minute changes to their delivery schedule. For instance, I can recollect an instance when a router called a driver to let him know ahead of time that due to inadequate delivery orders he has been put on a different route. Some drivers also called into the routing office late in the evening to find out if they could be allowed to use certain routes as they have noticed a diversion or road block on their route during the day.

3.5.2 Interviews

Interviews are one of the most significant forms of collecting qualitative data (Myers and Newman, 2007). To this end, open-ended, semi-structured qualitative interview questioning techniques were adopted during the interviewing process. This provided a lens that makes it possible ‘...to see that which is not ordinarily on view and examine that which is often looked at but seldom seen’ (Rubin and Rubin, 2005 p. vii). The answers solicited from senior departmental managers, team leaders, customer service operatives, delivery drivers and telesales reps on ICT-driven interaction spawned the need for more probing questions in terms of how control is instantiated in their operations.

This, as was anticipated, permitted and encouraged respondents to be more elaborate, recognising their emotions, manners and appreciation of the issues at stake. This idea is helpful in identifying the social cues, personal opinions and beliefs and attitudes of respondents (Kendall and Kendall, 1993). Before the interviews were taken,

the respondents were made to understand and assured that no one would be able to link whatever they said to them. In this connection, interviewees were protected on condition of anonymity. This assurance offered psychological protection to the respondents which, for instance, led one telesales rep to confide certain ‘company secrets’ that would otherwise have been elusive and unknown to the researcher.

The interviewing process is informed by Gaskell’s (2000) counsel on the conduct of in-depth qualitative interviewing. The particular background of the interviewees is taken into account, regarding their age, educational qualification, their job experience, and specific area of responsibility within the structure of the organisation. Gaskell reveals some techniques that are sensitive to the initial statement, embodying the research intentions leading up to the consent of the informants concerned to allow for the recording of the contents of the ensuing conversation. This prior knowledge permits the exploration of both the job description and job specification of the respondents within the context of ICT-driven interaction in customers’ order processing and tracing and tracking delivery drivers. The guide also served as a point of reference in discussing the many facets of mediated control both within and outside of the organisation. The concluding sections of the interviews involve securing additional documents at the end of the conversation with the expression of thankful appreciation to the interviewees for their time and involvement in the exercise. The interview guide provides the issues and their corresponding activities of all the aspects of the interviewing questions.

Issue	Activity
<i>Introduction statement</i>	Declaring of research aims and objectives Interviewee’s agreement to record the content of the conversation
<i>Background of interviewees</i>	The age of interviewees Educational qualification Job experience The sphere of organisational responsibility
<i>Telesales, order processing and customer service</i>	The conditions and work environment Routine activities and nature of assignment Responsibility in the order processing activities Demeanour on the phone Standard operating procedures (SOPs), norms, guidelines, rules and policies

	Award schemes, disincentives, The demands of the job
Routing, scheduling deliveries and delivery drivers	The application of mediated ICTs in coordinating the delivery of customers' orders. The role of ICTs in the demarcation and determination of delivery routes Delivery challenges and the means of overcoming them The uncertainties surrounding delivery activities The degree of discretion and the difficulty in monitoring delivery drivers
<i>Focus of mediated control on ICT-driven interaction</i>	The importance of distance in mediated control Extenuating circumstances and the use of discretion Perverse effects in mediated interaction Enduring nature of mediated interaction and the limits of control The diverse manifestations of organisational control The possibility of trust to replace control in mediated environments
<i>Concluding remarks</i>	Gather extra related documented evidence Express appreciation to the interviewee for their time and co-operation

Table 4: An overview of interview reference guide

The interview reference guide provided the architecture for exploring ICT-driven interaction in mediated control. The starting point is the objectives of the research. It then solicits the consent of the interviewees for manual and electronic recording of the conversation in order to corroborate the analysis of the gathered data (see, for instance, Jovchelovitch and Bauer, 2000). The reference guide enables the interviewees to come clear on their conduct on the telephone with the customers, submit their perspectives on their working environment, emerging dynamics of their work, routine programmes and other contingent demands associated with their work. The guide also provides the means for stimulating discussions on the uses of ICTs in scheduling deliveries and demarcating the various points or routes for reaching out to customers with their orders. Thought-provoking responses from interviewees' articulation on different instances of mediated control, the decisions that herald their use of discretion and unanticipated outcome of mediated interaction are also captured by the interview guide. Matters ranging from the company's capacity to cope with the behavioural or sociological challenges posed by

mediated interaction artefacts, operational connectivity, remote interactions and flexible or rigid interaction patterns were raised. Concerns about the composition of the technological architectural platform on which the various interaction mechanisms were running were also brought out.

The average time of each interview was 80 minutes. However some interviews nearly hit 90 minutes. The reason was due to periodic telephone interruptions which some of the respondents could hardly avoid, especially when the time of the interview occurred at the time when the respondents were engaged in their usual pattern of work. It must be pointed out that the interview process was not made like a dogma fitted into watertight compartment to the inconvenience of respondents. Indeed the process was made to be sensitive to the respondents' general disposition.

Similarly, the rationale behind the application of the new Axapta system, the strategies for engaging with field sales reps, how the company manages its relationship with customers to encourage trust and the control mechanisms in place were all queried. I had the permission from all my interviewees to tape record all the interview conversations. I also used a small note book to record 'off-record' conversations which later proved helpful as some of the issues noted offered leads to emerging themes. The 'off-record' conversations were later read out to the respondents for their consent and comments for reasons of validity and legitimacy. Mention should also be made of the use of informal conversation with some of the people at the lower echelons of EFSL administrative hierarchy. This proved helpful as a means of avoiding data bias, and filling data gaps to widen the scale of analysis as part of the story. The key informants through whom the data for this research was gathered varied in their fields of specialisation, sexual orientations, ethnic backgrounds and the positions they occupied within the company's organisational hierarchy.

The fieldwork is a combination of thorough interviews of 53 professionals across different levels of authority within the organisation under study. It also reflects a detailed observation of over two hundred employees who make intense utilisation of such portable ICTs as PDAs, mobile phones, laptop, telephone and PCs during the course of their everyday routine and contingent work. The table below is a detailed illustration of the interviewees involved in the primary research data.

Interviewee code	Department/Position in organisation	Number of interview(s)	Key responsibility
	Administration		
MD	Managing Director	1	Oversees to the general direction of the company
BOM	Business operations manager	2	Responsible for improving and expanding commercial opportunities
CM	Counter-clerk manager	1	Ensures that each driver picks the right batch of invoice for the delivery of customers' orders
CSM	Customer service manager	3	Supervises the activities of customer service managers, including monitoring their calls with customers
CSR1	Customer service rep #1	1	Addresses specific concerns of customers such as delivery delays, damaged orders, discrepancies between invoice and delivered items
CSR2	Customer service rep #2	1	Ditto as above
CSR3	Customer service rep #3	1	Ditto as above
CAM	Counter-driver administration manager	1	Distributes invoices to delivery drivers prior to their departure and checks them (the invoices) against returned items upon their return to the depot. Also delivers items to customers who call at the depot personally
DS	Drivers' supervisor	2	Supervises and allocates trucks to all the delivery drivers
OM	Operations manager	2	Retains control over all the vehicular activities of the company. Identifies the profitable routes and profit potential

			of customers by the use of the organisation's distribution map
FSR1	Field sales rep #1	2	Canvasses for new businesses, improves the existing relationship between the customers and the company, monitors the buying patterns of customers
FSR2	Field sales rep #2	1	Ditto as above
FSR3	Field sales rep #3	1	Ditto as above
FC	Financial controller	1	Handles internal and external financial matters of the company such as discrepancies in staff wage, reconciliation between cash collected by delivery drivers and the actual balance on customers' accounts
GM	General manager	2	Coordinates the efforts of all the functional areas of the company as well as maintaining constant link with the field sales reps
HRC	Human resource coordinator	1	Updates the database of the company's staff records, assigning email addresses to certain delivery drivers
ITM	IT manager	2	Takes responsibility for user support, testing new IT systems, systems configuration and their integration
MM	Marketing manager	1	Deals with advertisements, the design and print of the company's periodic product brochures
NS	Night supervisor	1	Prints all the invoices, identifies which various orders and their corresponding routes, oversees overnight loading activities

QAM	Quality assurance manager	1	Audits the company's suppliers, ensures the maintenance of the organisation's equipment, deals with hygiene complaints
SAM	Sales administration manager	1	Sets up and closes customers' accounts, decides on when to close their accounts, provides customers with price information on the various products
SCM	Stock control manager	1	Undertakes stock control activities, determines the current level of stock on daily basis
TL1	Telesales leader #1	1	Handles the problems and challenges faced by both telesales reps and customers in a particular product line
TL2	Telesales leader #2	2	Ditto as above
TL3	Telesales leader #3	2	Ditto as above
TM	Telesales manager	1	Organises daily meetings among the telesales reps, monitors reports on products that are selling well and those with poor sales, monitors customers telephone conversations with telesales reps
TS	Telesales supervisor	2	Directly monitors the activities of the team leaders
TR1	Telesales rep #1	2	Processes customers' orders on the telephone, and redirects customers to customer service where necessary
TR2	Telesales rep #2	1	Ditto as above
TR3	Telesales rep #3	1	Ditto as above
TR4	Telesales rep #4	1	Ditto as above
TR5	Telesales rep #5	2	Ditto as above

TR6	Telesales rep #6	1	Ditto as above
TR7	Telesales rep #7	1	Ditto as above
TR8	Telesales rep #8	1	Ditto as above
TR9	Telesales rep #9	1	Ditto as above
TR10	Telesales rep #10	1	Ditto as above
TR11	Telesales rep #11	2	Ditto as above
TR12	Telesales rep #12	1	Ditto as above
TT1	Telesales trainer #1	2	Responsible for training new telesales staff in such areas as product knowledge and handling customer telephone orders
TT2	Telesales trainer #2	1	Ditto as above
DD1	Delivery driver #1	1	Makes delivery of customers' orders
DD2	Delivery driver #2	2	Ditto as above
DD3	Delivery driver #3	1	Ditto as above
DD4	Delivery driver #4	2	Ditto as above
DD5	Delivery driver #5	2	Ditto as above
DD6	Delivery driver #6	1	Ditto as above
RP1	Route planner #1	2	Plans the routes for the delivery of ordered items based on postcode, familiarity of the driver on the route, etc, also ensures that the vans are not overloaded
RP2	Route planner #2	1	Ditto as above
RP3	Route planner #3	2	Ditto as above
CCS	Credit control supervisor	1	Produces different customer delivery reports for the credit control team
CCM	Credit control manager	1	Monitors all individual accounts, constantly engages with customers with outstanding balance and puts such accounts on hold.

Table 5: List of interviewees and their respective primary functions within the organisation

3.5.3 Miscellaneous data

References were also made to certain vital documents like EFSL annual reports, past award ceremonies that involved EFSL as a participant, flyers, offer catalogues, the company's official website among others. Pieces of information gleaned from these sources were instrumental in making valid comparisons with the responses solicited from the interviewees. It also helped in developing an appreciable level of understanding of how certain artefacts are employed in preference for others. Considerable knowledge of the company's management structure, its historical and operational trajectory, functions, etc., were also acquired. In addition to these, telephone discussions and e-mail communication were used as clarification on specific issues that emerged during the write-up. In effect, multiple data collection methods were vital in augmenting the on-site interviews, thereby enhancing the richness of the research findings as a way of guaranteeing validity (Stake, 1995). In short, this work, characteristic of inductive studies, went through the process of iteration as data were continuously revisited.

3.6 Mechanics of data interpretation

The data generated from both primary and secondary channels take the form of texts, notes, snapshots, signs, symbols, transcripts, tape recordings, among others. The study sought to draw on Hans-Georg Gadamer's (1975) enterprising work on philosophical hermeneutics, as this largely deals with the philosophy of the theory of interpretation. Hermeneutics dates as far back to the period of the earliest Greeks during their study of creative writing and biblical exposition in the Judeo-Christian tradition (Crotty, 2003). Basically, hermeneutics deals with interpretation of written text and constitutes a fundamental pathway to human comprehension. Texts are recognised as the conduit for the transmission of understanding, judgement and ideas from the originator of a text to the interpreter. It therefore eliminates the idea of finding meaning from sources external to the text under consideration. Consequently, Taylor (1976 p. 153) observes that:

Interpretation in the sense relevant to hermeneutics is an attempt to make clear, to make sense of an object of study. The object must, therefore, be a text, or a text – analogue, which in some way is confused, incomplete, cloudy, seemingly contradictory – in one way or another, unclear.

The interpretation aims to bring to light an underlying coherence or sense. The process is to ensure that the investigator is also, to some reasonable extent, involved in the presentation of the gathered data from the field of research. The aim is to guarantee that the researcher does not become only a

passive receptacles of whatever data or information that is transported to them, but as intelligent actors who assess the truthfulness, completeness, sincerity, and contextuality of the messages they receive (Ngwenyama and Lee, 1997 p. 151).

Hermeneutics therefore recognises the interpreter's knowledge, experience and understanding that are brought to bear on the interpretation process. These factors highlight the concept of 'effective history' (Foucault, 1989) that plays into understanding new things.

The historical background forms the basis of the interpreter's prejudices accounted for by their historical past, such as linguistic orientation, cultural beliefs and motivational practices that influence the shape and structure of the interpretation. It should be remembered however that the prejudice in this situation does not imply the negative connotation of bias. To be sure, it seeks to identify a pre-learning situation (Scott, 2000) or a foreknowledge of an issue. The adoption of the principle of hermeneutics in a sense is expected to consider 'not just the documentary artefacts that human subjects create, but also their individual actions, group behaviours, and even social institutions, all of which as text analogues, have meanings that can be read and interpreted' (Lee, 1994 p. 149). Hermeneutics is therefore appropriate and legitimate for capturing and understanding not only the forms of ICT-driven interactions adopted by the social agents in this study but also for making sense of the personal actions and their joint organisational culture and behaviour.

During the analysis and interpretation stage of the gathered text, the author is far removed from the spatial context where the organisation of the data occurred. The aim of this action is to reflect the view that

the meaning of what is spoken exists purely for itself, completely detached from all emotional elements of expression and communication (Gadamer, 1975 p. 392).

Finally, my experience, opinions, understanding and knowledge together with others incompletely explained in the text would signify Gadamer's 'horizons' which demands 'fusion' to originate some thoughts on the complexity of the constructed social reality of others in their unique, context (Hacking, 1999, Searle, 1995).

3.6.1 Analysing and interpreting evidence

It should be mentioned ahead of time that analysing evidence from the field resumed before the end of the data collection exercise. Glaser and Strauss (1967) along with Eisenhardt (1989b) submit the idea of intersecting data collection with analysis, as this style – apart from being desirable – they contend, allows the researcher to deal with issues that emerge whilst yet in the field. Indeed, Creswell (2008) favours the suggestion that data analysis as an exercise is carried out at the same time with data gathering, interpretation and descriptive writing of the report.

The field report of both taped-recorded and handwritten communication yielded about 130 pages of typed notes. Over the period of the research, this material provided the foundation for considering the series of events taking place at the site of the study and initiating strategies for subsequent stages of involvement.

The initial step of analysis was carried out in line with Strauss' (Strauss, 1987 p. 59) idea of 'open coding'. In this connection, conceptual tags were applied to identify certain portions of the data that were noteworthy and promising in terms of providing clues for emerging fascinating themes, categories and sub-categories. The theory of administrative behaviour created the enabling conditions in this regard Glaser (1978), while the fundamental research question offered the organising frame by which the importance of the data was determined. Relevant sections of the data with conceptual tags were written on 'post-it-notes' and attached to a small shelving unit in front of the researcher's desk. This proved beneficial in reviewing the data and also presented a crucial way of developing categories and sub-categories. With delineation of categories

and sub-categories, discriminatory coding process constituting ‘story line’ commenced (Strauss and Corbin, 1990 p. 139) to make a way for emerging themes to join together in a more natural, coherent, consistent and logical progression of thought and narrative format.

There was the use of different colours in Microsoft Office Word (2003 edition) to highlight certain aspects of the typed interview to emphasise particular themes and surprising revelations. For instance, red background was applied to indicate the perspectives and the explanations of telesales reps who favoured the use email as against other forms of mediated interaction. Green indicated the various reasons given for issues relating to discretionary decisions by delivery drivers and initiatives by telesales reps, while yellow designated control and monitoring techniques exercised over the work of both telesales reps and delivery drivers. These ‘sifting and winnowing’ techniques helped the researcher to match similar and dissimilar views, which were crucially important during the analysis and discussion sections of this study.

Attempts were also made to restrict the inclusion of language the researcher deemed inappropriate in the recorded interview due to the fact that such expressions are only permissible in spoken but illegitimate in written communication. The researcher was however careful to maintain and not to tarnish the integrity and dilute the import of such statements.

On matters of interpretation and meaning which characterise interpretive study (Walsham, 2002), a more practical position was taken to help in gaining penetrating insights into the contextual environment of work involving the key people in this research. For instance, the context-sensitive nature of the study meant a pragmatic iterative style of interpretation which enabled a description of how telesales reps and delivery drivers made sense of their routine engagements with the various tools they use at work. All these exercises were undertaken in the spirit of inductive research technique (Van Maanen, 1988). As a result, the researcher applied the concept of semiotics as delineated by Chandler (2007) which – probably – was influenced by enterprising work by (de Saussure, 1972) to analyse the text, bodily expressions and other symbolic representations of interviewees’ opinions and thoughts that dominated the typed and handwritten interviews.

The recourse to semiotics as a legitimate avenue to meaningful interpretation is the overarching drive on the part of the researcher to pursue the means by which signs and symbols are created to observe their transformation in social settings. The logical link between the symbols and their experiential manifestation only go to bolster point that 'language ceases to be a mere system of sounds and symbols - it becomes the expression of being' Hirschheim's (1985 p. 24). Consequently, the signs were examined not in isolation, but together with the context in which they occurred. In other words, the working environment of telesales reps and delivery drivers provided the guiding and organising principle for the interpretation and analysis of the evidence from the field.

3.7 Chapter in review

Demarcating the strategic path along which the research study is travelling, this chapter lays down the fundamental viewpoint against which the entire study hinges its orientation. Plying this route involves an educated comparison between the positivist and interpretivist research paradigms and the consequent justification for favouring the latter in this study. Case study is also elected as a more preferred research technique as the focus of analysis is directed towards telesales reps and delivery drivers whose work and the context of the study reflect an ongoing contemporary phenomenon. Various data collection systems have been accounted for in an attempt at validating the final research findings through a rigorous application of data interpretation techniques.

CHAPTER FOUR – THEORETICAL FOUNDATION

It is the theory that decides what we can observe – Albert Einstein (1879-1955)

Following the discussions in chapter two on the various instances, manifestations and administration of organisational control against the background of ICT-driven interaction, this section presents the theoretical platform on which the underlying themes of the research are properly explained. Investigations into the appropriation and application of technology in everyday experience and their probable impact imply societal implications which rely on theories in sociology and psychological concepts to shed insights for a wider audience. Some of the sociological theories that readily come to mind to possibly offer explanations into the phenomena that emerge in this study are Institutional theory (Scott, 1995, Selznick, 1949), Agency theory (Eisenhardt, 1989a, Williamson, 1975b), Structuration theory (Giddens, 1984), Actor-network theory (Latour, 2005), Information processing theory (Miller, 1956), among a horde of others.

Specifically, institutional and structuration theories can potentially be helpful in providing insights into the norms and routines that legitimise individual and organisational actions over time. Generally speaking, these theories offer little help, however, in offering detailed exegesis and analysis of the motivational directions and psychological underpinnings needed to understand the individual and organisational actions in their adoption and use of technology artefacts. Structuration theory in its fundamental conceptualisation provides limited sense to address matters of technology appropriation (Jones, 1999). Institutional theory on the other hand tends to over-emphasise the stable patterns that characterise organisational routines unless external forces induce a change of the status quo (DiMaggio, 1988). Based on these explanations, these theories are not convincing in their ability to offer the practical outlook needed to excite our thinking into a realistic appreciation of individual and organisational behaviour in their respective areas of complexity.

For instance, critical issues such as organisational recognition, identification and loyalty, the role of authority, the psychology underpinning administrative decisions,

communication channels and the nature of efficiency hardly receive any significant treatment from the theories just cited. This notwithstanding, it would be appropriate to suggest that some of these theories have the capability to challenge our current stock of knowledge and understanding on individual and organisational behaviour in everyday experience. The theory of structuration, social construction of technology and activity theory are a few abiding examples. Similarly, consultation on certain technology-oriented theories did not provide any favourable appeal in spite of their fair and near-symmetrical treatment of human and technology in their unit of analysis. In the same vein, Socio-technical theory (STT) and Task-technology fit (TTF) theory could not be adopted because both theories have very little to contribute by way of control and its diverse implications for organisational design (see, for example, Bostrom and Heinen, 1977, Avgerou et al., 2004, Land, 1987).

However, with the rationale of this research in mind – to understand mediated control and its manifestations and ramifications from the standpoint of technology-based interaction – I have decided to apply the theory of administrative behaviour (Simon, 1997) to this study. The reasons for this stance are not far fetched; to enable an extensive exegesis on the data from the field.

Firstly, the theory of administrative behaviour provides a far superior explanatory power for doing a detailed discussion and analysis against the background of the objectives of this study. These objectives, as stated elsewhere, include the exploration of mediated control in collaborative engagements and the manifestations of control in administrative undertaking.

Secondly, the theory of administrative behaviour is rich in terms of the various thematic concepts that are well designed to supply the practical application and the accompanying implications for this study. Employee and customer loyalty and discretionary actions are, but a few instances of the allied implications of technology mediated interaction in understanding the dynamics of organisational control.

Thirdly, administrative behaviour is well placed to provide philosophical and psychological engagement and understanding necessary to formulate concepts that deeply account for the motivation behind the use of tools of technology in everyday human activity.

Stated somewhat differently, but with the same intention, the psychological and philosophical concepts contained in the theory make it both ideal and practical in advancing a detailed rendition of mediated control in ICT-driven interaction. Last, but by no means least, using administrative behaviour in a purely human and technology environment can provide a real challenge to the suitability of the theory and, possibly, reveal its inadequacies on studies about mediated control in interaction driven by technology.

This portion of the research therefore introduces the theory of administrative behaviour and demonstrates how illumination of its fundamental tenets and essential concepts leave us with least doubt as to its worthiness in understanding control from the point of view of ICT-based interaction. In furtherance of this aim, the epistemological trajectory and an outline of administrative behaviour are presented in 4.1 by means of a discourse on the elementary and cross disciplinary ideas from which the theory originated. The mechanisms of organisational influence are elaborated in section 4.2. On account of this, themes such as the exercise of authority in organisations receive attention in 4.2.1 while the focus on 4.2.2 shifts to the structural constituents of authority. That provides the opportunity to further consider the triangular features of authority with respect to responsibility, coordination and specialisation. The rest of the chapter reflects the vital importance of training in securing individual and group commitment to the course of the organisation in 4.3 while the psychology of administrative behaviour is scrutinised in 4.4 to highlight such principles as rationality, organisational loyalty and routinisation of work in further sub-sections of 4.4.1, 4.4.2 and 4.4.3 respectively.

4.1 Philosophical underpinnings and foundations of the theory of administrative behaviour

Herbert Alexander Simon, the father of *administrative behaviour*, elected the phrase to explain the practices people adopt to work in organisations. In short, Simon explored the diverse functions of organisations through the lens of administrative behaviour. The rationale and motivation that gave birth to the theory of administrative behaviour (TAB) can be attributable to Simon's pioneering work on organisational

decision-making. His resolve to explain – in a profoundly succinct manner – the mechanisms involved in the management of people and the processes that are valuable to the functioning of human organisations since their earlier existence heralded the theory of administrative behaviour. Soundly convinced that sufficient vocabulary was lacking in the field of the appropriate devices for analytical discourse on organisations, he embarked on an academic journey that searched for constructs to make a worthy contribution to organisational sociology. His own words are illustrative and instructive of this observation.

...It derived from my conviction that we do not yet have, in this field, adequate linguistic and conceptual tools for realistically and significantly describing even a simple administrative organization – describing it, that is, in a way that will provide the basis for scientific analysis of the effectiveness of its structure and operation (Simon, 1997 p. xi).

Through this, he established the processes by which the determination of goals and formalisation of work procedures contribute to realistic behaviour in organisations.

Administrative behaviour is underpinned, implicitly, by the control of subordinate actions in various organisational settings. Yet, given the overwhelming prominence goal-setting and goal-achieving receives in the theory, it is tempting to perceive control as being relegated to the background. Perrow (1986) alludes to this observation when he points out that the theory emphasises unobtrusive control of subordinates through the activities of information exchange, standard operating procedures and training. This control mechanism is underlined by specifying the rules for achieving stated goals in spite of an individual's (the controlled person's) awareness of possible decision alternatives.

Administrative behaviour posits that decisions with 'higher value component' emanate from the top organisational hierarchy while subordinates at the lower echelons of the organisation take decisions rich in factual content (Simon, 1997). The higher value component of decisions emphasises the *what* of such decisions on the one hand whereas the factual content stresses the *how* aspects of subordinate decisions. Together, these two constitutive aspects of decision-making provide a panoramic view of the theory of administrative behaviour. Thus, the totality of organisations' decisions is a combination of value premises (suppositions of required ends) and factual premises (the reality on the

ground). For in this view are the nature and mechanics of administrative behaviour revealed (Simon, 1983).

These core, fundamental principles of administrative behaviour are described by Simon as ‘choice of ends’ and ‘choice of means’ to identify the nature (what) and mechanics (how) of decisions respectively. Choice of ends delineates the specific forms of organisational actions through fiat or consensus building at the top managerial level. Choice of ends is goal-driven as it lays out the clear conditions for achieving specific organisational objectives. Choice of means relates to subordinate actions resulting from decisions that are informed by empirical and emergent circumstances. Simon refers to the empirical and emergent circumstances that challenge subordinate decision making at the performance level as ‘the observable world and the way in which it operates’ (Simon, 1997 p. 55).

It is the very unpredictable nature of the observable world that invites the use of discretion by subordinates in the process of performance. This is because value premises may not be consistent with factual premises at the moment an action is taken; since factual premises are informed and influenced by events entirely dictated by emergent and unpredictable factors. However, the ultimate subordinate action is also dictated by the overall objectives of the organisation (Simon, 1997), as deviation from these explicit objectives on the part of the controlled may invite sanctions or discipline from the organisational top hierarchy.

It is the control and decision-making processes of individuals in the organisation that make the choice of administrative behaviour particularly appropriate to the study of telesales reps and delivery drivers in this research. The goals for performance are simplified and specified with the aim of providing support, and to some extent, predicting the consequences of subordinate action. It is also to detect the likely deviations and minimise their impact when they occur.

Given these approaches to decision-making in organisations, it appears superiors and subordinates have two-opposing aims of taking decisions. However, the overall aim for these decision making activities is the achievement of a common organisational goal. To this end, the entire hierarchy of an organisation ‘can be viewed as a congealed set of means-ends chains promoting consistency of decisions and activities throughout the

organisation'(Scott, 1998 p. 46). Simon (1976) explained the decision-making and administrative procedures by which prior specification of goals and the formalisation of control structures inform rational behaviour in organisations. He rejected Henry Fayol's notion of 'economic man' and inserted in its place 'administrative man' who is partially conscious of all the possible alternatives of his judgement and so is prepared to settle for those that yield sufficient satisfaction.

To Simon, the idea of optimisation is a misleading one as the possibility to achieve the highest possible solution seems inherently elusive. Drawing on March and Simon's (1958) thoughts on bounded rationality, Simon reveals the limits in the cognitive ability of those who make decisions. Simon pioneered the application of 'uncertainty' in organisational decision-making due to the real impossibility to obtain full and perfect information at any singular moment when making a decision. While this may not be an altogether new concept, it is fair to admit that Simon originated this idea. No wonder he won his 1978 Nobel Prize in this field.

The conceptual tools that Simon used to understand the world cut across a wide spectrum of disciplines, namely, administrative theory, political science, organisation theory, economics, psychology, sociology, public administration, philosophy, computer science and cognitive science (Augier and Frank, 2002). Reformulation of the idealistic notion of decision-making with specific reference to rationality took a significant proportion of his attention. Accordingly, rationality became the running theme in nearly all the disciplines he was connected with because the concept surrounded and embedded the larger framework of society. Hence his efforts to explicate rationality inevitably led him to many theoretical perspectives on economics, philosophy, psychology, sociology and politics. The connection between information, decision-making and technology turned out to be Simon's principal research focus during the latter part of the 1950s (Waring, 1991).

Yet in spite of Simon's multi-disciplinary approach to administrative behaviour, problem-solving and decision-making, he did not confine his loyalty to any one particular discipline. Indeed, he said in a discussion quoted in Augier and Frank (2002 p. 583) that 'If you see any one of these disciplines dominating you, you join the opposition and you fight it for a while'. The heart of Simon's contribution was on problem-solving and

decision-making in the specific areas of individuals, organisations and the society in general. For instance, (Simon, 1947, 1962, 1993) are instances of such work. ‘Logical positivism’, described simply by Simon as having the same connotation as empiricism (Simon, 1997 p. 68) is obviously the essential guiding thesis of the work of administrative behaviour. Administrative behaviour has at its core the searching into demonstrable organisational understanding consistent with the rigours of systematic methods. In this case subjects like philosophy, the social sciences and mathematics are practically brought together in the study of administrative behaviour (Kerr, 2007).

Three philosophers, namely, John Dewey, William James and A. J. Ayer, have had a decisive impact on Simon’s technical approach to the study of behaviour in organisations. William James and John Dewey’s work is a crucial antecedent to Simon’s ideology on administrative behaviour. Simon combines Dewey’s transformation of individual knowledge within the organisation environment and James’ proclamation of the manner of human understanding and habit with two other persons, namely, Ayer and Carnap (Kerr, 2007). It is fair to point out that only Ayer receives recognition in administrative behaviour. Each of the three philosophers is for a moment considered and related to Simon’s work on administrative behaviour in turn.

4.1.1 John Dewey

John Dewey, by far, is possibly the most insightful and influential among the three philosophers with greatest impact on Simon’s theory of administrative behaviour. The entire theory is replete with allusions to Dewey’s work. Dewey’s dominant perspective on administrative behaviour articulated ‘the organic nature of experience’ (Kerr, 2007 p. 259) informed by the scientific world and by Darwinian writings (Russell, 1945, Smith, 1959). Dewey explained two fundamental features of reality upon which an organism acts. The first is the idea of ‘system’, which is imperative to the philosopher (Hendel, 1959). Drawing on William James’ concept of ‘stream of thought’, Dewey illustrates the series of logical interactions through which reason links with perceptions to represent experience. This presents a seamless, unifying exercise by which ‘...a single life-process encapsulates, into an indivisible whole, the minutiae making up the stream of

sense-producing material' (Kerr, 2007 p. 259). To Dewey, thinking and acting are inseparably united (Hendel, 1959).

The second fundamental dogma of Dewey's work underscores his depiction of truth. Dewey's view on the constitution of truth marks a radical point of departure from its classical conception as something given rather than a negotiation process characterised by mutual shaping of the entities involved. In Dewey's thinking, truth must reflect the totality of the opinions and perspectives of all concerned and not something seen to be imposed from outside the interests and aspirations of those concerned. This is revealed in his criticism of the established notion of the truth as being too firm and rigid (Russell, 1945). In the process, Dewey rejected idealism to emphasise truth in a more thinly defined fashion. To him 'truth is a product of an evolutionary process, one that is potentially endless' (Dewey, 1938 p. 28). By implication then, inquiry does not result in any ultimate destination. For 'the world is inseparable from experience and the value of experience is dictated by the rigour with which examination occurs and by the methods through which it is shared' (Kerr, 2007p. 259).

4.1.2 William James

The theory of administrative behaviour makes multiple references to William James' work on *The Principles of Psychology* in a manner in which philosophical line of reasoning relates to human experience (Allen, 1970). The two significant ideas of James' work that inspire administrative behaviour are 'stream of consciousness' and 'fringe of consciousness' (James, 1950). Stream of consciousness identifies perceived but unstructured objects. Animated objects are then incompletely but consciously stored in an ever-changing directions. During this period linkages among objects are continuously subjected to hypothesis. In this case perception of any particular object inevitably implies knowledge about its associations (James, 1950 p. 259).

Fringe of consciousness, according to James, refers to a segment of the mind on which the stream of objects lies and yet is never recalled into consciousness. Many connections inside the fringe are created about some sensations recalled into consciousness. The conscious mind always moves towards a purpose, however

momentary it may seem: 'within each personal consciousness thought is sensibly continuous' (James, 1950 p. 225). With this the mind never goes empty (Kerr, 2007).

The idea of habit is an accessory to James' contribution, though indirectly, to the theory of administrative behaviour. In this instance, humans, to a certain extent, become captive to habit in an attempt to extend energy in an efficient manner so as to secure enough for use at a later time (James, 1950 p. 112). It is this energy-saving aspect of habit that presents the individual an essential protection against the prompt demands of contingent events.

4.1.3 Alfred Jules Ayer

One of the key sources that impacted on the theory of administrative behaviour is A. J. Ayer's masterful piece, *Language, Truth and Logic*, which gives a forceful, yet easy-to-understand preamble to the rationalistic philosophy (Ayer, 1959a). To this end, four chief principles of the logical thinking directly informed Simon's theory. To begin with, logical thinking as a philosophical tradition relates the meaning of a verifiable statement to clearly expressed interaction. Stated differently, for the logical rationalist, meaning is found in analytical or empirically verifiable statements. Thus 'a proposition is analytic when its validity depends solely on the definitions of the symbols it contains, and synthetic when its validity is determined by the facts of experience' (Ayer, 1959a p. 78).

Secondly, logical rationalists are also interested in bringing the body of mathematics and the empirical sciences together (Russell, 1945 p. 830).

Thirdly, logical rationalists inaugurated verification as the criterion by which statements can be evaluated as meaningful. Lastly, it is the undiluted view of logical rationalists that metaphysics, the aspect of philosophy that investigates fundamental facts and the reality of knowledge, deals totally with subjective statements. Effectively, metaphysics rejects the restrictions on human understanding, and in the process breaches the regulations that form the basis for the considerable application of language (Ayer, 1959a p. 34).

Having had a flavour of the philosophical origins of the theory of administrative behaviour, it is pertinent that we turn our attention to specific aspects of these

philosophers' work that have a bearing on mediated control in ICT interaction with respect to administrative behaviour.

To start with, Dewey's concept of 'system' sees the various social agents of organisations as constituting alliances in spite of the notable differences in accomplishing predetermined objectives. This is better appreciated when linked up with the logical interactions that underpin their real world activities. To Dewey, what constitutes truth is a matter of pragmatic experience, a view that connects with Simon's factual premises – reality on the ground. Part of the concept of behaviour control conforms to this fundamental idea. James's primary distinction between 'stream of consciousness' and 'fringe of consciousness' can be implied from the awareness and unconsciousness that associations with structured systems involve and what they stand for in terms of determining behaviour or controlling actions.

Fringe of consciousness refers to a situation when individuals become so engrossed in administrative procedures that they no longer regard themselves as experiencing the effects of such administrative procedures. Morgan aptly describes this as "psychic prisons" where people become trapped by their own thoughts, ideas, and beliefs or by the unconscious mind...modes of organizing manifest an unconscious preoccupation of control' (Morgan, 2006 p. 7). This has connotations of control, though in a subtle, innocuous manner.

Ayer places much premium on experiential truth, a view that ties in well with outcome or output control; which is the evidence of meaningful behaviour. In other words, empirical truth is no substitute for alternative behaviour, however expedient. This challenges the use of discretion in the realm of mediated control so far as ICT-driven interaction is concerned, especially when regulating subordinates in administrative behaviour.

4.2 Mechanics of organisational control

The administration of control inevitably implies influencing the behaviour of subordinates and modifying and directing their activities to be conducive and sympathetic to the aspirations of group and corporate objectives.

Organisational influence upon the individual may ...be interpreted not as determination for him of some of the premises upon which his decisions are based. Hence the several modes of influence by no means exclude one another. When the individual decides upon a particular course of action, some of the premises upon which this decision is based may have been imposed upon him by the exercise of the organization's *authority* over him, some may have been the result of his *training*, others of his desire for efficiency, still others of his *organizational loyalty*, and so forth (Simon, 1997 p. 177) (italics added).

The quotation above reveals, at least, three key concepts, namely, authority, training and organisational loyalty, that fundamentally underlie the modus operandi of organisational control. Each of these primarily influences and impinges upon individual actions resulting from diverse situational contexts. When social agents assume formal membership of an organisation, the organisation is faced with the challenge of how to shape the agent's behaviour to accommodate the overall organisational pattern and the scheme of its activities. Two sets of internal and external influence in the form of stimuli are adopted to handle this behavioural test. These are

the stimuli with which the organisation seeks to influence the individual; and the psychological "set" of the individual, which determines his response to the stimuli (Ibid).

Influencing the members of an organisation places the behaviour of the individuals and groups on a generally accepted pattern in two fundamental categories. The sets of influences are described as 'internal' and 'external' and each type informs, to a greater or lesser extent, all the key modalities by which organisational influence is accomplished, namely, authority, training, identification or organisational loyalty and communication.

4.2.1 Expressing authority in organisations

Among the modalities for influencing individual and group actions and directing behaviour in organisations, authority remains one that visibly and mainly differentiates the behaviour of individuals as actors within the organisation from that of their behaviour outside of the organisation. Authority provides the formal structures for the organisation on which the other modalities of organisational influence depend. It is appropriate we establish a sense of what authority stands for, as far as its definition in order to set up the frame for the different manifestations of its influence within the organisational

environment. Simon simply suggests authority as ‘the power to make decisions which guide the actions of another’ (Simon, 1997 p. 179). However, for the sake of detailed explication and more holistic understanding of the concept of authority, having recourse to Barnard’s account offers immense and rich amplification.

Authority is the character of a communication (order) in a formal organization by virtue of which it is accepted by a contributor to or “member” of the organization as governing the action he contributes; that is, as governing or determining what he does or is not to do so far as the organization is concerned (Barnard, 1938 p. 163)

The above explanation provides a fundamental relationship that emphasises the very essence of authority in the organisational milieu. The description gives an indication of the set boundaries for the demonstration of acceptable individual behaviour in the organisation based on a defining line of relationship. This relationship provides considerable analytical insights for understanding mediated control in ICT-based interaction as directives or instructions meant for the attainment of organisational goals generally move from the top organisational hierarchy to those at the lower echelons. The chains of command can also initiate from one functional area to another; not necessarily in a hierarchical fashion. Before an individual can get into terms with the various prevailing proscriptions, they must have been given a clear communication regarding the limits set on his or her behaviour. The conditions and circumstances outlining such behaviour and the terms by which they are exhibited must be consistent and be in harmony with the overall aspirations of the organisation’s objectives.

A similar account on authority is posited by Simon that clearly brings out the subject-object duality of authority. The subject-object duality emphasises the superior/subordinate phenomenon inherent in authority relationships which Simon explains as mainly hinging on ‘objective and behavioristic terms’. In this subject-object relationship,

the superior has the power or tools to structure the subordinate’s environment and perceptions in such a way that he or she sees the proper things and in the proper light. The superior actually appears to give few orders ...but sets priorities...and alters the flow of inputs and stimuli (Perrow, 1986 p. 125).

The mutual expressions of expected behaviour between the superior on the one hand, and the subordinate on the other, account for the existence of authority. In other words, the subordinate must acknowledge and carry out the valid commands of the superior for authority to prevail. Perrow brings out this idea succinctly when he recounts that

The subordinate makes a decision to grant authority to the person above him or her. If a subordinate does not accept the legitimacy of an order, the person giving it has no authority (Perrow, 1986 p. 71).

The logical deduction from the quote above implies that in a situation where the wishes and expectations of the superior are not followed through, authority would hardly be said to be existing. The behaviour pattern of the subordinate on other hand is influenced by certain conditions for engaging in a particular activity. The issue of discretion is drawn into the decision-making processes of the subordinate prior to taking an instructed activity. Thus the subordinate 'holds in abeyance his own critical faculties for choosing between alternatives and uses the formal criterion of the receipt of a command or signal as his basis for choice' (Simon, 1997 p. 179).

According to Chester I. Barnard, authority thrives on two basic structures, namely, the subjective and objective phases. While the former involves the 'personal, the *accepting*⁴ of a communication as authoritative, the latter relates to the character in the communication by virtue of which it is accepted' (ibid. 163). Chester's objective-subjective view on authority provides a crucial investigative implement for this research as it offers an all-inclusive approach to understanding the sources and mechanics of organisational control. It gives greater indication that mutual influence is inherent and essential in any control undertaking. Subordinates must be prepared to accept instructions and directives for goal-directed activity to be realised. In a similar fashion, superiors should be in a position to accommodate the suggestions and initiatives of subordinates in the interest of organisational goals. A situation where a subordinate refuses to take legitimate commands issued from above shakes the very foundation on which authority stands. The sustenance of authority is contingent on the prevailing notions of the people

⁴ Italics in the original

whose ultimate aim it is to have certain mission accomplished for their common benefit.

The famous treatise by Roberto Michels well illustrates the foregoing:

Whether authority is of personal or institutional origin it is created and maintained by public opinion, which in its turn is conditioned by sentiment, affection, reverence or fatalism. Even when authority rests on mere physical coercion it is *accepted* by those ruled, although the acceptance may be due to a fear of force⁵

For authority to be functional there is the need to secure the necessary involvements by way of individual efforts directed at cooperative targets. Organised individual efforts express vigorous interests at any specified time with the view to keeping the integrity of the prevailing organisational authority as long as instructions fall within, what Chester labels as, 'zone of indifference'. By zone of indifference, Barnard (1956) seeks to depict a situation where subordinates unquestionably accept the instructions or directives for the performance of goal-directed task. There are variations in the zone of indifference, which reflect various shades of broadness and narrowness depending on the extent to which incentives surpass the 'burdens and sacrifices' that define a person's bond and attachment to the organisation.

Authority has a bi-modal source, the two of which seem to operate in complementary fashion; the technological and social components. The determination of authority in an organisational environment is therefore contingent on these technological and social components. On this account Barnard submits that

Authority arises from the technological ... limitations of cooperative systems on the one hand, and of individuals on the other. Hence the status of authority in a society is the measure both of the development of individuals and of the technological and social conditions of the society (Barnard, 1956 p. 184).

There is a mutual shaping of both social and technological elements in the expression of authority. For instance, technology is as crucial in putting structures of authority in place and influencing behaviour just as much as the social (human) mechanisms in the determination of expected behaviour and inducing prearranged results. The two work in concert as each has its field of operational emphasis.

⁵ Encyclopaedia of the Social Sciences, New York: Macmillan

Thus authority depends upon a cooperative personal attitude of individuals on the one hand; and the system of communication in the organization on the other (Barnard, 1956 p.175).

In view of this, individuals submit to human based authority systems just as they defer to the requirements of technology based control and cooperative systems. Controlling group and modifying individual behaviour and influencing organisational targets and demands involve shaping the mechanisms that carry the demands for the performance of specific activities. Given these analytical constructs of authority, it is possible to construct the structure of authority through which these characteristics manifest as well as the processes that underlie its function.

4.2.2 The structural components of authority

Authority can be described to rely on three primary pillars of functionally interlacing equivalents of responsibility, specialisation and coordination (Barnard, 1956). It is necessary to emphasise the role of each of these components and explore how they, together, function in concert to give a new dimension to the understanding of control. It is necessary to bring out this perspective because it helps to broaden the frame through which social agents, with varied organisational interests can meaningfully be appreciated. Each of these aspects of authority is worthy of consideration in turn, because, controlling the performance conditions of subordinates through both output and behaviour, involve a greater degree of responsibility, specialisation and coordination. Responsibility determines performance expectations, specialisation explains the extent of discretion and coordination specifies the harmonisation of individual (superior and subordinate) efforts. Now attention is turned to address how these concepts become implicated in ICT-driven interactions as far as mediated control is concerned.

4.2.2.1 Responsibility

One fundamental purpose of authority that seems to attract emphasis from administrative scholars is its function to insist on group and individual conformity to the norms and behavioural standards instituted by those in higher positions of authority (Friedrich, 1932). Responsibility implies the strength of a 'particular private code of

morals to control the conduct of the individual in the presence of strong contrary desires or impulses' (Barnard, 1938 p. 263). To a higher degree, a specific conduct is governed by different personal codes. Such codes may be high, low, simple, complex, comprehensive or sketchy, depending on one's moral standing. This suggests the existence of general tendencies in people to act in consistent with private interests and contrary to stated principles. To this end 'elaborate set of sanctions may be evoked and applied against the recalcitrant member' (Simon, 1997 p. 187) upon an infringement or defiance of laid down procedures, rules, norms and accepted standards in the performance of certain activities. In Barnard's view the clash of codes of behaviour has the following three serious repercussions:

either there is paralysis of action, accompanied by emotional tension, and ending in a sense of frustration, blockade, uncertainty, or loss of decisiveness and lack of confidence;
there is conformance to one code and violation of the other, resulting in a sense of guilt, discomfort, dissatisfaction, or a loss of self-respect,
there is found some substitute action which satisfies immediate desire or impulse or interest, or the dictates of one code, and yet conforms to all other codes (Barnard, 1938 p. 264).

The threat or abiding fear sometimes inherent in the application of punitive measures can go a long way to give individuals a little space to manoeuvre to suit their personal whims and caprices. Robert Prethus is graphic on this psychological hangover.

When authority and the symbols that define it are organized and patent and there are known sanctions to encourage desired reactions, we seem to have left the permissive level of influence for the authoritative level of power. In terms of a continuum of sanctions, we say that authority is a condition that is subject to being reinforced by sanctions, while influence usually secures compliance without reference to sanctions (Prethus, 1958 p. 57).

In Gaus' view (1936), it is certainly unimaginable to consider the authority of administrative organisations without entertaining its corresponding thoughts on the structures that call the various levels of organisational hierarchy to account for their actions.

4.2.2.2 Coordination

The aim of coordination is to secure a unified sense of purpose towards a common direction. Stated differently, the specific function of coordination is 'the adoption by all the members of the group of the same decision, or more precisely, of mutually consistent

decisions in combination attaining the established goal' (Simon, 1997 p. 190). The task of conforming to a unified direction and purpose makes communication a challenge to, and a vital element of, coordination. Coordination champions the integration of the various 'islands of automation' to achieve total organisational efforts (Kling et al., 1992 p. 511). Diverse individual and group activities are integrated to obtain a joint organisation-based ends. Communication is the key element that ensures that operational diversities are coordinated to reflect the collaborative contributions of all the stakeholders in the organisation. Thus 'all communication relates to the formulation of purpose and the transmission of coordinating prescriptions for action and so rests upon the ability to communicate with those willing to cooperate' (Barnard, 1938 p. 184).

From a philosophical standpoint, then, authority works as a coordinating mechanism (Simon, 1991). For, authority promotes the institution of chains of command and channels of communication through which individual efforts are harmonised towards the achievement of a unified purpose. The channels of communication reinforce interdependences among various organisational units (Kling, 1991). Coordination may manifest in two fundamentally distinct forms, namely, procedural and substantive. Procedural coordination seeks to emphasise an outline of the broad base clarification of the behaviours and relationships of the agents of the organisation, while substantive coordination deals with the operational activities of the organisation.

According to Simon, the specification of lines of authority with instructions setting out the limits of individual members exemplifies procedural coordination, whereas blueprints for the production of certain goods and services typify substantive coordination. The essence of coordination underpins the certainty that enables members in a coordinated venture anticipate the likely behaviour of their colleagues. To achieve a maximum level of coordination, Gulick proposes the fulfilment of two basic experiential requirements.

By organization, that is, by interrelating the subdivision of work by allotting them to men who are placed in a structure of authority, so that the work may be coordinated by orders of superiors to subordinates, reaching from the top to the bottom of the entire enterprise. By the dominance of an idea, that is, the development of intelligent singleness of purpose in the minds and wills of those who are working together as a group, so that

each worker will of his own accord fit his task into the whole with skill and enthusiasm (Gulick, 1937).

4.2.2.3 Specialisation

Specialisation as a function of authority underlies the significance of administrative competence, the essence of which dwells on the knowledge that organisational agents are different in skill, experience, capacity and character. This belief draws on the tendency of specialisation to boost productivity by enhancing efficiency (Gulick, 1937). Central to specialisation is the concept of division of labour in which ‘the work of the organisation is subdivided, so far as possible, in such a way that all processes requiring a particular skill can be performed by persons possessing that skill’ (Simon, 1997 p. 189). With specialisation comes ongoing mutual adjustment by members in cooperative endeavour. Barnard (1956) outlines five dynamically but interrelated criteria through which specialisation becomes operationalised in configuring organisational activities, namely, specialisation by location, time, expertise, artefacts and methods. None of these divisions escapes the role of technology in undertaking and reinforcing the specific requirements of their respective functions.

Specialisation by location identifies the geographical region where work is carried out. Spatial arrangement of work in terms of shelter, air-conditioning, partitioning, among others provide a sense of independence for accomplishing specific duties. Time-based specialisation is crucial for scheduling the process and patterns of complex activities, especially in organisations that work round-the-clock to provide expedited service. The coordination challenge for harmonising the time at which work is accomplished has implications for punctuality and continuity of the flow of work. Losing time, unavailability of the needed materials at the right time, doing things in an inappropriate fashion are some of the practical challenges to time-induced specialisation.

Expertise as a function of specialisation emphasises the instrumentality of organisational agents who carry out different specialised duties. The selection and training of persons are based on competence and preparedness to follow strict time-schedule of organised arrangements in order to guarantee the essential technical proficiency (Taylor, 1911a).

Specialisation also manifests in the tools and artefacts used to get work done. In this case, certain tools and technology implements may be preferred to others in the performance of specific tasks, such that the processes may give rise to different implications of the end result. For instance telephone may be preferred for instant feedback on communicated messages to email. Last but not least area in which specialisation can occur are the processes or methods that agents use for the realisation of their activities. The efficiency of such process-related specialisation is contingent on the skilfulness and the natural adaptability of agents concerned.

The following diagram can be originated to represent Barnard’s explication of the functional nature of authority.

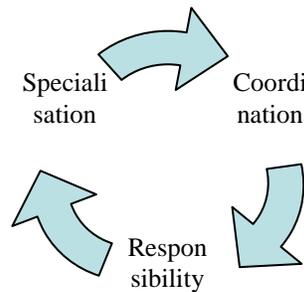


Figure 2: The structure of authority based on Chester Barnard’s (1938) analysis of the concept.

4.3 Training as a tool for organisational influence

Training provides one of the tools that enable organisations to influence the habit and mentality of their employees. As a mode of organisational influence, training turns social agents “from the inside out” (Simon, 1997 p. 13) and as such, moves their actions and decisions favourable to the operational efficiency and organisational loyalty. Central to this thought is the principle of inculcation, that makes employees shed off certain attitudes and characteristics while simultaneously gaining other habits and aptitudes that come between them and fruitful performance (Terpstra and Rozell, 1993) through learning. Consequently, training underscores the significance of capacity building.

Lessons dispatched during training sessions are required to prepare employees to cope and deal with the challenges associated with their assigned duties.

The idea of training may be to reduce the frequency with which instructions and guidelines are delivered to direct subordinate behaviour. In this sense training ‘prepares the organization member to reach satisfactory decisions himself, without the need for the constant exercise of authority or advice’ (Simon, 1997 p. 13). Viewed in this format, even though training becomes an alternative instrument of control with which to influence the decisions and actions of subordinates, it is also seen as, what I term, a discretion-granting medium. In support of the discretion-granting idea, Simon points our attention to the fact that little supervision is needed after the training period. The reason could stem from the claim that

it may be possible to minimize, or even dispense with, certain review processes by giving the subordinates training that enables them to perform their work with less supervision (ibid. p. 13).

Mastering the details for specific performance with least number of errors and mistakes is the hallmark of, and the rationale behind, most training programmes in organisations. Training thus allows for a certain level of decentralisation as an essential link of influencing behaviour at various layers of the organisational hierarchy. The decentralising process establishes the framework for subordinate thinking and actions, based upon broad structural guidelines expected to shape and mould behaviour at the lower level of the organisational hierarchy. Training considered in this light is a potential source for fostering reliability (Weick, 2001) and instilling confidence in employee decision making with respect to their documented operational undertaking.

In spite of its promise of the minimisation of errors, and the claims of expanding requisite variety to ensure reliability among social agents to face challenges of complexity, training is known to be the source of many disappointing situations (Weick, 2001). To be sure, training fails to mirror all the probable scenarios that social agents are likely to encounter in the normal course of their duties. It is feasible to agree with Weick that training programmes in most instances fall short of the actual contextual circumstances that real-life conditions engender. The resulting conflict between training experience and exposure to real-world challenge may drive even trained employees to

beat a retreat to cling to old behaviour (Weick, 1985) much to the disadvantage of organisational strategising.

This can be disturbing and could accordingly affect the psyche and morale of social agents with unpleasant consequences; especially the possibility of negative effects on targets and efficient performance. Still, when training has been successful, experience provides little guarantee for employees to handle the changing and unpredictable patterns of work once they assume the responsibilities of their duties. Stated in simplistic terms, employees are hardly presented with the same environment they had for their training 'once they actually operate the system' (Weick, 2001 p. 332). The repercussions of this development could be frustratingly disappointing and cause work-related stress by upsetting the emotional stability of workers thereby putting them in a position less able to deal with approaching challenges.

Focusing on training in the control of organisational agents in regulating and moulding behaviour could be one sure way of understanding the underlying causes and effects of the reason why training sometimes fail to render its promises. This can serve as a sure basis for examining the psychological account responsible for this phenomenon. It could also underscore a methodological reorientation to the factors that provide the enabling atmosphere for effective training activities. It could also be a starting point for analysing the instrumentality of technology mediating tools in determining the effectiveness in training programmes. In view of this, the relevant connections can be established between the challenges of the real world and the controlled training environment. This would lead to a consideration of the reasons motivating the strategic manipulation of training techniques to suit organisational control strategies. It is against this context that some kind of legitimacy would be brought to bear on the manifestation of mediated control in collaborative work settings.

4.4 The psychology of administrative behaviour

To appreciate the applicability of administrative behaviour to this research to any significant degree, it is essential that due consideration is given to the extent to which the psychology of the individual becomes involved in the whole realm of organisational

activities. This is intended to understand how the organisation adjusts and transforms his or her behavioural patterns. Making provision for this aspect of the theory is crucial because one of the fundamental duties organisations carry out is to ‘place the organization members in a psychological environment that will adapt their decisions to the organisation objectives, and will provide them with the information needed to make these decisions correctly’ (Simon, 1997 p.92). The psychology of administrative behaviour is suitable for studying ICT-driven interaction in organisational mediated control because concepts such as rationality and organisational loyalty can be brought to bear on different motivations for mediated interaction. Ways by which these can be determined are the subjective individual reasons for the application of ICTs for interaction and the extent to which these same ICTs occasion employee loyalty or disenchantment.

4.4.1 Rationality

Rationality assumes a central and important frame in administrative theory. And it is appropriate to relate it to mediated control to determine the sort of factors that inform the decisions and actions of subordinates in carrying out their assigned mandates. It should be stated ahead of time that a focus on rationality is not intended to portray social agents, as is often supposed, as fundamentally rational, a view that held sway in much of economic theory. Rather, rationality should be embraced to reflect the totality of decisions reached by social agents under conditions relative to their specific organisational engagements even though such final decisions may appear erroneous to the ‘objective bystander’. Stated somewhat differently, rationality in this context has a more technical appeal than its usual dictionary connotation of ‘agreeable to reason; not absurd, preposterous, extravagant, foolish, fanciful, or the like; intelligent, sensible’ (Simon, 1978 p.2).

Further, rationality in this case is not only considered to be the monopoly of humans; non-human agency can also be described as rational such that

structural arrangements within organizations are conceived as tools deliberately designed for the efficient realization of ends... Rationality resides in the structure itself, ... – in rules that

assure participants that evaluate performance and detect deviance, in reward systems that motivate participants are selected, replaced, or promoted... (Scott, 1981 p. 78).

To this end, rationality is broadened to include structured systems of procedures and rules designed to allow the logical progression of workflow or pattern from one process or situation to another. Rationality in this context, essentially underpins control in its application.

Rationality can be said to embody three key cognitive processes of perception, intuition and reasoning. These cognitive processes are predicated on preferences, beliefs and opinions that generally motivate and guide individual action. At least one of the key cognitive processes is activated in reaching a decision prior to undertaking a favoured course of action. Rationality can then be employed to understand discretionary actions in terms of mediated control. Consequently, rationality deals with the practice of 'means-ends' chains of sequences or hierarchies of objectives. The means-ends dimension expresses the technology or non-human component of rationality. The technology component which, for convenience sake, can be described as system, reflects the integration of behaviour by which the units in the whole system function to reveal the overall purpose for which the system was designed. Rationality demands weighing strategic options for reaching out to the final objective. It should be convenient, feasibly, to suggest, in line with Simon (1997), that rationality is contingent on 'useful purpose' for an individual or organisation in the performance of an activity.

In rationality, conscious or wilful act and unconscious activity manifest in the cognitive processes of decision-making. However, an unconscious act can turn deliberate once the details for performance have been mastered to the point that it becomes automatic and 'second nature' to the individual. Behaviour can be both objectively and subjectively rational depending on the angle of analysis. Simon lucidly illustrates this category with the following example:

When a subjective test is applied it is rational for an individual to take medicine for a disease if he believes the medicine will cure the disease. When an objective test is applied, the behaviour is rational only if the medicine is in fact efficacious (Simon, 1997 p. 84).

Subjective rationality emphasises the belief system and preferences of the individual while objective rationality reinforces the perceptions attributed to the inherent quality of

the decision depending on the outcome of the performed task. This impression indicates that even though a certain medicine cannot cure a particular disease, the fact of its efficacy makes it objectively rational. From a subjective standpoint the belief that a medicine can cure a disease is a sufficient and convincing proof of its disease-treating capabilities. The foregoing interpretation provides the foundation for introducing 'qualifiers' to clarify the near confusing complexities associated with the concept of rationality.

First, objectively rational suggests the appropriate behaviour for deriving the maximum benefit in a given situation. Second, subjective rationality signals achieving the greater benefits from the standpoint of the individual involved. Third, conscious rationality describes a situation where the ends and means dichotomy is cognitive process. Lastly, deliberate rationality identifies a condition where an individual fully engages the mind in showing up a specific behaviour. It should be noted that all of these shades of rationality can manifest in organisations.

It should be pointed out that there exists the possibility for social agents to engage in activities without an awareness of the underlying purpose for their action. Rationality in an organisation includes the structures and rules for modifying and encouraging acceptable behaviour as well as the means and processes for their establishment, making rationality both a process and product of individual and organisational engagement.

4.4.2 Organisational loyalty

It is crucial to consider the means by which social agents gradually, but somewhat consistently, become identified with the concerns of the organisation, given that originally, the organisation's goals are imposed on the individual in the course of administering control and authority. Viewing ICT-driven interaction from the standpoint of administrative theory could provide insights into generating a theoretical template that would inform our perceptions of mediated control. Administrative theory aids in the explanation and analysis of how individuals turn out to be internalised and become disposed to organisational loyalty. Organisational loyalty, according to Simon, takes their source from two diverse trends of individual behaviour. Trend towards a commitment to

‘the service of the organization’ and an ‘attachment to the conservation and growth of the organization itself’ (Simon, 1997 p. 278). The process by which social agents or individuals in organisations obtain ‘organisation personality’ quite different from their individual personality, is

...through his subjection to organizationally determined goals, and through the gradual absorption of these goals into his own attitudes... (*Ibid*).

The quote above implies a process where the organisation allocates specific role to the individual and prescribes the values, facts and the options against which his decisions and actions in the organisation should be modelled and established. Reducing the possibilities within which an individual’s activities are to operate, the organisation, to a reasonable extent, limits the challenges and options of his decisions and actions to a controllable degree. Giving up one’s own preferences together with subjecting ones personal values in a bid to conform to organisational stipulations could be psychologically demanding. It gives the imagery of two opposing poles pulling the individual apart, each demanding equal attention. Barnard gives a vivid and telling account of this tension.

Every effort that is constituent of organization, that is, every coordinated effort, may involve two acts of decision. The first is the decision of the person affected as to whether or not he will contribute this effort as a matter of personal choice. It is a detail of the process of repeated personal decisions that determine whether or not the individual will be or will continue to be a contributor to the organization...

The second type of decision has no direct or specific relation to personal results, but views the effort concerning which decision is to be made non-personally from the viewpoint of its organization effect and of its relation to organization purpose. This second act of decision is often made in a direct sense by individuals, but it is impersonal and organisational in its intent and effect (Barnard, 1956 p. 187-188).

The intense struggle can result in the individual favouring either his personal preferences, values, judgements or significantly ignoring the indoctrination regarding the demands of his role. However Simon observes that once the frame for actions and decisions have been laid on the line, the individual is left with but one ‘best’ option that reflects organisational values and situational dynamics. Discounting the possibility of the involvement of the individual’s motives in the ultimate decision making and final action could minimise any traces of discretion of the individual regarding his interests. For instance Simon proposes that

Within the area of discretion, once an individual has decided, on the basis of his personal motives, to recognize the organizational objectives, his further behaviour is determined not by personal motives, but by the demands of efficiency (Simon, 1997 p. 283).

This is not to suggest that all of the individual's actions, motives and decisions would be taken over by organisational interests. Acknowledging the limit to his own proposition, Simon points out that there are instances when the individual might not act in the interest of the organisation; in which case 'personal motives reassert themselves, and the organization, to that extent, ceases to exist' (Ibid. 283), at that particular moment when the decision and the likely subsequent action are taken. *Ipsa facto*, the individual swaps the scale of values of the organisation for his personal scale of values as the defining yardstick for the rightness of his judgement.

One significant and influential channel of administrative behaviour by which an individual psychologically ties his or her emotions to the cause of the organisation is identification. Identification can arise in a circumstance whereby 'a person identifies himself with a group when, in making a decision, he evaluates the several alternatives of choice in terms of their consequences for the specified group' (op. cit., 284). Using the father-son relationship metaphor to illustrate the strength of the psychological bond between an individual and organisation, Freud submits that

It is easy to state in a formula the distinction between an identification with the father and the choice of the father as an object. In the first case one's father is what one would like to *be*, and in the second he is what one would like to *have*. The distinction, that is, depends upon whether the tie attaches to the subject or the to the object of the ego (Freud, 1922 p. 62).

It can be conveniently gleaned from the above quote that identification is an essential apparatus of group solidarity. The psychological mechanisms for explaining the identification experience, according to Simon, falls into three distinct categories of personal interest in organisational success, transfer of private-management psychology and focus of attention. These distinctions are taken in turn to emphasise their respective areas of analytical focus.

Personal interest in the success of the organisation resulting from an attachment to it thereof is influenced by personal motives. Not only are personal motives the reason for the individual's established link with the organisation but also 'the growth, prestige, or

the success of the organisation itself'. These provide adequate opportunities for increased remuneration, promotion, manpower succession plans and the exercise of greater responsibility so that a person looks beyond the challenges and unpleasant problems associated with his duties. To this end, a deeper sense of commitment rises with frustrating circumstances to achieve the overall stated objectives of the organisation.

Transfer of private-management psychology enables the individual in the organisation to reorient their thinking and see the organisation as their own. The shift in mental attitude leads members in the organisation to use such personal pronouns as 'my' section, 'my' group, 'my' company, etc., an indication that they share the organisation's concerns, aspirations and dreams. The use of these pronouns also suggests that members in the organisation share a common destiny as they share a common sense of 'ownership'.

Focus of attention, as a means of psychological identification directs the administrator's efforts at those values and those members in the organisation who are likely to be directly influenced by the administrative plan. In short, focus of attention encourages the subordinate to adjust their activities towards the objectives and aims of the organisation.

Viewed from these perspectives, identification offers an effective tool for controlling both individuals and groups in the organisation in order to fix their interests, aspirations and personal inclinations towards the over all intentions of the organisation. The strategic organisational mechanisms for identification allow for wide-ranging organisational configurations to regulate and direct the activities of members who are participants in the entire organisational processes. Consequently, this assists rationality to go beyond the restrictions brought upon it by a reduced attention span.

4.5 Chapter in review

As a lens for analysing the dynamics of ICT-driven interaction from the standpoint of organisational mediated control, this portion of the study has considered the diverse and penetrating views offered by administrative behaviour on the matter at hand. It achieved this by first tracing the philosophical origins about the thoughts of John

Dewey, Williams James, and Alfred Ayer that were instrumental in hatching the theory of administrative behaviour. From this point, the chapter reconnoitred the mechanisms of organisational influence, highlighting the ways and means by which authority is structured and exercised. Training was seen as a means for both behaviour manipulating device on the one hand, and a medium for granting discretion on the other, all aimed at enhancing performance on the job and ensuring productivity.

The concluding section of the chapter focused on the psychology of administrative behaviour drawing heavily on such concepts as rationality and organisational loyalty and how they impinge joint collaborative work in mediated control. Together, these interlacing concepts reveal the multiplicity of understanding likely to be gained by scrutinising some of the analytical dimensions of administrative behaviour. The philosophical insights advanced by the theory of administrative behaviour, carved mainly from the expositions of Herbert A Simon provide a promising and comprehensive outline for analysing mediated control against the background of ICT-driven interaction.

Drawing on the diverse issues touched upon by a review of the relevant literature on administrative behaviour, it is just appropriate that a detailed analysis is embarked upon in the subsequent chapter. The aim is to combine the different emergent thoughts to form a set of integrated ideas that combine with decision making processes to become established guidelines for controlling organisational behaviour. It is also to investigate and provide the directions for ascertaining the different dimensions by which organisational efficiency, allegiance, fruitful interaction and dynamic relationship between the organisation and its external world are brought to bear on its operational commitments.

CHAPTER FIVE: RESULTS
MOVABLE AND IMMOVABLE ICTS IN TECHNOLOGY-DRIVEN
INTERACTION – A MEDIATED CONTROL AND SERVICE PERSPECTIVE

It is the challenge of this chapter to provide detailed account on EFSL as the sole field study of this research. Achieving this objective leads to the presentation of the contextual understanding, key highlights and multiple perspectives of the case study settings. The chapter is structured as follows: section 5.1 provides the background to the company where the research took place, and specifically delves into how the study was coordinated from the outset. Part of the purpose of this section is also to outline the rhythmic nature of work that characterises the seemingly seamless processes of the different sections of the company. Following on from that point, is 5.2 which provides a succinct account on portable and movable ICTs that make it possible for control in technology mediated interaction not only feasible but also pragmatically meaningful. Section 5.3 discusses the different scenarios involving the application of various ICTs in technology mediated interaction with insights on control, service delivery and enhancement techniques and its associated concepts of monitoring and discretion.

These concepts are particularly emphasised to provide the foundation for discussion and analysis in the subsequent chapters. The use of discretion and how it is applied by subordinates and superiors in both contingent and planned activities is the subject of discussion in section 5.4. The substantive findings are finally rolled out in section 5.5 in three distinctive sub-headings. The conclusion of the chapter, reflecting its general trajectory and the abbreviated form of the key findings are presented in section 5.6.

5.1 EFSL – historical account and operational overview

EFSL began as a small general food service wholesaler in 1988 in a 3000 sq ft north London Borough of Haringey. The company was seen then as a one, complete business entity without a systematic, departmentalised structure. Thus no special designations such as HR, IT, transport, marketing customer service or quality, health and

safety departments existed at the time. There was no planned connection between staff and tasks. Therefore people were engaged in multiple roles or tasks. For instance, the MD used to combine marketing with security, sales, warehouse, etc. activities. Thus one person used to function in more than one department.

A couple of years after its 10th anniversary in 1988, EFSL embarked on a business expansion programme, culminating in the acquisition of a six-acre freehold site in Enfield with an integrated vehicle maintenance unit. Two more distribution centres were opened in Birmingham and Doncaster during this period, and the Enfield site became the headquarters, overlooking the operations of the two subsidiary depots in Birmingham and Doncaster. This expansion endeavour was a direct response to the challenges that the growth in size has orchestrated; from a few hundred customers since its inception to over twenty-two thousand at the time of this research in the winter of 2007. Indeed, operating on an annual turnover of £4.5million in 1994, continuous growth and expansion have meant a current annual turnover of £102million as of March 2007.

With less than 200 employees and 37 trucks in 1997, the company now employs 685 people in all its three depots (551 in its London outskirts depot and 134 between the remaining depots) together with a current fleet of 182 trucks. EFSL has the traditional human resource (HR), customer services, telesales, marketing, finance, purchasing, sales and other management staff as pertains in many business organisations. The company pays most of its employees by the hour, while the auxiliary senior members of staff are on a regular salary scheme.

EFSL supplies almost everything required to operate small restaurants and fast food shops and became a member of the British Frozen Food Federation in 2003 – a body that promotes and protects the interests of the frozen food industry in United Kingdom (UK). There is intense competition in the frozen food market; an observation supported by the fact that there are over 181 companies⁶ making up the industry. These diverse, food supply companies operate under the Food Standards Agency, an independent

⁶ <http://www.bfff.co.uk/members/member-links>

government department established by an Act of Parliament in 2000 to protect the health of the public and interests of consumers in matters of food.

The daily activities of EFSL demand heavy reliance on technology for the conduct of its various mediated interactions, implying the adoption and application of both mobile and stationary ICTs integrated with highly structured and extensive organisational infrastructure. In other words, technology plays central role in the enterprise-wide business activities of EFSL. Some of these activities are routine and highly structured with little or no human intervention at the instance of operation. These occur especially at the telesales domain while the operations at the delivery driver level are predominantly emergent, requiring a certain degree of discretion at the moment of performance.

As a typical medium-sized organisation, operating on the brink of a diverse cosmopolitan city, a greater percentage of EFSL employee population reflects a range of neighbourhood plebeian community. There is a continuous variation in the ratio of females to males, however it has the propensity to hover around nine-tenths male to one-tenths female at any given time. Eastern Europeans, specifically, Turks and Polish are the dominant ethnic group among the company's current employee strength, in spite of the fact that 27 different nationalities constitute the entire labour force. To be sure, at any particular time, EFSL employs about 5% of part-time workers to beef up the current stock of its employee situation.

Administratively, EFSL is hierarchically structured and governed. At the pinnacle of the company's management structure are two managing directors, including the founder of the business who is also the Chief Executive Officer (CEO). Major policies for the day-to-day administration of the organisation emanate from these two influential personalities. Right below the managing directors are the BOM and the General Manager (GM). The BOM, for instance, is responsible for the formulation and implementation of strategic business plans for the entire company and reports directly to the CEO. The BOM however maintains both electronic surveillance and periodic physical supervisory contacts with a greater majority of the company's staff.

The following managers, namely, marketing, transport, finance, information technology (IT), and customer service function under the direct authority of the BOM,

while human resource and sales and administration managers report directly to the GM. Together, these two categories of administrative managerial staff, viz. BOM and GM wield greater authority and appreciable degree of discretion in their diverse job roles. The rest of the structure comprises those believed to be at the middle level of the organisational hierarchy such as telesales supervisors, stock control managers, credit control supervisor, operations manager and other senior staff. The rest can be found at the lower echelons of the organisation, such as team leaders, telesales reps, customer service reps, delivery drivers, stock control managers, warehouse personnel, among others. They carry out the tactical and operational activities of the organisation, and they usually possess a relatively lower degree of discretion in the course of performing their assigned duties. Their work is characterised by fairly stable patterns of routinised activities, reflecting its standardised and structured nature which makes it more predictable and, to a greater degree, controllable. Pictorially, the structure of the organisation can be represented by the diagram below:

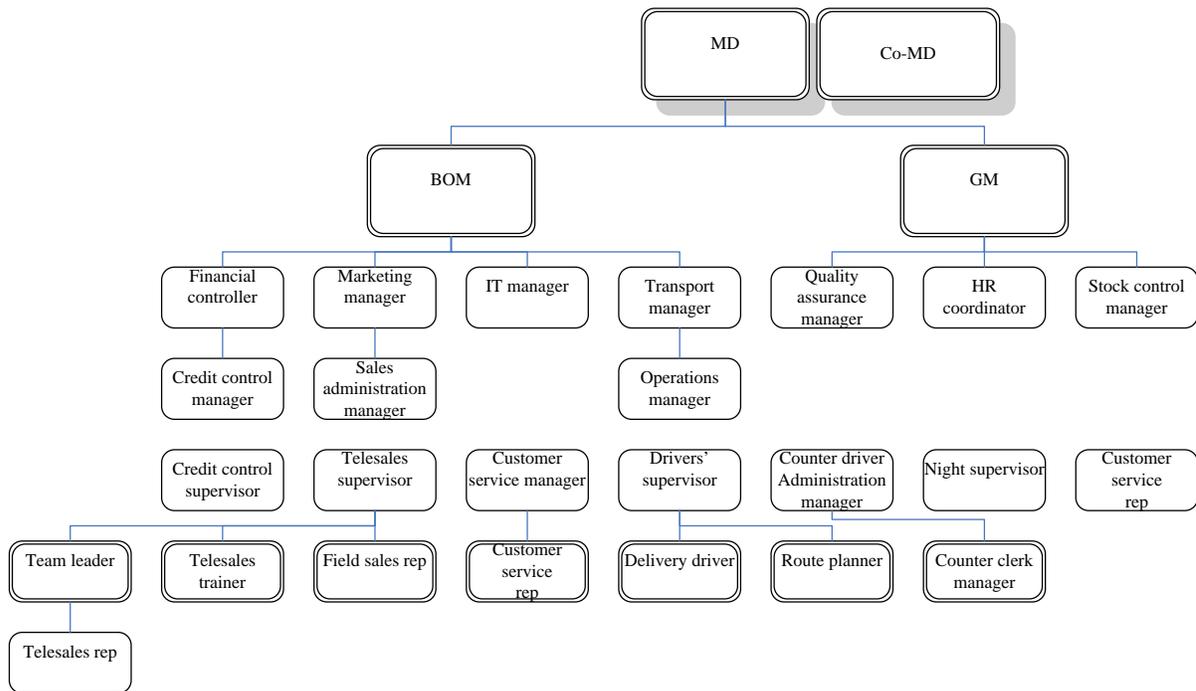


Figure 3: Organisation chart of EFSL

5.1.1 Service range and the Rhythmic pattern of work at EFSL.

EFSL serves a wide variety of customers involving wholesalers and retailers. These include cafés, restaurants, burger bars, football clubs, chicken and chips shops among others. The operations at EFSL run almost seamlessly on a 24-hour basis from Monday to Friday and, half-day on Saturdays and Sundays. Supplying semi-prepared foods and drinks to small restaurants and shops requires registered customers and potential customers to call a generic telephone number anytime between 9am and 5pm from Monday to Friday and, occasionally on Saturdays to make their orders.

EFSL range of products consists of chilled, frozen, ambient foods, cleaning and packaging products. However, in the first half of the 1990s, EFSL commenced a nationwide sale of halal to the UK food service industry as the sale of such products hitherto has been scarce and bitty at best. A mention of few a brands is important to give an impression of what the structure of the organisation's supply is. This includes McCain, Coca-Cola, Aviko, Buffalo, Vivat, Kara, Vittorios, among a host of others. The food and its related products sold by EFSL range from potato, pizza, sandwich fillings, snacks, vegetarian meals, pastry, jams, fish, sea foods, fruits, vegetables, dairy products, herbs, oil, and a host of others. The following provides representative picture of the about hundred different products from twenty-three various brands that EFSL offers to its growing customers.





Figure 4: A representative variety of food items that EFSL sells to its customers

The round-the-clock business processes of the various sections and departments are activated when a customer originates a call to the company to make an order. All such calls are dealt with in the first instance by telesales reps. The details of the orders, are then stored on the company's database system until after 5:30 p.m. when they have been matched against their respective business contact details of the customers.



Figure 5: Telesales reps taking and processing customers' orders on the telephone in the call centre hall

Route planning follows immediately after order processing. Thus, route planning involves the task of arranging all customer orders in a systematic manner on the company's database prior to their picking in the warehouse, which is informed by such criteria as:

- the postcode of a customer's delivery address
- the size of the lorry,
- the driver's familiarity with the particular delivery routes
- the volume (the final tonnage of a set of packed and packaged orders) and
- the value of particular orders and the general traffic situation.

It should be made clear that in the course of determining the routes for the drivers in route planning, the routers (the people who undertake the routing work) call the relevant drivers on their mobile phone, when necessary, to inform them of the latest developments on their routes in terms of traffic or road diversions and other situational delivery emergencies. According to the routers, updating the drivers of the current developments on the road via their mobile phone is helpful as it prepares them to make advance plans of the alternative routes through which delivery can be dispatched.



Figure 6: Maps indicating the details of a customer's order and the delivery points for a particular delivery area during route planning

Shipment building takes place after all route planning activities have been completed. Night loading (involving the use of forklifts and other small trucks on the floor of the warehouse, to pick, sort and arrange customer orders into the waiting fleet of the company's big vans and trucks) is carried out afterwards. Loading is done on specific guidelines; that each of the accumulated weight of the orders on a van does not exceed the permissible weight limit; and that each customer order on the invoice indicates the corresponding total weight of the separate items. This makes the determination of the final tonnage of every set of customers' orders readily available on the computer system

prior to loading. Loading is done all night until about 6 a.m., by which time the individual drivers of the various trucks should have arrived at the company's premises to complete the paperwork on their respective delivery schedules for the day.



Figure 7: Shipment building activities at EFSL's warehouse showing certain aspects of loading, parking and arranging orders prior to delivery

This process involves comparing the invoice list of customers ordered items with the actual items on the loaded truck and making sure that there is a trolley on each loaded truck. The delivery drivers use the trolley for carting the items on the truck to the customer's preferred place on arrival at the delivery address. When the drivers complete their delivery assignment, they return to the head office with both damaged and undelivered orders to the counter-driver administration manager, who ensures that evidence of bank deposits and or cash receipts are in tandem with their respective invoice face value. All the duplicate invoices are then passed on to credit control to pursue those customers with outstanding balance.

The rhythmic sequence of operations that characterise EFSL operations can be illustrated with the diagram below:

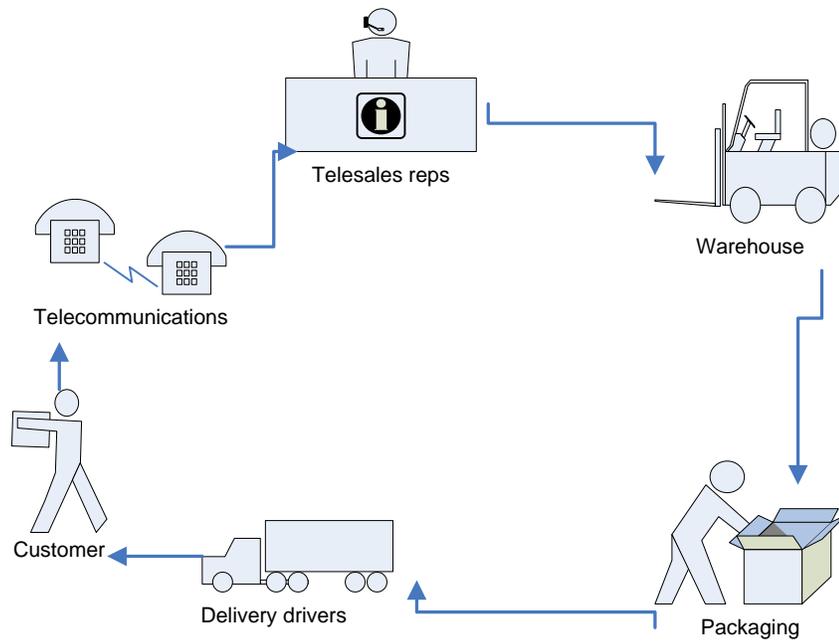


Figure 8: Operational cycle of work at EFSL

Since this study dwells largely on the activities of delivery drivers and telesales reps, it is deemed suitable to provide an overview of the key operations involved in the work of these categories of people at EFSL. The aim is to connect meaningfully with the analysis and discussion chapters of this work.

5.1.1.1 Delivery drivers

On the day of delivery, the delivery drivers face several delivery challenges. They are often beset with traffic diversions, especially, in inner London delivery addresses, a situation which enjoins them to call and update the head office via their mobile phones. The aim is to make it possible for the customer service to call the likely affected and anxious customers and put them at ease; this means assuring customers their products are on their way. The customer service thus, in the process, informs them of the reason for their delayed orders and when to expect their deliveries. The drivers are also challenged by how to avoid parking tickets in the course of getting individual customer orders transported to their shops. It is also required of the delivery drivers to use the company's

bank card to deposit all monies collected upon delivery when a certain threshold is reached. Primarily, this is to minimise incidents of robbery. Meanwhile, the drivers are held personally liable for any discrepancies (usually shortfalls) between invoice amount and collected sum.

Last but by no means least, is the general indecision on the part of delivery drivers as to the next line of action in a situation where a customer's shop is not open for business at the time of delivery. Under normal circumstances, drivers are supposed to contact customer service people on their mobile phone who in turn get in touch with the customers to find out when they would be ready to receive their orders. However, the delivery drivers capitalise on the advantages of their knowledge of the local situation and subject such a directive to discretionary judgement. In other words, their exclusive awareness of the dynamics of the local situation puts them in a greater position to decide on what they should do without a mediated contact with the head office of what action they should take next.

5.1.1.2 Telesales reps

Since a greater percentage of EFSL customers are Turkish by nationality, the company has integrated a language switching facility that makes it possible for a telesales reps to speak to a customer who prefers to speak in Turkish when making his or her order. It is appropriate to point out, however, that most of the customers speak English in spite of their Turkish orientation. According to the BOM, the company has gone this extra mile only to 'provide a comfort zone that makes them [customers] feel supported'. This technology-driven facility has gone to the extent of sustaining and building customer trust. The system also facilitates healthy rapport between the organisation and its customers in customer relationship management (CRM) terms.

In mediating the interaction between telesales reps and customers, the following demonstrates how the system works in allocating telesales reps to waiting customers. When customers initiate calls into the company, the telephone system automatically identifies the number and establishes the language the customer speaks by default so they could be welcomed in their preferred language. The telephone system then reassigns the call to relevant telesales agent based on skills and availability. After establishing the

initial searching process, the system also figures out who, out of the available telesales reps, has spoken to that particular customer the most in recent past.

In a circumstance where, for instance, two Turkish reps have both spoken to a particular customer previously, the system would allocate the customer to the rep who has had more prior interactions with the customer. In this case, it is not just the language, not only the free and available telesales reps, but also crucially, according to the BOM, 'there is a league table of interaction with customers building continuously'. The aim is to boost positive customer experience in terms of speed and quality of service. The case is different for potential customers whose details are not pre-stored on the company's computer systems. For them, they get a prompt from the system to press a specific button on their telephone, to specify the preferred language for placing orders.

Again, anytime customers originate calls to the telesales reps, the relevant customer information is shown on the screen of the rep who handles the call. This allows the telesales reps to see the products customers normally buy, and therefore be in a position to recommend products and promotions based on the customer profile. The telesales reps are able to influence the customer and help raise the profitability of each sale taking into account the more profitable lines available and the key selling points.

The direct integration with warehousing means that the telesales reps can also find out if products are in stock and what quantities are available between distribution sites and when product deliveries are expected from suppliers. The company describes this instant awareness of product knowledge 'available to promise', which keeps customers informed at all times. For ease of work and reasons of collaborative undertaking, EFSL has structured its main activities in line with task specialisation. These task-dependent, specialised sections work in concert to ensure safe, orderly and prompt delivery of customers' orders. Other incidental matters like any queries that customers might have in respect of those orders are also handled by a team of customer service personnel, while account-opening and account-closing tasks (sales administration) are undertaken by sales administration staff. Together with customer service operations, these activities take place during the day.

5.1.2 Movable and stationary ICTs as instruments of control through interaction

Without a doubt, EFSL largely and increasingly relies on both movable and immovable ICTs to mediate both internal and external communication. As control constitutes essential and integral element in the work processes at EFSL, portable ICTs play a key part in shaping and reinforcing the patterns of mediated interactions across the entire organisational set up. These same technology tools act as instruments of control and mark out the lines of administrative authority. For instance laptops and PDAs are provided for middle-level workers and senior support staff. The fundamental ICT tools and accessories that aid most of the staff in the varying degrees of their mediated interactions and the performance of other legitimate duties are the following:

- 20-inch flat screen Dell desktop computers with Microsoft Axapta (Microsoft Business Solutions) as the main operating software;
- Cisco IP telephone system (7940 series);
- Mobile telephone;
- a headset with an integrated microphone and
- other non-electronic gadget like a notepad, also has a place beside their electronic counterparts and is used to record messages for later reference and action.

The ICT equipment mentioned above serve a dual purpose as far as mediated control and interaction are concerned. They are instruments for initiating and receiving telephone calls, mechanisms for monitoring telesales reps (internal) and delivery drivers (external) in respect of their daily routine activities. With these technology tools team leaders are able to know the number of customers that a particular telesales rep has dealt with over a certain period. Customer service can tell, with relative certainty, those customers yet to receive their deliveries as a result of regular interaction with the drivers who update them on the status of their delivery schedules.

5.1.3 ICT use and service delivery as an organisational strategy

As part of its aim to achieve a commendable level of efficiency in its enterprise-wide activities, the use of ICTs plays a significant role in EFSL's commitment to

effective customer rapport. This is achieved through the regulation of subordinate behaviour by superior managers in the organisation. The process of delivering enhanced service to customers and improving customer relationship therefore hinges on ICT-driven interaction in its manifold applications.

5.2 Foundation for developing mediated control relationship

The telesales is considered by EFSL as one of the key sections in terms of operational significance, possibly as a result of the fact that a bulk of the company's sales is generated via the instrumentality of that section. To this end, the company attaches immense importance to the education and training that telesales reps receive immediately after their recruitment into the organisation, and just before they are integrated into the rest of the telesales team. Following their recruitment into the organisation, they are given intensive 2-3 weeks training programme on product knowledge, common telephone etiquettes in the field of proper conduct on the telephone, even in the face of intimidating and abusive customers. Pieces of advice like these only go as far as to strengthen the fact that the company perceives the telesales staff as one of the key groups of people through whom the customer speaks with the organisation. In a sense, behaviour control can be seen to manifest which fundamentally emphasises the rationale for the training activities of the employees.

Part of telesales reps training involves the skill of introducing new product lines to customers on the phone and running customers through a range of other alternative food items. Telesales reps also receive guidelines on how and when to initiate calls to customers who have not purchased from the company for a month with the aim of finding from them the reason for their commercial silence or hibernation. The company adopts this measure to attain a certain degree of output control. EFSL views this 'purchase-reminder' strategy as a trust-building mechanism as well as customer relationship management technique, both of which reinforce mediated control relationship between subordinates and their superior managers. The telesales trainees are required to master the product knowledge of majority of the food items and their corresponding prices before they start interacting with customers on the phone on the sale of those products.

On a day, each telesales rep handles between 90 and 100 calls. These consist of the following:

- Initiating telephone calls to customers to take their orders, either on mobile phones or landlines,
- Receiving telephone calls from customers who want to place orders and
- Receiving and re-routing calls from customers who might have complaints regarding their delivery orders and some other pertinent matters to customer service.

Initial periods of uncertainty that telesales reps undergo are overcome by falling on colleagues with rich experience in product knowledge by means of arms-length interaction or direct contact with team leaders with request for help in selling to a customer. All these are done to enhance the efficiency of telesales reps and speed up the number of telephone calls they are tasked to handle in a typical, working day.

During an interview with a telesales agent TR4, a customer called to express his surprise at an amount on his invoice upon the arrival of his order. He called in to the company to find out why the amount on the invoice indicated a credit of £17.00 when in actual fact he was supposed to have been credited with £32.58. TR4 first of all asked the customer to confirm his details and immediately pulled them from the database onto the screen. The resulting information matched the query raised by the customer. TR4 then put the customer on hold and phoned up credit control and relayed the customer's query to the credit control manager (CCM). The CCM quickly ran a credit check and realised that the customer's complaint was genuine, and accordingly asked TR4 to inform the customer that his next order would be credited with £15.58. The customer satisfactorily welcomed this arrangement. TR4 thanked the customer and ended the call. Afterwards TR4 used the electronic event log to record this event or complaint as required by her team leader. It is by mere coincidence that TR4 gets the opportunity to handle this call.

There is a monitoring system that schedules telephone handling tasks by putting a customer on hold while automatically looking for the next available telesales rep. The system indicates on the screen the number of customers on hold or in a queue at a particular time and this message is on visual display for all telesales reps to see and take note of. When calls on queue reach ten, all outgoing calls are stopped for prompt

attention to be turned to those on hold until the number on hold drops to less than ten. If a customer wants to talk to a particular telesales rep, and they happen to be engaged on the phone or busy, an email is sent to that particular telesales rep to call the customer back at his or her earliest convenience. This is one of the various manifestations of how calls are monitored and juggled at EFSL.

In the course of a working day, telesales reps have a certain quota of outgoing calls to make. The telesales reps are directed to make the outgoing calls for two specific reasons. The first is to customers who, for some reasons, have not purchased from the company for about a month, what is technically known in the company's circles as 'resenders'. The second reason for making outgoing calls is to introduce 'new lines' to a certain number of customers during a working day. 'New lines' refers to food items that have never been bought by a customer previously. What the telesales reps do in this instance is to call every customer on a given list at irregular intervals to try to persuade them of the deals on those new lines.

During an interview, I had the opportunity to listen in to the following conversation on a 'responder call-back situation'. One afternoon, just before her lunch, TR4 goes through her list of responders. Randomly, she calls a customer and finds from him why he has stopped buying from the company for the past month. The customer tells TR4 that his decision to discontinue purchasing from the company for sometime was due to the fact that during delivery of his orders the driver enters the shop with the trolley, much to his dislike. He reveals he has had the opportunity to caution the driver against that behaviour before. He further went ahead to disclose to TR4 that from observation drivers of a certain nationality are fond of bringing the trolley to the shop when making delivery.

According to the customer, the trolley in the shop causes both inconvenience and constitutes nuisance to people who have come to the shop to eat. TR4 immediately offered an unqualified apology to the customer and assured him that the same incident was never going to be repeated. TR4 further promised the customer that she would put a remark on his invoice to the effect that drivers should not enter the shop with the trolley anytime delivery is made. The customer then made a fresh order to the tune of over £275.00.

Working to a tight schedule interpolated with targets is a dominant characterisation of the telesales work, and can occasionally be intimidating for the telesales reps. This observation came to light during one of my interviews with a couple of telesales reps. Trying to convince customers on the telephone to add new lines to their current stock of purchases is not an easy task and getting back customers who have not made purchases for over a month is equally a challenging undertaking. Here are some expressions of telesales reps and team leaders on the sort of pressure they face everyday as they go about their work.

'They [team leaders] are always on your back, I can't force 11 people to get new lines' – TR1.

'After two years of doing it [i.e. being a team leader] I use to get more and more worried of coming to work if my team doesn't hit their target' – TL3.

'Not being able to hit your target always puts you off' – TL1.

'When you've got like 20 calls holding and you know you gonna take the next call the customer is gonna be angry because they've been waiting, you know, and they don't wanna hear you trying to sell them something; it's hard' – TR3.

The irritating behaviour of certain customers, coupled with their inability to manage their temperament is a possible cause of verbal abuse of not only telesales reps but also customer service staff. Due to the fact that interaction with customers is predominantly mediated at a distance, some customers take undue advantage of any delivery hitches and pour invectives on the phone to the reps who handle their complaints. The emotional repercussions on situations like these can be damaging and demoralising to the staff concerned. While the customer service manager was diplomatic in her remark about the nature of the job, a telesales rep was more graphic in her description of a boiling and fuming customer.

'Customer service is difficult to handle...rarely do you get customers calling to commend or praise you, but more often than not calls are full of complaints, swearing, and moaning at you' – CSM.

'Sometimes you can feel that they are really shaking from their anger ... I couldn't take a customer swearing down on the line to me and I just put the phone down' – TR7.

Under such intimidating circumstance, one telesales rep said she did her best to try and calm impatient customers down on the phone but in a situation where it gets beyond manageable limits, she had no option but to hang up on the swearing customer. Anytime a telesales or a customer service rep hangs up on an angry or abusive customer, he or she promptly informs or notifies her team leader or immediate superior at their earliest convenience. This is because the customers involved in that situation usually call back to make a complaint against whoever dealt with his or her call. To the telesales rep, this self-reporting act is more of an instinctive reaction to avoid a surprise summons by the concerned team leader than a procedural imperative.

Similarly, difficult customers make customer service job quite a frustrating experience in certain instances. This notwithstanding, the customer service manager acknowledged that upon reflection she appreciates the worry and anxiety that some customers go through as a result of delayed and wrong deliveries. This is her point of view:

'But I do understand them, I do understand their frustrations, although mistakes happen, it is part of every business but when I sit back and think I still believe that they are right even if they swear at me down the line. Because their very livelihood depends on the small business they are running and so if they can't find a product they ordered locally because of our inability to deliver their orders it is understandable' – CSM.

In spite of this empathetic stance and support for certain customers, the customer service rep does not however give her full backing to customers who go beyond their limits in expressing their frustrations. She has some uncharitable remarks for such customers. Understandably, some of her subordinates become disenchanted. No wonder the

customer service manager has had the cause to refrain one of his weeping staff who has been emotionally hurt from a customer's vitriolic outbursts.

'...don't be silly, you don't have to cry, don't take anything personal...' – CSM.

'Due to a very, very small silly mistake they use all their energy...they shout, they scream, they swear and you find it extremely frustrating' – CSR2.

The pressure to meet call target coupled with customer impatience, and its associated occasional verbal vituperations can be a recipe for a frustrating work experience. The following remark well illustrates this point:

'Personally I don't think I really like my job [a reference to the telesales work] anymore, I have got commitments so I have to come and get paid' – TR12.

5.2.1 Training – a tool for managing emotional outburst in mediated interactions

One of the important prerequisites for becoming a telesales rep is sufficient mastery over basic telephone etiquettes in order to deal with customer calls on diverse customer-order issues. EFSL is convinced that between 2-4 weeks rudimentary training on handling a range of customer matters on the telephone is enough to guarantee a commendable degree of customer satisfaction in respect of telephone conversations. With the right telephone interaction skills, the company is of the view that its telesales staff could be relied upon to deal with even irritating telephone calls. A telesales trainer's view sums this up.

'There's procedures that we've in place that they [telesales reps] go through during training when they first start with us. They don't start everything straight away. Training would reassure the company on how they should speak on the phone to customers and all who do business with us' – TT2.

The training given to the telesales reps is instrumental in equipping them with the requisite knowledge on their fundamental duty of ensuring a workable rapport with the company's customers. The aim of this exercise is to instil proper manners, otherwise described as 'good telephone behaviour' by a telesales trainer. Good telephone behaviour gives an indication of the expected conduct of the telesales reps in their dealings with customers. The account by one of the two telesales trainers in this study could not have been more graphic.

'Telephone behaviour shows the telesales reps on induction how to speak on the phone, what sort or manner to talk on the phone and the questions asked on the phone, etc. etc.'
– TT1.

'When we recruit new telesales rep, we provide them with much product knowledge, how to offer new lines to customers and how to be confident on the phone during their first few days of training. Later, we listen to how telesales rep speak and conduct themselves on the phone with customers to find out their problems and difficulties' – TT2.

Given the distinctive difference between conditioned training environment and the unaccustomed experiences provided by the real world, there is always a gap between what is expected of the telesales reps and their actual delivery. The gap has a direct bearing on trust relations between the telesales reps and their superior managers.

'I've been in a situation when somebody I felt was trustworthy until I listened to a recorded phone conversation and found out that they are not as trustworthy as they should have been. My first action was to talk to the person and found out I'd to take that trust away from him' – TT1.

In spite of the emotional stress and the harbour of mistrust connected with ICT-driven interactions, one telesales rep reveals the romantic side of technology mediated interaction. She described how men sometimes readily make marriage proposal on the phone instead of making their orders straightaway or talking about something concerning their business. One rep even suggested it was by far easier to sell to male customers as

they were predisposed to imputing or revealing their romantic promptings onto mediated interaction. A certain telesales rep however saw the opportunity to talk to customers on the phone as a means of fulfilling his social interaction aspirations, especially with the use of English.

'I spoke to a customer who asked me to marry him over the phone ... he went like 'alright darling', 'okay sweetheart' all this sort of talk' – TR8.

'You can sell a new line (in other words a new product) easier to a man than to sell to a woman... women, you know, just get on a bit but men oh!...they hear a woman's voice and they know she is young and they go like: What's your name, darling? Where're you from? ... and stuff like this' – TR11.

'To be honest when I first came to England my English wasn't very good...most of our accounts are British people, English people that speak proper English, to me when it was offered it was yes, I can learn English, I will interact with English people' – TR5.

5.2.2 Building effective rapport with customers through service

As an organisation, EFSL considers the existence of strong, dynamic rapport with all its customers and final consumers of its service. This marketing idea is pivotal for soliciting unflinching customer loyalty and retention while at the same time acting as a disincentive to unnecessary and costly customer defections. It is also part of brand familiarity campaign in an industry where competition is stiff and keen due to the fragmentation of the service in the market. The company has developed innovative selling concepts like 'responder' and infrequent personal visits by field sales people intended to cement the commercial relationship between the company and its customers.

For instance in a 'responder' situation, telesales reps are obligated to ring customers who, for some reasons unknown to the company, have not purchased from the company for about a month. Typically, customers cite the price of the product, quality of the product and manner of delivery as some of the reasons for the discontinuation of their

custom. On this occasion, telesales reps acquire the opportunity to demonstrate their selling techniques in an attempt to win back customers. At the same time, telesales reps offer new product lines to such *backsliding* customers when necessary. Sales monitoring mechanisms geared towards customer buying behaviour are in place to flag up gaps in customer buying patterns. In addition, any new lines that telesales reps sell to customers are registered onto the database for marketing decision making purposes.

From this, reports can be generated to inform management on their marketing strategies and tailor their advertising campaign to a more focused target. The generation of customer reports, also provides managers the ability to know why customers have not bought certain products from the company for a while. Field sales reps also pay periodic visits to customers' shops once they get the signals – passed onto their PDAs by customer service reps – regarding lapses in customer buying patterns. A field sales rep discloses how vital such visits are to the company. Here is how he relates the significance of this relationship building exercise:

'The personal visits makes the customer feel the company has him at heart and so they are prepared to come out with the problems that worry them deeply which are promptly communicated to the customer service via the PDA for redress where necessary' – FSR1.

However the concern of a telesales trainer is that the appropriate application of a particular language is to first of all ensure that the client (customer) and the company achieve a mutually fulfilling benefit. The following is how he relates the use of a certain language in customer order-processing requests.

'Those at the Kebab shops...their English is not too great at all, when they speak to someone in English, they feel uncomfortable, they can't get their communication level up to scratch, which would mean customers repeating the same questions, a wrong pronunciation could lead to wrong order and wrong delivery, but when the Turkish customer speaks to a Turkish telesales agent, he can understand what he wants, so the error levels of the number of returned products drop to a minimum level – TT2.

Monitoring outgoing and incoming telephone calls is another strategic tool for building effective customer service. The recorded conversation serves as reference point in the determination of the source of a faulty or wrong delivery to prevent a similar or possible future occurrence. It is also a means for the organisation to determine the impact of the training programme the telesales reps receive prior to their joining the company. The purpose of all these activities is two-fold. One orients towards the customer and the other orients towards the organisation itself. These can be described as internal and external reality checks. A customer service rep recounts thus:

‘At any particular moment, two or three people may be listening to calls and monitoring how telesales reps dealt with them and find out if the training they received is having a positive impact. If a telesales agent finds a customer difficult to deal with, he/she hands that customer to the team leader’ – CSR3.

Another key area that EFSL has been exploring to its advantage to deliver specialised service as a means of building strong customer relations is the integration of a language switching mechanism into its call handling operations. With this utility, customers get the opportunity to speak a language they are comfortable with. Since majority of the company’s customers are of Turkish extraction, such customers call to make orders by preferring to talk to a Turkish telesales rep. This facility has the obvious advantage of reducing errors on orders made on the telephone as those customers find it easier to pronounce the names of certain food items, thereby cutting the possibility of mistaking one product item for another. The BOM simply relates this reassuring experience to the following.

‘There is always a comfort zone that makes them [a reference to Turkish-speaking customers] feel supported’ – BOM.

Effective organisation-led customer rapport also means reliability in the provision of prompt service in the continuous supply of ordered items. Organisational infrastructure supports this venture in the form of interaction mediated by ICTs. A pop up message on

the screens of the computers used by the telesales reps alerts them to the unavailability of certain products. Telesales reps are then in a position to inform customers of these out-of-stock products should they make orders for them. This ready information enables customers to make advance alternative arrangements from elsewhere. As a gesture of goodwill, the company however reimburses customers the difference between the price it sells for the same item and the price at which the customer gets for the same item from other sources. In the same vein, messages of incoming products and the day or date of their arrival pop up onto the screens of telesales reps for them to inform customers of their next availability. The intention is to help customer plan ahead of their orders.

5.2.3 ICTs and work transformation

ICTs constitute the mainstay of the work processes at EFSL. Most of the manual and laborious work activities that featured high during the company's early beginnings had to give way to a more advanced automated and structured way of doing things. The transforming power of ICTs in automating and quickening the process and patterns of work and their final execution is manifested in almost every department of the organisation. Standardisation of work, information retention and transmission, flexibility and convenience of mediated interaction in the form of wide-ranging IT infrastructure characterise the organisation's current work culture. The benefits of work transformation brought in by technology are direct and indirect. The direct advantages translate into the improvement of the bottom line while indirect benefits point towards the satisfaction customers derived from expedited service delivery.

Portable handheld device in such form as PDA makes it convenient for staff to conduct their work at home, whiles on the move and such locations that are several miles away from the office. To this end, gaining access to records of customer accounts, information retrieval, updating themselves with events in the workplace is vital for providing efficient service for the company's clients. One field sales reps relates how PDA is instrumental in accessing customer accounts and transmitting information irrespective of his geographical locale.

'With the PDA I can access my email 24hrs a day, and when I am on the road, I can send a message, put a post code to search an account...' – FSR3.

Unlike previous working environment which would have necessitated the field sales reps to be physically present before they could carry out similar activities, the use of the PDA gives credence to the observation that 'out of sight' does not indicate 'out from site'. With the PDA information comes in handy with regard to retrieval, processing and exchange, so the boundaries between the office and periphery become faint and blurred to the extent that distance is no longer a dominant issue.

Information processing has also taken a dramatic turn compared with when the company had to rely on less dependable human memory for storing and recalling vital information. The following scenario is indicative of how disappointing and unreliable human mind can be under those circumstances.

'Things were done by memory twelve years ago, especially promotional offers... inevitably, the memory fails and you forget to tell people. Now it is all stored on the computer, it's a lot more accurate, everyone gets the same message' – MM.

With storage, comes quick reference to database to ascertain and confirm the queries of customers and working colleagues alike. Without making due reference to stored information, interaction becomes one sided and makes little sense to one's counterpart. The technology functions as both the substrate and the medium for conveying stored records and information. The following testimony supports this claim.

'Sometimes what customers take for granted... is that they call me and they say my account number is ABC123, but it means nothing for me because I don't sit in front of my computer' – FSR2.

With access to the necessary medium, mediated interaction presumably becomes meaningful, purposeful and definite. Meeting customer deadline is one of the means by which customer loyalty and trust are built. Relying on the arm of flesh rather than ICTs to carry out duties that can be performed with alacrity by ICTs is almost a thing of the past

with EFSL. Processing customer order is a sequential, collaborative undertaking which means all the various structures in the organisation work in concert in an atmosphere of mutual co-operation. The BOM emphasised this point when he commented that

'We have to use a lot of technology to make sure these [a reference to the collaborative responsibility of the various sections] keep on going 24/7.

'Loading has to be done around 10 p.m. in the night, but when this system [a reference to automated invoice processing system] was rolled out, this has come to about 8pm. The 2-hour gain is attributable to technology because the routing is now online, it is no longer paper based. This has meant not only avoiding physically handling 1500-1600 invoices in building shipment, but also making sure the weight is correct and the area is right on spot' – BOM.

The use of ICTs for seemingly simple task such as invoice processing is now a time saving imperative that translates into economic advantages and productive efficiency. Customer orders are automatically saved onto a database which means the moment order taking finishes, invoices are ready for shipment building to resume. The influential role of ICTs in loading and building shipment has instigated a dramatic reduction in processing speed during the preparation of invoice. Similarly, loading used to be done in a situation where invoices were printed after the routers had completed their work and moved around to locate the ordered items on the invoice in the warehouse. The situation was made more cumbersome in an instance where an item had been ordered by many customers. The BOM makes a comparison between the previous manual loading process and the current ICT-driven situation.

'For example before we couldn't process our invoices, and neither could we print invoices till it's gone 10 o'clock at night but now by 6 o'clock literally we start producing invoices. That means saving 4hrs in a day that means an extra capacity for saving £30million a year: A big slice of extra efficiency within one building – BOM.

An internal survey that revealed that call transfers within the company wastes a lot of time led the integration of the language switching technique into the call handling processing. About 70% of the issues that emerged from the survey bordered on language problems. Logically the company believed that finding pragmatic response to the issues that resulted from the survey could significantly reduce customer queues and minimise call handling times. Prior to the introduction of this system, customers rang a generic number to make an order. Before the initial exchange of greetings, the customer would request a Turkish-speaking telesales rep to deal with his or her particular order. He would then be put on hold for about 30 seconds before a free telesales rep is ready to handle his query. By the time the customer begins to mention the list on his or her order, a minute or so has already been lost. However what currently prevails is that the system readily recognises the telephone number from which the customer is calling (if the customer is originating the call from his or her workplace) and automatically identifies the preferred language of that customer. This effectively reduces customer waiting time.

The language switching system – as integrated into the telephone handling processes at EFSL – strengthens the bond of friendship between the company and its customers. This foments customer trust and loyalty. The facility also builds healthy rapport between the company and its customers. The BOM acknowledges this to be great intangible value to the company. And he reckons this as building a comfort zone for the customer as a means of engendering trust to the extent that certain customers make request to speak to specific telesales reps when they ring. Requests such as *Can I speak to this or that telesales rep? Could you pass me to that telesales rep? Okay I will call back or tell him to call back when he is free* are some of the recurring refrain of the familiarity that has developed between the company and some of its customers.

However the BOM is quick to sign a note of caution of this friendly atmosphere. His concern seems to originate from a possible breach of trust. Such abuse leads to costly forgeries at the expense of the company. A situation where a telesales rep, who has become so familiar with a customer over the phone for a while and therefore gave undue credit was fresh on the mind of the BOM at the time of interview.

5.3 Mediated interaction: Monitoring and building a case for evidence

Monitoring constitutes an integral component of EFSL's control function in all areas of its administration and management. In order to ensure service improvement and shape employee work practices and culture in line with the stated policy objectives of the company, monitoring individual and group behaviour and set targets is of paramount concern to the company's efficiency. Hence all telephone calls to and from the company are monitored from the control room. Both electronic and physical means of maintaining track of all manner of activities are the hallmark of the company's surveillance systems. Occasions exist when monitoring is accomplished via the instrumentality of technology and human effort. To this end both rely on the respective strength of each other to ensure an effective combination of socio-technical control strategy. Keeping close watch on both incoming and outgoing telephone conversations, logging all relevant and related electronic activities undertaken by employees provide the platform for erecting a profile and a portfolio of evidence against which future managerial control decisions are based.

The electronic form of monitoring builds up a case for evidence to double check on the identity and the authenticity of the provenance of sales activities. This piece of information is only available for team leaders and those at the top of the organisational hierarchy. Having such monitoring systems in place makes the administration of control, to some reasonable degree, quite predictable, even from sales administration perspective. Technology is a salient tool in the enforcement of rules and regulating acceptable behaviour in terms of its efficacious essence in instilling both outcome and behaviour control. Recounting the vital importance of the monitoring system in the resolution of an uncertain and dubious sales and sales promotion activities, some of the interviewees expressed the following thoughts.

'If we need to verify if they are genuine [a reference to sales promotion claims by telesales reps] we can listen to phone call and we can see that telesales agent didn't offer that new line to the customer' – TL2.

'If a telesales sells a new line, there is a tagging system on the computer which they go and punch the account number in ... and that gets registered unto a database so that management can, at the end of the day, look at who sold what' – CSR1.

'We've got systems in place to show how many new lines that person has sold, em... how much money that person has made, em...how many orders they've taken and how many incoming calls have been taken' – TT1.

'Anything being done by somebody can be seen on the system because it is just one system it is easy; if it is separate systems we are using it would be difficult' – SAM.

It should be noted that control systems at EFSL also provide the power of giving off signals for the appropriate supervisory authority to pick up the coordinated activity from there. This signal-providing functionality is, even, potent enough to restrict subordinates (for instance, telesales reps) from carrying out specific fundamental functions, like order processing. The signals provide a symbolic reality that never leaves the intended recipients in any doubt of their legitimate interpretation.

'If you put an account on stop, it flags up red, whereas like before it was all the same colour so at least this helps you out in a way to show why this account is on stop...without the colour it was harder to monitor because you having to go into every single account to find out whether it's been stopped or not' – CCM.

'They [a reference to telesales representatives and other subordinate staff] can't put special price because I am the manager who is putting those special price on the system, they don't have the facility. If they are sending anything below the minimum all the time I can catch it from here because it is the same system. We don't need to see them; we don't need to communicate with them because we can see it on the system' – SAM.

There are situations when monitoring becomes a shared, distributed exercise or 'coordinated monitoring' providing the opportunity for both opposing parties but with common interest to have the ability of instantaneous appreciation of events.

'We look at live data that is changing minute by minute and our suppliers are looking at the same data so what we do is not to hold very much stock here. We've got to a point when stock is arrived just in time; no sooner has it arrived than it is loaded into our vehicles, so the vehicles are now our storage facility which is ready to the customer.

'We don't have to place orders to the suppliers, they've actually got it on their screens, they can watch live data, our stock levels, as well as how much we are selling on a day' – MD.

'I monitor reports on the computer, to know the products that are selling, monitor the performance of individual products through the creation of those reports, making sure that the team leader does what they are suppose to be doing. Through the generation of customer reports, I am able to know why customers have not bought certain products and once I know the reason, it is easy to come up with what action to take next' – TM.

The Human Resource Coordinator (HRC) demonstrates a seemingly unquestionable trust in the wisdoms of monitoring systems. The extent of his confidence draws on the fact that

'The most important thing is not the people, the most important thing is the system, people come and go, if the system is steady and strong...it can be used without depending too much on the people' – HRC.

However, periods exist when monitoring systems fail to account for certain situations within the framework of organisational operations. The stock control manager identifies a typical scenario.

'Keeping track of products makes stock control a challenging duty. One moment a product that has just been counted then falls short; and it is difficult to trace the difference' – SCM.

Control has become so embedded to the extent that its diverse manifestations occasionally escape the very people who constitute the centre of such control and monitoring strategies. The account by the financial controller typifies one of such situations. During the initial stages of an interview with him, the financial controller

failed to admit that there is a monitoring system in place to check the activities of his subordinates. However in the closing stages of that same interview, he unwittingly revealed that when he worked from home sometimes after dinner or lunch,

'I sit down and try to dig into them [a reference to many activities by his subordinates] and try to identify what is the problem, what's going on...so that next day when I come [to the office] I can ask the question: was it due to system error...?' – FC.

Clearly this is an instance of the subtle nature that control can assume; because control becomes embedded in the daily pattern of work, it tends to be taken for granted, however its administration results in a manifestation that is not lost on the outsider.

ICT-induced interaction also facilitates interorganisational understanding as information sharing via the available network of computer systems enables real-time and prompt response to meet the needs of each other. Monitoring through the computer systems also facilitates the decision-making capabilities of superiors over their subordinates and that puts them in a better position to determine what needs to be done at any particular moment. Another dimension of checking customer account to determine their status of indebtedness is demonstrated in the richness of monitoring the customer account database. Colour coding is used to support this account surveillance activity which sets up contrast between what existed previously.

Under this instance time saving, speed and accuracy are the overriding considerations for undertaking monitoring activity. Time saving and speed would permit several accounts to be checked and thus determine their credit status. Apart from this, the time saved could be devoted to other productive exercises. Accuracy would ensure the right accounts are identified for credit control decisions to be taken. To avoid sending the wrong messages to customers and risk embarrassing them in the process, it is essential that the company gets their customer records right. One of the effective means of ensuring this happens is picking out the customers concerned in an accurate fashion. Possibly the determination to get things right is one of the reasons why credit control runs a report on cash on delivery twenty-four hours after drivers have delivered customers' ordered items.

According to the sales administration manager, the control systems afford her extra opportunity in reinforcing her level of discretion. Of particular focus is the setting up of prices, which she thinks there are structures in place to debar anybody from encroaching prohibited domain of operation. This strengthens her faith and increases the degree of her confidence in trusting the wisdom of structural mechanism of systems. Her seemingly unquestionable confidence in the structural properties of systems may be assumed to provide an added opportunity for people in such positions to concentrate on other matters that demand more human attention. For, the technology is seen to provide the necessary support to relieve certain human efforts.

5.3.1 Modes and motives of ICT-driven interaction as environment for mediated control

One interesting aspect of the field report is the uncovering of different motives and modes in the adoption of different media for the exchange and transmission of various mediated contextual messages. Respondents expressed why, how and when they make use of diverse technology mediated objects to transmit their messages in varied situational settings. Information exchange then becomes an environment for control, as control in this instance, derives its perspective from the concept of enactment which seeks to imply that to control something is to take a series of activities. The activities turn out to constitute the raw material (environment) from which the knowledge and idea about control are developed. The following responses reveal multi-purpose intentionalities for employing different media for conveying one kind of information or another. Situational imperatives invoke divergent motives for mediated or unmediated interaction that hinges on the demands of either media richness or social presence. While media richness reflects the ability of the medium to reproduce the delivered information, social presence highlights the awareness one has of his or her interaction partner.

5.3.2 Heterogeneous modalities and motivations of information exchange

The sophistication of ICTs has driven the modes of mediated interaction beyond single dimensional perspective and as such introduced flexibility into the means and modalities of communication. Depending on the circumstance and purpose of

communication, people ascribe different intentions to the preference and use of one form of communication over another. The emphasis of these vagaries in mediated interaction varies from individual to individual and the performance of one task or another. For instance, different respondents attributed different reasons for their preference for various ICT-driven interaction devices as their main communication mode during the interviews. However the respondents did not miss the occasion to include the challenges and problems associated with these same tools of mediating interaction. Some related the significant amount of time expended in email communication, while others also extolled the merits of email and, at the same time, hinted on their limitations to highlight it as a double-edged sword of a communication gadget. Below are a few of such differing perspectives, where for instance a segment of the interviewees are ready to recount their discomfiting experiences with the particular use of email as a medium of getting a message across to their working colleagues.

'Personally the email is a second option. I prefer the use of the telephone because that gives me a more appropriate description to the problems the staff may have. I don't get immediate response to emails and I can't put them any questions for instant response. That means I can't really fish out what the problem is when I use the email' – ITM.

'Using emails wastes a lot of time, as talking on the phone gives me the opportunity to get instant feedback for my queries' – TL1.

'When you send an email you don't know if that person is actually available in the premises or if they are actually going to reply, the phone is much more easier to find out ... and you know how things are for yourself' – CCS.

On the other hand, there are some respondents who are all too prepared to recollect their enduring, reassuring experiences with the use of email in their daily work. To them, convenience, evidence of a communicated activity and the risk as well as the possibility of subjecting a communicated message to multiple, conflicting interpretations are the

overarching and crucial motivating factors for exchanging information with their colleagues at work via email.

'Using email is more convenient because I can't talk to credit control in the middle of the night when I am doing my normal job; therefore I send an email to credit control telling them why an order was stopped or put on hold and they take action when they come to work in the morning' – NS.

'I send an email to the field sales reps and all of them get the same message simultaneously, it is not misinterpreted, and it is accurate, but if it is a telephone (mobile or landline), I have to send it one after the other. However, if you speak to someone, two or three different people asking the same question, you'd get two or three different interpretations...so that [an allusion email] works very well for me' – GM.

'Email would also be a backup for ourselves, proof of receipt if I send email ... indicating we've done our bit, you cover your back by sending email; whereas before word of mouth causes a lot of blame' – MM.

'Email helps both parties; the sender and the recipient, since I can forget a request or a verbally reported problem but this may not be the case with email' – BOM.

The ability to manipulate the content of email coupled with the desire to make the medium seem like a servant not a master in its use stimulates the basis for its application among certain interviewees. Making a specific email function as servant allows for a flexible transformation and arrangement of its constitutive elements to suit the comfort and preference of the user. To this end, the user is able to make dynamic application of the environment of the electronic medium. The following is a brief and arresting account provided by an interviewee.

'The beauty of email is you can prioritise your work, set reminders, colour code in terms of priority, arrange and delegate to other people' – BOM.

The figure below is an instance where the researcher had a first hand opportunity to witness an email that has been highlighted in two separate colours to emphasise the import of a specific message. The highlight provides a means of enriching the content of a communicated message to suit the unique preferences of the recipient.

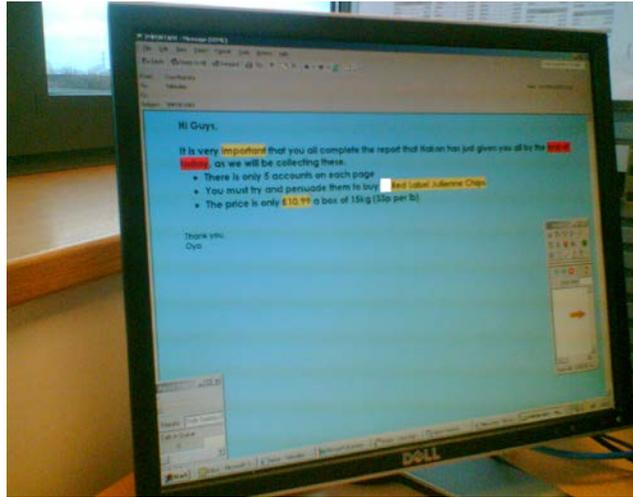


Figure 9: An email highlighting the text in different colours

Issues on the use of the telephone in various situational dynamics also presented the respondents with the opportunity to outline their missed feelings and opinions as reflected on their lived experiences. Some sounded unequivocal with regard to the nuisance that interaction via the telephone may bring especially in a one-to-many situation. His account reflects the following frustrating experience with a cross-section of his staff.

‘When people call you and say, I’ve got this problem, I’ve got that problem, I’m not coming to work tomorrow, non-serious things you know..., but if you hear it 500 times a day, it makes you go crazy!’ – HRC.

‘With email you cannot quite tell if something is right or wrong...you ring them up you find there is a little bit of nervousness in their voice and you get the chance to say, tell me what is going on’ – MM.

Though 500 times may be an exaggeration but at least, it captures the bothersome point of the telephone as a communication device, especially in a situation where one person

interacts with several other people at particular point in time. In this instance, it is not the message or the medium being used that matters but the condition of the recipient that counts. Others also argue that the telephone and the email are the same in terms of the content being transmitted. Logically they see the telephone and email to be the same in terms of the content. Stated differently, they contend that what would be sent via telephone would not be any different from that sent through email. Some telesales reps provided succinct philosophical responses.

'The message that would be sent via email would not change when the telephone is being used' – TR9.

'If the person doesn't want to answer email or telephone he's also likely to fail to respond to interaction initiated via mobile device' – TR4.

'Just the same thing that I would say to the other person on the line is what I put down on the email; if I want to say something I would say the same on the email as I would via the phone' – TR2.

Scepticism about the presence, availability and readiness of one's interaction partners also present an opportunity to influence the medium of mediated interaction object to adopt. The attempt to clarify certain pieces of information calls for the use of face-to-face communication rather than emails as a more convenient form of technology mediated interaction. Gaining the full attention of one's interaction partner therefore prompts the use of specific mode of interaction. This is vital for immediate feedback and response to wipe off any possible doubts that may be hanging around later.

However, there are occasions when walking to a person and initiating face-to-face contact is almost impossible due to the nature of work that needs to get done. Such situations make the use of email a more appropriate form of communication than, say, telephone. However, there are periods when sending an email may not be appropriate, from the standpoint of the two parties (in this case, the delivery drivers on the on hand and the night supervisor on the other). The chances are that the delivery drivers may not obtain a prompt feedback for their messages and the night supervisor may not even be

aware that such messages are waiting for his attention in his inbox. Controversy can also be averted by the adoption of a particular interaction modality.

In a related development, the email may be used rather than the telephone in a mediated interaction to prevent the possibility of subjecting the same piece of information to multiple interpretation schemas and hence reduce the occurrence of mixed messages from the same source. Occasionally, the choice of a particular interaction modality is driven by sheer personal experience. And sometimes informal channels are a worthy source of obtaining vital information in the normal course of work. Circumstance like this and other such situations make the use of arm's-length interaction seem the most appropriate option. The interviewees in this particular context tell of their divergent opinions on this matter.

'If I call him [referring to a colleague] even if he is at lunch he will pick up the call, but if I walk to him face-to-face, he would say let me finish eating before we talk' – QAM.

'I think sometimes the information you get while having lunch or walking in the corridor has got more weight and value than the one you get from a formal meeting. I've learned, with amazement, over the years ... that the formal meetings do not always bring everything out.

'In terms of media richness face-to-face conversation is much better than telephone conversation, and telephone conversation is better than a fax or email and the fax or email is better than the Royal Mail' – BOM.

'Oh yes...sometimes if it is really an urgent thing like an item is out of stock but it is not shown on the system, then one of the team leaders would rush to the purchasing department to find out what is going on' – TR6.

'I can send an email may be they don't understand, may be they have some problems, so it is better to discuss the information face-to-face, that is easy' – OM.

'I think email as a communication tool is not enough because I'm not sure whether that person may have read it... I tend to follow everything up by walking to someone and say hey have you done this or that?' – TS

'Talking over the telephone, you never know if the other person is listening to you so when you have the eye contact it makes a huge difference' – ITM.

The ability of the interaction medium to transmit visual images in addition to the content of the information seems to provide a stimulus for choosing a particular tool for mediated interaction. Such visual images are deemed to play a significant role in boosting the image of the company as well as enhancing corporate goodwill as can be gleaned from these couple of thoughts.

'Everything is coming to a point in the industry where visual information is the way forward... We've been given the very high position of being the face of the company, whatever we create would be the visual impact that the customer would see' – MM.

'We use the video phone or web cams to get in touch with the depot managers. While talking, at least looking at the face and the emotions and the body language and everything, that helps a lot' – BOM.

5.4 Discretion and the conditions for its application

In spite of wide-ranging structured systems of control embedded in the activities at EFSL which, to a greater degree, ensures adherence to procedural and administrative methods, superiors and subordinates make use of discretion in their legitimate operations. The use of discretion largely emanates from, and is determined by, contingent circumstances thereby influencing the nature of decision-making. Findings reveal that route planners and delivery drivers apply a significant measure of discretion in their everyday, routine work. Control includes a considerable portion of discretion while the exercise of discretion, to a considerable extent, is guided by a greater degree of control.

Recounting the conditions that give rise to the use of discretion during the normal course of performance, the night supervisor provides an illustrative instance.

'I have got a lot of discretion due to the absence of the other working colleagues. For instance, because credit control is not around during the night, final decision is left for me to determine if certain customers would have their orders suspended for the night or not. I use my own opinion to decide what to do' – NS.

'I don't have to call the drivers' supervisor [a reference to his immediate superior] and tell him I am changing the routes of driver A or driver B when something unusual happens, all I do is to use my common sense because I do it everyday and know my work better' – RP3.

In this case, circumstances culminating in the unavailability of other working colleagues trigger the use of discretion in the course of performing a legitimate duty. It can be safely assumed that in this particular scenario, a person's accumulated experience on the job reinforces the need for the application of discretion. Similarly, in certain situations knowledge on the job due to a progressive development from one level of the organisational ladder to the other that facilitates the taking of discretionary actions. One route planner recounts the following story.

'Nearly all of us [route planners] have been delivery drivers before and what we went through during that time help us to mark out delivery points on the system that pose least trouble for the drivers...If I call up my supervisor every now and then when I am doing the routing, he would think I don't have confidence in my job or I am not efficient. This means I have to try as much as possible to depend on my own understanding in the job I'm doing and take actions that are better for the company' – RP1.

The unpleasant feeling of being perceived as inefficient by one's immediate superior resulting from a possible lack of self-confidence is seen in this particular instance as encouraging the use of discretion in the course performance. Therefore, it

could well be that coming out with a discretionary decision is driven by a desire to demonstrate to a higher administrative authority that one is in a position to meet the full responsibilities and demands of his or her job. In certain circumstances, discretion is informed by best practice rather than strict adherence to laid-down, formulaic procedures. Here is the picture painted by a route planner and a delivery driver.

'I do route assembly everyday thinking that I've got to make sure I arrange delivery for the drivers in the best possible way; not always according to what has been put on the computer [an instance of routing procedures and criteria for delivery arrangements], because I want to be flexible and make life easy for our drivers' – RP2.

'I am driving and doing my job, those in the office don't have a clue what is going on when I am going to make deliveries... I can't call them at the office on my mobile phone while driving, you see, so I try to do what is good for the customer and what is good for the company' – DD4.

Conditions for the use of discretion are underpinned by a careful consideration of what is thought to be the most appropriate course of action instead of unbridled pursuit of pre-planned, procedural series of activities. In other words, delivery arrangements are not usually based on such criteria as post code of the delivery address, the size of the lorry, and the final tonnage of the orders to be delivered but by what is most suitable given a combinatorial analysis of emerging factors.

The use of discretion was found to be quite rampant with the delivery drivers. They operate in a sort of circumstances predominantly shaped by emerging circumstances. And those circumstances largely inform their discretionary decisions. Hence some of the drivers interviewed admitted that they do not make deliveries according to the way the orders have been arranged on their trucks. This portrays and provokes an imagery of discretionary judgement in the course of performance. Similarly, a conflate of emerging circumstances can potentially activate a recourse to independent judgement, that is totally at odds with explicit prescription from the centre of authority.

However, some drivers are more considerate and therefore able to temper discretion with patience and understanding in spite of how risky their judgement may be.

'I can't use my mobile phone to call the head office when I know a parking attendant is gonna give me tickets for parking in front of a shop or when a road has been suddenly blocked because there is accident. I'd finish all I'm doing first and tell the office later what happened...like there was a diversion or something that is why I didn't make delivery A or B in time' – DD2.

'If a customer tells me he has no cash right now because he has just opened the shop or something like that, I don't call customer service or credit control with my phone to say should I take the order back or what. I make arrangement with the customer and tell him I would come later to collect the money.

'It is not every customer that I make this decision. I know customers who I can trust and those I would never trust. So it all depends; some customers good, some customers bad and I don't play with the bad ones' (he laughs off) – DD5.

Trusting relations between customers and drivers can also motivate the exchange of contact numbers between them, a situation verboten by EFSL for obvious reasons; talking at the wheel is against the Law in England. Besides, it encourages customers to call the drivers at any time – even when they are driving – especially on the day of delivery, to find out when their orders would arrive. It was learned during this study that a driver was dismissed for giving his mobile number to a customer. It was later discovered that there had been a passionate relationship between that particular delivery driver and the customer.

One driver however disclosed (on condition that the researcher protects his identity) that one of the company's female customers has his mobile number in spite of the expressed prohibition by the company. He provides a fascinating reason.

'My friend, the office people don't know that this customer has my mobile number. I talk to her everyday and she knows when I am going to make deliveries. Sometimes she calls

to find out when I am going to drop her order. And I say 10 minutes, half hour or even one hour, you understand? Me and this customer we are very good friends for a long time now’ – DD6.

In spite of this apparent use of independent judgement, product recall, especially arising out of customer’s inability pay on delivery, always has to be authorised from the head office. The reason could be that the delivery driver may not have a complete picture as to the credit history of a particular customer. In this sense, the delivery driver has little opportunity to allow his decision to be informed by discretionary motives, and in the final analysis become sparing in the application of personal judgement.

‘If I make delivery and the customer doesn’t pay me cash, and say come collect your money the next day, sometimes I call customer service, sometimes credit control and they tell me what to do. They know the customers more [a specific reference to their knowledge of the credit history of the company’s customers] so it can be two things. They can tell me to collect the items back or sometimes they say, oh he is a good customer so leave him and collect money tomorrow or next time’ – DD1.

‘There should be no reason to be thinking whether I negotiate with a customer on making payment before delivery; it only takes a phone call to the office to find out if I can actually leave the goods with the customer and collect the money later or I take it away when the customer don’t give me money. I most of the time don’t decide things myself’ – DD3.

5.5 Substantive findings

In the course of the interview, three key distinctive findings of this study emerged. It was discovered within the context of mediated control in ICT interaction that:

- Unquestionable trust that telesales reps and their colleagues place in the structured systems of technology;
- Mediated control measures instituted by the top managerial hierarchy encourage the need for the use of subordinate discretion and

- Repetitive interaction mediated by technology lead to unanticipated ramifications, such as romantic relationships and the use of abusive language with negative effects on telesales reps.

The areas of these discoveries are taken up briefly in turn in the following sub-headings: absolute trust in the wisdom of systems, mediated control induces the use of discretion and ICT-driven interaction reinforces or mars social relationships.

5.5.1 Absolute trust in the wisdom of systems

What became so obvious, and quite surprisingly clear, during the interviewing process of this study is the apparent unquestionable trust that most of the managers reposed in the non-human systems put in place to monitor activity and regulate behaviour. To them, it was almost unheard of to challenge any information or data that the computer systems produce. This noticeably fetish regard for the various monitoring and output systems erode and blunt their sense of initiative to question any erroneous or misleading information that the systems may bring out. It was revealing, as it was interesting, to listen to managers unashamedly declaring and attributing infallibility to their computer systems. One manager, so much entrenched in her notions about the inerrancy of computer systems, was quick to reveal that there was no way her subordinates could outwit her without the monitoring mechanisms picking such manoeuvres up for attention. Suggesting the possibility of a telesales agent processing a customer order below the minimum acceptable amount, she shows least hesitation in pointing out her confidence in, and the dependability of, the monitoring systems. The following underlies the basis of her conviction.

'If they are sending anything below the minimum all the time I can catch it from here because it is the same system. We don't need to see them; we don't need to communicate with them because we can see it on the system' – SAM.

Managers are prepared to sacrifice their independent judgement and hold on tenaciously to, and content themselves with, the structural control mechanisms in the simple belief that any inappropriate behaviour cannot go undetected. Even in matters of

doubt, human judgement is relegated to the background and consultation with laid-down monitoring mechanisms proves to be the final arbiter. Evidence for this observation is illustrated in the following quote by a manager:

'If a telesales rep sells a new line, there is a tagging system on the computer which they go and punch the account number in ... and that gets registered unto a database so that management can, at the end of the day, look at who sold what' – CSM.

Naturally, the higher trust managers have for the structural monitoring systems led them to place little belief in the people they are working with. It was all too easier for a manager to consult with the established structural systems than to challenge common or strange occurrence with human wisdom. In spite of this, managers have reported that they have ample time to deal with non-routine, emergent organisational challenges. Ironically, while managers made limited use of their human faculties in monitoring unusual circumstances, they have more time and enough mental resources to deal with daily emergent challenges and non-routine events associated with their assigned roles and duties.

5.5.2 Mediated Control induces the use of discretion

Another informed revelation of this study is the paradoxical perspective reflecting the relationship between mediated control and discretion largely necessitated by interactions through ICTs. While the technology, on the one hand, was elevated to the point of spearheading most control and its related activities over individual behaviour and activities, it simultaneously provided opportunities for the use of individual discretion. This occurred in instances where the prevailing situational dynamics presented individuals – including those not even in managerial or supervisory positions – the chance to use their sense of initiative and judgement to make somewhat legitimate decisions. In work largely characterised by computerization process, it is both feasible and viable to structure tasks and design work and stipulate their pattern of execution in explicit terms. However, since there is always difficulty in pre-programming all the necessary causalities and conditions that must influence and yield a certain action or

direct a particular behaviour, opportunities always exist for the performance of seemingly justifiable activities not initially considered.

For instance, during my time with a delivery driver, I learned that the decision to inform customer service of a driver's arrival at a customer's shop (when the shop is closed) was entirely the driver's own. This is in spite of the fact that the driver is duty-bound to relay such information back to the head office. At certain times the driver calls customer service to get the customer informed of the readiness of his delivery. At other times the driver was all too ready to ignore and bypass that stipulation when a customer's shop was closed at the time of delivery. With recourse to his sense of judgement instigated by a personal volition, he parks in a nearby residential area and returns later for the next rounds of delivery.

Similarly, this study uncovers the way and means delivery drivers apply their sense of initiative, discernment and proficiency in personal intervention to evade parking tickets by persuading parking attendants from issuing parking tickets in the course of making certain deliveries. Management have very scant idea and appreciation of what the delivery drivers go through during this unforeseen negotiation process and how they handle the ensuing emergent issues. Strictly speaking, the delivery driver is supposed to alert the head office via his mobile phone of this impending situation, but they (at least all the drivers that I studied) did not deem it appropriate to get the head office informed. The delivery drivers prefer to deal with it on their own rather than draw the head office into it when the situation is unfolding. Nevertheless it never weakens the observation that delivery drivers are active and prepared for the pragmatic exigencies associated with their work. This exemplifies a situation in which emergent contingencies strongly encourage local improvisation that is likely to result in the use of discretion, however less apparent and insignificant its effect may be in the scheme of things.

5.5.3 ICT interaction reinforces or mars social relationships

Another revealing moment captured in this study, which also constitutes a key finding, is the ease with which ICT-driven interaction inspires, strengthens and occasionally vitiates the formation of social relationships. These relationships sometimes

transcend the barriers of acceptable norms of business behaviour and practice. The interview discovered breaches of strict organisational codes of practice as a result of familiarity between telesales reps and customers occasioned by repeated and intensive mediated patterns of interaction. The technology makes it possible for initial encounters at the point of service delivery to develop into relationships cemented by a bond of trust that follows changing and dynamic interactions between the social agents involved.

Evidence from this study indicates a scenario where a delivery driver gave his mobile number to the wife of one of the company's customers, contrary to expressed instructions. This recalcitrant and dodgy driver was reprimanded when the relationship nearly resulted in extra-marital affairs. Again, due to the opportunities (or the benefits) the technology presents to telesales reps and delivery drivers, they can initiate and maintain intense interaction with some customers with a significant amount of ease, without physically seeing each other. Presumably, interaction mediated by technology has a healthy potential to remove the initial shyness and the uneasiness often associated with the early encounters that usually characterise face-to-face interaction.

The account of one respondent highlighted the removal of any such barriers that could have otherwise made it difficult for unhealthy pattern of interaction to develop. For instance one interviewee (TR1) makes brazen comparison that it was far easier to sell new products to a man than to a woman. According to her, male customers have the penchant to reveal their romantic inclinations when they realise that the voice on the other end of the phone is that of a young lady. She recollects an instance where a male customer proposed to marry her over the telephone. Other emotional repercussions attend to ICT-driven interactions. For instance, a respondent (a manager) recounted a particular experience in which she had to comfort one of her sobbing subordinates after a customer had poured invectives on her via the telephone for no apparent reason. The resulting emotional stress and discomfort – the manager disclosed – were telling enough to merit some days off work. Besides, certain customers take undue advantage of the fact that they could not be seen by their interaction counterparts and say all manner of things that they could not possibly have said in a face-to-face encounter.

5.6 Chapter in review

The chapter has given a graphic detail by considering the environment that offers the basis for this study. The chapter then brings out the various strategies within the sphere of ICT-driven interaction to encourage and establish organisational rapport with which the company under study depends on for its mediated control operations. The chapter also captures diverse monitoring and surveillance techniques to provide the various manifestations of mediated control in administrative behaviour. Multiple modes and motivations of information and communications exchanges and how they transform work also constitute the embodiment of this chapter. The three core findings briefly reported here provide the foundations for a detailed interpretive analysis in the next chapter.

CHAPTER SIX: ANALYSIS
ORGANISATIONAL CONTROL IN MEDIATED INTERACTION –
MOTIVATIONS, INSTRUMENTALITIES AND RAMIFICATIONS

Take care of the sense, and the sounds will take care of themselves

[Lewis Carroll: Alice's adventures in Wonderland (1865)]

The distinctive input of this chapter is an analytical presentation of the research findings. Marking a logical progression from the previous chapter, the analysis casts a reflection on ICT-driven interaction and organisational mediated control which capture the research intentions of this study as delineated in the first chapter. The analysis offers an empirically informed perspective on the dialectics between the instrumentality of interaction driven fundamentally by ICTs and organisational mediated control. As was hinted in chapter 3, the informed perspective of the analysis is based on the principle of hermeneutics that account for the interpreter's personal judgement, experience, knowledge and understanding of the subject of study (Foucault, 2002). In doing this, certain portions of the theory of administrative behaviour, pertinent to the analysis, are brought to bear on the findings to shed light on the interplay between organisational mediated control and ICT-based interactions.

The chapter is organised in the following format. The first section mainly teases out the diverse manifestations of mediated control in a standardised working environment. It highlights the motivations, instrumentalities and repercussions of the administration of mediated control in terms of the key role that interactions through ICTs play by recourse to the findings from the field study. The second part of the chapter throws light on the extent to which psychological factors can lead us to appreciate organisational relationship management through the theory of administrative behaviour. Finally, the last segment of the chapter deals with the extent to which we can make sense of the fundamental motivations that underpin the choice and application of ICT tools in the process of organisational mediated control. To appreciate the significance of the analysis in this section, it is apropos to bear in mind that all of the strategic control and

other complementary strategies directing the entire activities in the organisation have a rationale underpinning their existence. To this end, it is befitting to revisit and orient ourselves to the key research question in chapter 1: *How does control manifest and ensured in technology mediated interaction in an organisation's collaborative work?* Recalling the research question not only reminds us of the context but also provides the frame and sets the boundaries within which to position the analysis in the subsequent sections.

6.1 Standardisation: Manifestations of control and repercussions of mediated interaction

It is fascinating to realise a clear case of the various manifestations of control and the dynamics in which they are administered that the findings from the field study point out. These multifaceted manifestations of control are made possible via psychological conditionalities and effective application and instrumentality of ICT artefacts. The motivations that occasioned these structural control mechanisms are of multivariate sources, indicating the favourable dispositions and the relative strength associated with each. While some of the mechanisms are effective and fruitful in monitoring and securing the required human behaviour, others are found to be inadequate in ensuring compliance to, and demonstration of, recognised behavioural demands expected of both individuals and groups in their various areas of work.

One of the key indicators of control, and the means by which the company seeks to assimilate its staff is to streamline their behaviour through a thorough training programme. The behaviour-streamlining strategy is motivated by standardisation on several fronts: standardisation by work processes, skills and output, all enhanced by division of labour (Mintzberg, 1983). The training programme is not a one-off event at the resumption of the employee's contractual obligations; in fact, it is the company's core intent to provide ongoing training to all the employees. For, the company is under the impression that with training comes a change in the mental attitude on the part of its staff towards a high sense of allegiance to the cause of its operational undertaking (Courpasson, 2000). The motivation for the training, especially, the telesales staff is

underpinned by psychological factors that orient and psyche the staff to handle the challenges connected with their job. However the findings from the field readily and amply indicate that there is more to the psychological factors of the training programme. Indeed, findings suggest that results of the training provided in an environment where interaction occurs in an unmediated mode are significantly different from the realities of ICT-driven interaction when the telesales begin their job in real earnest.

A plausible reason that can account for this mismatch could be the mediating and influential role of the technology artefact. The technology artefact is able to provide a platform that allows both parties to communicate what would have been difficult otherwise, had they engaged in arms-length, close, face-to-face interaction with each other. The mediating role of the artefact enables anonymity and depersonalisation of the parties involved. The corollary is a probable lack of shared norms of acceptable behaviour, which makes it more likely for the expression of aggressive and unrestrained negative behaviour towards one's interaction partner (Sproull and Kiesler, 1991). A ready example from the findings is the abusive language some customers occasionally use when their orders are being taken or their worries and concerns are being addressed on the telephone. The impersonal nature of the mediated communication reveals certain antisocial conducts like verbal resentment, aptly described as 'flaming' (see, for example, Siegel et al., 1986 p. 161).

Again the training environment prior to the commencement of one's contractual duties does not mirror the realities of the mediated exchanges that emerge during the call processing periods of actual business operations. The reality of interaction possibilities and the affordances of the mediated ICTs permit the occurrence of certain unanticipated events. For instance, experience of emotional trauma and weeping, premature and sudden termination of telephone calls, swearing and tirades poured on the phone against telesales reps, are indicative of the unpredictable extent to which mediated interaction can degenerate. This means the verbal content alone of the communicated information appears more significant and, arguably, powerful in meaning construction (Hancock and Dunham, 2001), in the formation of perception and relationship (Walther, 1992) during mediated interaction than the additional visual gestures that collocated interaction usually affords by default.

The propinquity of the mediating features of the artefacts provides a psychological nearness that has the potential to generate a bond of affinity between the interaction partners. This could account for the extra-marital relationship that developed between one telesales rep and the wife of one of the company's customers; illustrating the development of interpersonal perceptions facilitated by intense mediated interactions accumulated, presumably over prolonged period.

The communicative flexibility of the ICTs ensures interaction on at least two instances: online and offline which deepen the extent of attraction, interests and commitments of the communicating parties as they negotiate and erect a common communication platform. This resonates with Castells' (2001) idea of 'networked individualism' by which technology transforms and varies the organisation and arrangement of social relationships. Long-term relationship (developed as a result of repeated mediated interaction) between two people previously unknown to each other may engender a certain kind of familiarity and relationship. The relationship could become intimate which may mean that those involved negotiate for alternative means of interaction even if it defies prevailing organisational instructions and norms. The exchange of contact numbers between a delivery driver and a customer so that either of them may call to find out when a delivery is due against the expressed prohibition by the company is an abiding example. However, occasionally, the relationship spills over the norms and ethics of business practices and develops into something beyond platonic rapport.

Equally, the request for marriage via the telephone and some of the romantic gestures that sometimes characterise order taking defies and attacks one of the fundamental assumptions of social presence theory. Social presence theory primarily argues that the lesser the number of channels or signficatory schemes there are within a given medium, the lesser regard one directs towards their interaction partners (Walther and Burgoon, 1992). The mediating power of the ICT artefacts in diverse forms of interaction enables and facilitates a high level of social presence, with a relatively high tendency to encourage personal and emotionally charged interaction. This can be accounted for, and exemplified, by the lack of face-to-face nature of ICT interaction. Therefore the generally claimed proposition that computer mediated interaction is lower

on social presence as compared to face-to-face interaction lends itself to highly contestable arguments. This is because the technology does not prevent emotions and other similar non-verbal cues from being transmitted to the person on the other end of the communication activity.

From the foregoing, technology mediated interaction can achieve the same effect just as face-to-face interaction can if not possibly greater. And messages exchanged via ICTs can influence one's communication partner, possibly, in an equal measure as collocated interaction, an observation radically different from Pena and Hancock (2008) who hold that in an online environment '...we cannot use our voice, gestures and gaze to influence others' (p. 7). It would be safe, then, to argue that essentially, the mediated object grants nearly the same or certain communication effects that make interaction via ICTs appear as though it is face-to-face communication.

6.1.1 Communication through control

A significant number of control strategies that EFSL adopts is mediated through portable and immovable ICTs in the form of mobile telephone, computers, PDAs, laptops, fixed telephones, etc. Essentially, control allows the application of a variety of interaction forms such as email, telephone calls, text messages among others. These strategies are informed by administrative behaviour to the extent that the formulation of various structural procedures to regulate behaviour is geared towards a determined end in a rational format. Thus, the many facets of communication point to administrative rationale for effective control and customer loyalty and retention in their long-term relationship with the company. In the end, EFSL achieves mediated control through different purposeful means of strategic interaction.

6.1.1.1 Control by significatory schemes as a trust-diminishing mechanism

One of the means by which control is manifested is through the specific application of certain significatory schemes for the transmission of standardised, non-negotiable messages or information. Information relayed in this arrangement enables a common interpretative scheme for the intended recipients. A prominent example of this

predesigned communication strategy that the study observed is the use of colour code to regulate the order processing activities of telesales reps. Colour in this instance becomes a tool of prohibition; forbidding telesales reps from performing specific duties of selling to a customer whose account is in debt or on hold. A customer's account can be put on hold if the total amount of ordered items falls below the required daily minimum amount or when an account for which an order has been made has an unfavourable account balance.

For instance the colour 'red' on an account is used to instruct telesales reps not to process any orders associated with such an account as it denotes the indebtedness of the customer to the company. The colour in this sense becomes a tool for imprinting the denotation and reference for adherence to a stated rule. Using a standard colour gives an indication of a standardised message and that a common interpretation frame is applied by the same audience with least regard to the prevailing and emergent nature of the situation. In such a condition, for instance, there is little chance for telesales reps to bring their opinions, beliefs and thoughts to bear on their specific duties even when different situational circumstances present themselves at separate times.

The presence of the significatory scheme(s) therefore limits the extent to which the telesales reps can relate their personal experience on the job to the specific dynamics of its execution. By implication the reference object assumes the status of instrument for the transmission of purposes, plans and meanings (Bowker and Star, 1999). As a result, the symbolic functionality of the reference object (significatory schemes) becomes a symbolic reality of presence (Borgmann, 1999). The use of significatory schemes for the expression of authority by means of mediated communication presents certain challenges to people working under administrative authority. It was discovered from the findings, for instance, that when two separate accounts say, A and B are in debt, of about £0.99 and £100.00 respectively, processing orders for such accounts would be unsuccessful. For, both accounts are viewed by the same criterion without taking into consideration the significance of the amount involved. The reason stems from the fact that the system has been programmed to flag up and put on hold orders about the situation not the details relating to the particularities of the situation. However the decision to grant and process

the order with an almost insignificance magnitude of debt would have to be sanctioned by a reference to, and a permission from, a higher authority.

It should be noted that in spite of his own faculties of reasoning, judgement and initiative, the subordinate is expected to restrain himself from taking such action and depend on the laid down channels of authority to process such orders. The thinking faculties of the subordinate is thus effectively set aside, making him fit Weber's description of 'specialists without spirit and sensualities without heart'(Weber, 1958 p. 182). A description that coincides with Simon's reasoning that in such a scenario the subordinate is forced to subject his own judgement and decision making powers in 'abeyance' and makes a detour to official procedures and stated formalities for job performance (Simon, 1997). Consequently, the degree of specialisation a person has on the job has, if any at all, a very limited impact on the decisions necessary to ensure successful performance as guidelines for carrying out tasks are separated from the contingent decisions that go with it.

The foregoing has a direct implication on trust. When control structures become regimented to the point of being perceived as a symbol of unquestionable trust, placing trust in human judgement is significantly diminished. Indeed human attributes like informed decisions, professional experience and sound judgement are given little room to operate. Trusting the wisdom of systems rather than human expertise seems to pervade and dominate the thinking of not only those promoting the use of such systems but also those applying those systems at the operational level of organisational undertaking.

6.1.1.2 Monitoring and mediated supervision mechanisms

Various forms of EFSL's communication mechanisms are geared and designed towards effective monitoring and feedback purposes to enhance internal effectiveness and external efficiency in its business operations. Part of the monitoring structures has become so embedded and enmeshed in the patterns of work that the means by which people and their corresponding behaviour and activities are monitored can scarcely be noticed in ordinary scheme of work. Monitoring activities are then taken for granted in the course of normal performance. Part of the reason could be attributed to their mediated

nature. The study bears testimony to the subtle nature in which certain monitoring activities are accomplished. Possibly, the technology which aids in the accomplishment of work has become part and parcel of the social relations of the organisational agents. An instance of this came to light when the financial controller, in an initial stage of an interview denied any monitoring systems in place in his outfit by which feedback is channelled into the mainstream of his department's activities.

However, during the latter stages of the said interview, the same officer inadvertently revealed, and even conceded, that sometimes he establishes a remote connection to try to identify what the situation or problem at the office might be 'so that the next day when I come [to the office] I can ask such questions as was it due to systems error ...?' Given that the idea and the reality of monitoring elude the practitioner, their administration results in a manifestation that can hardly be lost on the discerning independent observer. James's (1950) idea of fringe of consciousness that identifies a situation where an experienced reality is registered in a specific segment of the mind but failed to be recalled into conscious thought can be relied upon to explain this forgetful behaviour or 'taken-for-grantedness'. In spite of the fact that certain actions have been previously performed, the memory of such an activity finds residence in a dormant part of the mind and so its recollection escapes the cognitive awareness of the person concerned.

Electronic monitoring at EFSL well captures the notion of 'peripheral vision'(Fisher et al., 1981) which seeks to identify the 'ability to monitor aspects of the physical and behavioural environment outside the focus or direct line of their regard'(Heath and Luff, 2000 p. 90). Findings suggest the deployment of a semblance of an electronic Panopticon⁷ across the length and breadth of the entire organisational set up. This is achieved through work profiling and employee assignment logs. The traces and shadows establish a network of coordinating mechanisms that serves as a conduit for feedback for the decision making points in the organisation. These coordinating mechanisms involve mutual adjustment as well as both direct and mediated supervision

⁷ Panopticon is a term used to describe a form of prison architecture designed by Jeremy Bentham in 1785; the term is being applied in this context to illustrate its monitoring properties.

(Mintzberg, 1983). The motivation driving these surveillance techniques via ICT-driven interaction varies in function and kind.

The application of monitoring devices continuously relies on the individual technologies of control, such as database management, monitoring systems, bureaucratic hierarchies and the manner in which these are connected with each other. Networks of computer systems, telephones, video links and other media of electronic communication interconnectedness enable even remote access to distant knowledge and awareness of activities elsewhere in the organisation. With a network of surveillance systems, supervisors were quick to point out that they did not need to be around their subordinates to notice instances of breaches, deviations, strange, suspicious and unauthorised activities. The monitoring mechanisms ensure supervisors are constantly alert to, and readily aware of, the irregular events within the organisation's operational structure. In connection with this, not only does scrutiny operate continuously, but also 'the gaze is alert everywhere' (Foucault, 1995 p. 195). The following quotation by a sales administrator summarises and reinforces this observation.

'If they [a reference to subordinate] are sending anything below the minimum all the time, I can catch it from here...we don't need to see them, we don't need to communicate with them because we can see it on the system' – SAM.

Citing this quotation is to demonstrate the relevance of Ayer's (1959b , 2001) concept of logical rationalism. The aim is to make a juxtaposition of it to the ease with which supervisors relate logical rationalism with their thinking on the effectiveness of building a portfolio of evidence against subordinate deviations. Even more significant is the lingering notion of 'a sentiment of an invisible omniscience' (Lang, 2004 p. 53) calculated to impress on the subordinates that their activities are under constant inspection. For, nearly every mediated and electronic activity leaves in its wake a digital trace, perceptible from the centre (Mosco, 1983) to serve as a check on unruly behaviour and preventable errors. This coalesces with Foucault's submission that the observed 'is seen but he does not see' his observers and simultaneously move away from his litigious

observation that the observed 'is the object of information but never the subject of communication' (Foucault, 1995 p. 200).

The disagreement found in the latter part of the sentence is legitimate, because subordinates in EFSL have recourse to both horizontal and vertical channels of communication in carrying out their legitimate functions. These legitimate functions include order processing on the part of telesales reps and delivery of customer orders in terms delivery drivers. The monitoring capabilities inherent in network technologies facilitate both proactive and reactive business decisions driven by the logical gathering of business intelligence and information aimed at effective control. With electronic monitoring, the possibilities of feedback in different creative ways are always available. Through monitoring it was possible to separate those customer service staff and telesales reps who need to be given more training in some specific areas of their legitimate duties to enhance their performance.

It was possible to get feedback on the impact of training on telesales reps' behaviour on the phone during order processing by observing their performance without the slightest hint of their knowledge of such subtle examination. Again, it was possible to establish aptitudes and gauge characters in distinctive categories in respect of manpower succession plans, promotion and other incentive schemes. Crucially, a retrospective benefit of monitoring avoids the attribution and apportionment of blame to certain operational errors of commissions and or omissions.

In the realm of experiment, monitoring behaviour and events provided a fertile ground to test the effectiveness of pedagogical programmes in order to induce prompt response to negative attitude. From this perspective, the intelligence of the technology is a revelation of administration depended not just upon intuition but on rational and logical rules of administration and ritualised behavioural practices. Three cardinal *raison d'être*s of the organisation's information management system are constitutive of this phenomenon as indicated in information creation, preservation and dissemination. Thus monitoring through information management techniques makes it possible for information to be recycled, reproduced and replicated to regulate human and non-human activities in the organisation.

6.1.2 Mediated control: Iron cage or electronic chain?

The administration of mediated control at EFSL evokes Weber's imagery of the 'iron cage' (1958 p. 180 - 181) in some respects and electronic chains in other accounts. The extensive rationalisation of automated structures of computer systems regulates, determines and, to some extent, dictates the pace and pattern of work that entrap telesales reps and delivery drivers. Subsequently, their behaviour is moulded in an iron cage of rule-driven logical control. This observation can be confirmed and accounted for by the findings in respect of the domineering sales target instituted for telesales reps. In this connection, telesales reps are under specific instruction and obligation to sell new product lines to 11 people (both potential and existing customers) a day on the telephone.

Particularly, the responses from two telesales reps about this sale expansion and customer acquisition and retention technique were laden with worry, frustration and intimidation. Indeed, one telesales rep minced no words when she declared in an interview that she feels quite apprehensive going to work at the thought of the challenge in meeting the daily sales target via the telephone. The expression of this worryingly frustrating experience connects well with an observation elsewhere that 'the increasing competitiveness of the modern economy has rendered people slaves to their workplaces' (Bolchover, 2005 p. 2). Besides, Bunting's (2005) 'Willing Slaves...' similarly has a striking resemblance with a workplace characterised by a stressed and overworked employees.

The desire for efficiency and the ultimate motive of profitability, expressed by way of good financial standing, culminates in the institution of non-negotiable mechanisms of mediated control for eliciting uncompromising standards of behaviour and performance. This situation accounts for a simultaneous reflection on both outcome and behaviour control as espoused by Ouchi and Maguire (1975), although the pair's analysis considers personal surveillance and measurements of outcomes as occurring under separate conditions of work. Once organisational life and activity turn out to be bureaucratically legitimised through such behaviour-shaping structures, human actions and work processes are constrained by them. For example, the rule that binds telesales reps to refer and have all refund decisions sanctioned by somebody higher on the

organisational hierarchy could hinder the possibility of a timely response from the telesales rep.

Ipsa facto, a rule that encourages organisational efficiency on the one hand (securing administrative endorsement and the supervision of refunds) concurrently holds back its operational effectiveness in terms of delayed response. In Weber's parlance, the individual organisational agent operating under the instance of these tightly coupled structures 'cannot squirm out of the apparatus into which he has been harnessed'⁸. Stated differently, as rich information for carrying out an activity is stipulated through automation, the vitality of discretion seems to be sapped up by these same structural mechanisms of performance. Thus structured systems of control immediately introduce us to an unequivocal paradox. The very rational processes of work that allow cooperative organisational effort tend to impede the same joint, collaborative organisational endeavour. The systems of mediated control therefore develop into an iron cage consigning its inhabitants to a tabernacle of 'polar night of icy darkness' (Weber, 1994 p. 368). This is the place where the exercise of personal judgment and individual freedom become increasingly difficult if not impossible in most circumstances. To this extent, there remains little room within which the individual can manoeuvre or bring their experience, however sensible it may seem, to bear on the specific dictates of their job.

Social agents in the organisation under study are inevitably left with barely any choice to handle the tactical challenges associated with their work. The iron cage of structured communication systems literally takes away the intelligent capabilities of the actor, along with their goals, plans, values, beliefs and past experiences. Thinking innovatively to widen their sphere of coping with unanticipated challenges and taking the initiative to deal with unforeseen events connected with the situational dynamics of their work are hampered in the process. In light of the foregoing, it would seem strange to raise the issue of subordinates having the right of discretion in the normal course of executing their duties. However, the findings do indicate that regardless of how tight control

⁸ This is a quotation from James R Barker's (1993), "Tightening the Iron Cage: Concertive Control in Self-Managing Teams", *Administrative Science Quarterly*, 38, 408 – 437, which he attributes to Max Weber (1978; 987 – 988).

structures are designed there will always be room for the use of discretionary powers at the operational level of activity.

This reveals a tension between administrative mediated control and individual discretion which is a potential source of psychological conflict in balancing personal interests against collective objective. For instance, a rule obliging delivery drivers to telephone the customer service at the head office when customers are not ready to pick their orders at the time of delivery is susceptible to, and at the mercy of, the drivers' personal judgement. Due to inadequate and weak monitoring regulations, the delivery drivers almost always have a field day when it comes to making the final decision. Many options are open to the delivery drivers in spite of this express stipulation, especially when customers are not on hand to collect their orders at the time of their arrival at the vicinity of the shop.

Some drivers would proceed to other areas or slots on their delivery schedule and return to the previously closed shops later, in the belief that customers may be ready to sign for their items upon second delivery attempt. Others will telephone the head office on the company's mobile phone to inform them of the situation on the ground. Still, some delivery drivers, who have developed vibrant relationship with the company's customers, would prefer to call such customers on their mobile or fixed telephones to let them know that they are waiting right in front of their shop.

During the data-gathering stage of this research, there were two separate instances when a delivery driver and the writer spent about two-thirds of an hour in a nearby residential area to while away the time in a delivery van. This situation arose when majority of the shops were closed and the respective customers were not available to sign for their ordered items. It could be argued that the deployment of context-aware or location-based systems in the form of Global Positioning System (GPS) can be used to effectively limit or curtail the extent of the driver's use of discretion, sometimes inappropriate, in this aspect of their work. This is a valid point; however, the institution of such a monitoring technology should be gauged with cost-benefit analysis to establish its commercial validity and viability. However as of the time of this study, no such location-sensitive technology was in use. It is fair, though, to acknowledge that the

management of EFSL was considering the feasibility of instituting such a project in the near future to closely monitor and locate their drivers on the ground at any given period.

6.2 Specialised service delivery through mutual adjustment

For reasons of operational efficiency, supplying food logistics to hundreds of small restaurants in and around London requires effective structural, organisational configurations that allow for speed, accuracy, urgency and tactfulness within the entire organisational network. Specialisation arising out of division of labour has come to be the key feature facilitating the company's order processing and delivery services. Each unit, section and department at EFSL's structured hierarchical outfit functions in concert with one another to ensure a seamless collaborative, co-operative and coordinated service delivery of customers' orders and other operational commitments (Mintzberg, 1983). Featuring prominently in the service delivery effort and the accompanying chain of activities is technology, playing both instrumental and conditional roles. Mutual adjustment is a fundamental feature of these roles as it enables individuals organise their own work in an environment of constant communication among colleagues in the spirit of co-operation.

The useful application of technology in multifaceted ways comes into sharp focus when the BOM gives an adumbration of what EFSL has become. According to him, 'we've (with specific allusion to the company) become absolutely professional in the methodologies that we use ..., IT systems that we have, the way we store our goods'. In other words, the BOM implies the reliance on technology to deliver satisfactory service through the performance of specialised tasks that anchors customer loyalty to produce fruitful and working relationship with the company and its clientele. The findings imply that work has been categorised, sectioned and compartmentalised to reflect the degree of variations of task specialisation necessary to work around seamless collaborative and coordinated approach. The primary aim is to dispatch customer orders and their queries with the highest possible customer satisfaction against minimum cost implications. The methodological approach to specialised work performance necessitates job definition, configuration of structural space and performance of duties in a fashion reminiscent of

division of labour. Each group of personnel accounts for a different specialised segment of the entire organisational assignment. By extension, different technology devices are used to undertake jobs for which they are best suited and separate personnel are also responsible for certain tasks under the sphere of their specialisation.

Division of labour and specialisation which underlie the tasks of both telesales reps and delivery drivers enable interaction to cut across the breadth and length of the organisation without regard to the laid down structures of authority. In this case, boundaries of authority become decomposed as specialisation allows subordinates to wield much control and increases the measure of their discretion on the job. As the superiors rely upon subordinates to perform certain crucial tasks, it makes them (subordinates) nearly indispensable in the entire organisation scheme of work however insignificant their specific roles may seem. Thus the performance of specialised tasks triggers the need for managing collaboration, supervising cooperative activities and harmonising coordinated efforts. These forms of interaction are purposive rather than the precise functionalities of the particular communication device being used. In other words, the use of communication gadgets may override the immediate considerations of their original or familiar functions.

The central motive for mediating interaction by means of technology is seen to manifest itself in three fundamental forms when undertaking the performance of specialised tasks necessitated by division of labour. While the channels of communication in technology mediated interaction may originate from top to bottom, bottom up or in a lateral fashion, lines of administrative authority are almost always hierarchical in orientation. Subordinates may initiate communication with their superiors (bottom up) to receive further instructions, suggestions or explanations for carrying out their assigned tasks. Working colleagues may also exchange ideas and knowledge regarding their collaborative jobs and the mechanics of their delivery (lateral interaction) and superiors may equally provide directives, details and the terms under which agreed duties may be executed (top down interaction).

6.2.1 Managing relationship through mediated interaction

Strengthening and encouraging robust relationship with customers through the network of various ICT systems such as the use of PDA, telephone, mobile phone and laptop demands a careful strategy that assures customers of abiding trust and unflinching loyalty. The management of EFSL seems perpetually sensitive to the logic of the significance of encouraging an enduring relationship with its customers. To this end, different appealing and dynamic interaction strategies have been instituted to ensure customer retention and good relationship. The use of electronic communication equipment facilitates the recording, processing and dissemination of the right information to various contact points. Such information involves customer account details, previous record of service and payment difficulties and awareness of customer preferences to front-line staff to ensure marked improvement in customer service by means of the following techniques.

6.2.1.1 Empowering front-line staff through call back

The responder call back technique enables front-line telesales reps to keep the hearts and minds of customers with a high propensity to switch their loyalty and those who have almost established commercial contacts elsewhere. The aim is for EFSL to sustain contact with its customers on regular basis by seasoning their interaction with demonstrable responsiveness, swiftness and flexibility to create an atmosphere of what Ling (2008) terms 'bounded solidarity'. The aim of cultivating bounded solidarity is driven by the desire to raise and enhance interaction with those customers considered to be 'within the intimate sphere' (ibid. p. 165). It is also a technique for mending breached and severed relationship with customers that might have occurred in the process of delivery. Indeed, this interaction technique allows for active and deep relationship with customers. When telesales reps initiate calls to customers who have not made orders for four weeks or more, the company gets the unique opportunity to know at first instance the causes and reasons for a change in customer behaviour. The telesales reps have been trained to woo and win back the discontented customers as far as it is within their capability, once they have been able to reach out to them on the telephone. When the

sentiments motivating such action are addressed, it mends the bridge on which to develop and enhance profitable customer relationship management activities.

6.2.1.2 Innovative ICT-driven interaction as a comfort zone

Delivering services seasoned with personalisation and customisation constitutes one of the hallmarks of successful and effective customer relationship programmes. Personalisation and customisation are driven by the need and desire to strike a balance between improvement and innovation (Holmbeg and Mathiassen, 2001, Gibson and Birkinshaw, 2004). Not only on the psychology of floating customers does this marketing technique seem to reap benefits, but it is also a possible guarantee of effective sales campaign aimed at retaining even reliable and assured customers. Within the context of EFSL, findings reveal that customers are provided with the option of using a language with which they are most comfortable. For instance, since a significant proportion of the company's customers are of Turkish extraction, there is a language switching mechanism that identifies the language orientation of all customers initiating calls to the company.

The language switching mechanism promptly allocates the call to a waiting telesales rep who communicates well in Turkish. Where two or more Turkish-speaking telesales reps are prepared to deal with an incoming Turkish call, the system is able to determine and allocate the call to the rep with the highest frequency of previous interaction with that particular customer. The reason behind this form of innovative ICT-based interaction is to facilitate easy rapport with customers thereby deepening the level of trust between the customer and the organisation.

Apart from its trust generating advantages, this innovative language changing facility affords customers and the company the luxury of processing orders with minimum number of errors. Conducting interaction at a more familiar level in terms of language provides a common vocabulary platform for both parties to reach a deeper appreciation of each other's point of reference. On this basis, little room is given to doubts, uncertainties, mistakes or errors arising out of inappropriate pronunciation of the names of certain food items thereby limiting the degree of wrong order processing. Allowing customers to use a native tongue to interact with front-line staff makes it possible for them to relate well to the company. Findings indicate that customers trusted

those telesales reps who spoke their ‘language’ and were in no difficult position to trust them when making a complaint or discussing business issues with them. Once the groundwork of trust has been laid, customers were given the ‘comfort zone’ within which they could interact in an open, mutually benefiting manner.

6.2.2 Emotional repercussions of mediated interaction

Collins (2004) largely sees emotions as a double-edged mechanism for building and transforming social structures on the one hand, and a potential source of societal conflict on the other, through the application of what he refers to as ‘emotional energy’. The universal approach to understanding emotions in terms of micro and macro-sociological dynamics as contended by Collins does not resonate with the findings associated with this study. It is therefore logical that this segment of the study takes a radical point of departure from Collins’ sociological account of emotions and rather focuses on the immediate repercussions of emotional ramifications necessitated by ICT-induced interactions. Indeed, findings from this study support emotion as a key behaviour changing mechanism at the level of individual experience, and this idea seems more accommodative of Simon’s (1997) exposition on the concept as driving the behaviour and subsequent performance of organisational agents.

As an attempt is made to explore and understand technology mediated interaction in a variety of ways, the emotional repercussions among telesales reps in the call centre become too pronounced and forceful to ignore as far as the research findings. This is because the many possibilities of communication driven by technology in the study resulted in scenarios that transcend the immediate purpose of selling company products and addressing direct customer concerns on the telephone. The emotional conditions necessitated by those communication activities are worthy of reflective consideration. For instance, evidence of emotional hangover and spillover of technology mediated interaction arose from two divergent sources; one within the company (internal) and the other from outside the organisation (external).

Internally generated emotion-charged telesales reps seem to result from ‘unrealistic’, customer call-back daily targets. Telesales reps found it was seemingly

unreasonable for their immediate superiors to expect them to introduce new products and also sell to customers. A typical situation is when customers have expressed the least hint about their need for such purchases or when they have already been angered by unsatisfactory conditions of delivery. Further, inability on the part of telesales reps to meet sales target arouses the feeling of worry, anxiety and frustration which eventually bears on their overall performance as motivation for future duties sinks. Absenteeism – genuine or enforced – becomes the likely characteristic of employee behaviour with respect to his or her current job as the daily determined targets keep ‘hunting’ them.

Against this view, emotion is no longer seen in its favourably beneficial light ‘as a force that helps direct actions toward particular goals’... neither does it work ‘with reason’ because it fails to align with the general and enduring objectives of the organisation (ibid p. 90). Entertaining the thoughts of anxiety and trepidation about a possible failure of achieving and fulfilling prescribed expectations is an attractive and appealing ingredient of work disaffection. The following sentiment of a telesales rep “After two years of doing it [a reference to his position as a team leader] I used to get more and more worried of coming to work if my team didn’t hit their target” is proxy of such alienating sentiments. When emotional worries get in the way of assigned work, there remains the lingering potential for employees to become psychologically detached from corporate objectives. They then view their once cherished job as a burden and a source of their present job uncertainty, work apathy and discomfort.

Externally motivated emotional scar is a cumulative result of frustrated, worried and occasionally aggressive customers who call to spew their spleen on telesales or customer service reps at the least provocation. More often than not their harsh action is associated with queries such as delivery errors, incomplete shipment, inaccurate billing, and prolonged waiting time on the other side of the phone among other related issues. It may also be due to a probable lack of patience or misunderstanding on the part of telesales or customer service reps trying to address and resolve customer complaints or problems over the telephone. When customers insult and mistreat telesales or customer service reps on the telephone, they become distracted and take such abuse on a personal level to the extent of personalising it. In other words, they become emotionally involved without being open-minded about the issues at stake.

Consequently, they become subjective to the scale that they momentarily forget and ignore their immediate allegiance and mandate to the cause of the organisation as a group committed to a common mission. A near feuding remark by a telesales rep sums up the cumulative effect of employee disenchantment when emotions surge to an unbearable limit as a result of mediated interaction. *Personally I don't think I really like my job [as a telesales representative] anymore, I have got commitments so I have to come and get paid.* With this kind of emotionally-laden statement, performing one's duty latently removes any traces of dedication and commitment that usually go with effective job execution and professionalism. Having made this observation, it is tempting to assume that emotions emit displeasing consequences or depressing experiences in technology driven interaction in which case anger, abuse, contempt present themselves as the only discernable observation.

This notwithstanding, it is also not uncommon to uncover some of the positive emotional experiences of technology mediated interaction as was witnessed in this study. Indeed, this study chanced upon instances of mutual admiration and hedonic experiences between certain telesales reps and some customers as a result of the familiarity from repeated mediated interactions. It was found out that where deep relationship exists between customers and telesales or customer service reps there were breaches of professional ethics that are supposed to guide the performance of legitimate functions. This is because when pleasure, excitement and even enjoyment gain prominence in everyday interactions rising from intense communication, the possibility of getting involved personally, and with one's emotions, can be unexpectedly acute.

6.3 Making sense of ICT-driven interaction

ICTs have made interaction an activity that is both dynamic and flexible, though at times it can be equally both problematic and inconvenient in its application in diverse contextual circumstances. One of the instructive revelations of this study directly relates to the varied application of different communication gadgets among working colleagues even as they collaborate, co-operate and coordinate their respective tasks in a harmonious fashion. The subject of multi-dimensional communication techniques as revealed in the

findings confines itself to the discussions in this subsection. Motivations behind the adoption of ICT communication tool(s) to mediate interaction are organised, in line with this study, around three conceptually different but empirically appealing themes on the choice of medium. These are the nature of task(s) to be performed, the extent of social presence the mediating tool affords and the degree of information richness provided by the communicating equipment.

Selecting a medium to engage in mediated interaction demands the consideration of several factors that play on the motivations of the initiating party as well as a thought (sometimes) on the likely consequences of the receiving counterpart. Reasons ranging from economic (cost of interaction), time, psychology, sociability, privacy and urgency, synchronicity and availability are some of the possible underlying or even overriding considerations for preferring a particular medium of communication over another, irrespective of the task at hand. Views across the various sections and departments in the organisation on the driving force behind their adoption of ICTs to connect with their colleagues yielded multiple rationalities for their final decision on settling on a particular application for communication.

6.3.1 The economics (cost) of interaction

One outstanding but fascinating revelation that this study came to find in the field of ICT interaction is the economics or the cost decisions involved in setting up what can fit Goffman's (1963a) description of 'engagement enclosures' with one's interaction partner(s). In this sense cost-benefit analysis is given a careful, thoughtful consideration and weighed up against the use of alternative media. The use of cost-benefit analysis as a criterion for engaging in interaction hinges on the duration for the construction of the message. Time is also a factor in terms of the length of the intervening period within which the initiating party may secure a feedback from his counterpart on a communicated message (the degree of synchronicity). When the element of time is given financial interpretation in the composition and management of email as a medium of interaction, it becomes a costly activity as communication is arranged and carried out.

The BOM makes a terse mathematical calculation to capture the cost implications of managing email as a form of mediated interaction. Hear him: 'Email management is time-consuming as it can take about 50% of your work time'. In effect, email as a mode of interaction can be detrimental to productivity and therefore may have an oblique relationship with the bottom-line. Probing a bit further to understand how sending email is seen as a costly interaction mechanism by some of the staff interviewed, one plausible factor came to the fore. Constructing a moderately proper message in a second language, given that a greater percentage of the employees speak English as a foreign language, demands considerable amount of time in thoughtful composition of the intended message. The time to ensure that sentence construction, and for that matter the content of the message, reflects the appropriateness of grammatical syntax, clear vocabulary expression and unambiguity. The challenge to conform to the rules of the language of communication seems a daunting one. This stems from the ambition to guarantee a certain degree of mutual and shared understanding of the matter under consideration.

In a different development communication by emails is also perceived to be cost effective means of broadcasting and getting in touch with a large number of people simultaneously with a standardised message. Standardised communicated information carries with it the aura of consistency in mediated interaction. It is worth repeating the following arresting illustration by the GM to reinforce this observation.

'I send an email to the field sales reps and all of them get the same message simultaneously, it is not misinterpreted, and it is accurate, but if it is a telephone (mobile or landline), I have to send it one after the other. However, if you speak to someone, two or three different people asking the same question, you'd get two or three different interpretations...so that (email) works very well for me'.

One might be tempted to reason with the GM that emails serve to significantly avert a potential controversy resulting from ascribing conflicting and plural interpretations to the same communicated message. From the point of view of the originating party, email appears to be a time-saving interaction mechanism. For instance, the time that would be

devoted to sending the same message designed for different people in a telephone communication would have been saved for other pressing organisational demands.

6.3.2 Social presence vs. bodily absence

Adherents of the doctrine of social presence suggest that face-to-face interaction can hardly be argued to have a perfect substitute (Culnan and Markus, 1987, Walther, 1992). According to them mediated interaction is technologically weak on its 'capacity to transmit information about facial expression, direction of look, posture, dress and nonverbal, vocal cues' (Short et al., 1976b p. 65). The foundation of this belief is grounded in their conviction that social presence presents a medium that allows for interaction to be consummated without the interference of, and the inconveniences sometimes produced by, mediating devices. In fact, their thesis has heavily relied on the supposed superior quality of unmediated interaction which ICT-driven interaction struggles to replicate.

Communication cues like facial expressions, vocal inflexions and other gestures that provide additional decipherability to face-to-face communication and without which the meaning of exchanged information may be obscured are readily marshalled to support the claim. However, the details of their submission, significantly influenced by 'rich' rather than 'lean' channels of communication, make minimal reference to the context and content surrounding the circumstances of certain interaction activities largely driven by ICTs (see, for example, Daft et al., 1987). Again the explanation offered to back the claims of the superiority of social presence does not account for the perceptions people hold of the medium with which they use to relay their message.

Even though the significance of the notion of social presence cannot be entirely set aside in most meaningful communication engagements, certain segments of the findings of this study is indifferent to, and occasionally undermines, its fundamental postulates. For instance, some interviewees indicated they pay least attention to matters of social presence when initiating interaction with their working colleagues. They have a settled indifference to the use of ICTs with specific reference to telephone and email for

mediating their interaction. Their contention seems to dwell not primarily on the device being used but on the content of the message being transmitted through the device. This observation was echoed by a couple of telesales reps' opinions for which the following statement is typical.

'Just the same thing that I would say to the other person on the line is what I put down on the email; if I want to say something I would say the same on the email as I would via the phone'

When mediated interaction gets to a point of 'philosophical indifference' the element of social presence barely shows up in the motivational frame of the initiating party to an interaction endeavour. To this end, synchronicity, or more specifically, the simultaneity of interaction with one's communication partner, through whom feedback – instantaneous or delayed – can be secured, is no longer an issue. Logically, the speed at which feedback can be provided to a communicated message does not become a defining condition for communication. Rather, the instrumentality of the communication medium in transmitting intentions or messages across is the overriding consideration. In a related but a contrasting account, the findings suggest the initiating party to interaction, at least, pays considerably little attention to the implications of the capabilities of the communication tool in the message transmission process. For instance, sending email leaves traces of the communicated message. The traces can serve as evidence of a communicative act to both recipient and sender to thrash out any doubts, misunderstandings, or controversies that might arise out of the communicated information in the future. Though this could not originally be said of telephone communication, advance technologies have made it possible for telephone conversations to be recorded so as to keep track of the import of the communication for reference and other commercial or legal purposes.

Concerns about the readiness of a person to enter into the immediate presence of his interaction partner have however made it possible for social presence to feature prominently on the interaction agenda. This is because uncertainties about the absence or the inattentiveness of the potential recipient of a message are likely to prompt the sender to reconsider – carefully – the device likely to yield a better and a more satisfying communication experience. Instances of this anxiety were revealed in the findings among

some of the interviewees. One opinion contended that *'when you send an email you don't know if that person is actually available in the premises or if they are actually going to reply, the phone is much more easier to find out ... and you know how things are for yourself'*. There is another viewpoint by an interviewee which is concisely contrasted with one of the experiential benefits of face-to-face interaction against an obvious demerit of mediating interaction via the telephone. *'Talking over the telephone, you never know if the other person is listening to you so when you have the eye contact it makes a huge difference'*.

These representative samples of insufficient knowledge to permit the determination of the readiness or otherwise of one's counterpart in mediated interaction raises the issue of 'absence availability' (Sarbaugh-Thompson and Feldman, 1998) which is maximised by the use of email as ICT interaction mechanism. With the email, one's absence or unavailability does not necessarily become a condition for communication. Indeed, evidence exists in this study of a situation where telesales reps had to put customers on hold on the telephone, compose and send email to customer service staff to address concerns raised by customers regarding their account or delivery. This is when an original attempt by the telesales rep to contact customer service staff on the telephone on behalf of a customer for a prompt response to a query had failed. It is the belief of the telesales rep that the content of the email would be addressed by his working colleague at his earliest opportunity (i.e. whenever he or she is available).

6.3.3 Enriching information or mediating interaction?

Information richness is central to the reduction of equivocality and ambiguity in mediated interaction. Proponents of the information richness theory suggest the variety in communication due to the differences in media choice depends on bandwidth or the number of cues offered by the media. Information richness, described as the ability of information to shape understanding within a specific time frame (Daft and Lengel, 1986), is influential in informing and determining people's media choice. Face-to-face interaction still reigns supreme vis-à-vis the other brands of interaction, particularly those mediated by ICTs such as email, telephone and videoconferencing, though these are

considered as ‘moderately rich’ (Walther, 1992 p. 57). The richness of face-to-face interaction is attributed to the number of channels it affords, the possibility of instant feedback it presents and the opportunities of back-channelling signals it enhances.

There is ample evidence in this study to imply that the degree of richness provided by the media has a direct bearing on its selection as a channel of communication. Supporting his reason as to why he favours the telephone over email as a medium to interact with his colleagues one interviewee revealed the following: *‘With email you cannot quite tell if something is right or wrong...you ring them up, you find there is a little bit of nervousness in their voice and you get the chance to say, tell me what is going on’* (see chapter 5 above). The benefits of vocal cues and the added advantage of immediate feedback provided by the mediating capabilities of telephone communication appears to be the overarching factor motivating its choice as a communication medium. The communication cues supply clues to message contents, which potentially clear the ambiguities around them, thereby making the communicated messages less equivocal. In effect the superiority of the mediating artefact also plays no less a significant role.

The decision to select a particular kind of a communication channel is also influenced and informed by the demands and dynamics of the tasks at hand. In other words, the extent to which the medium aids the performance of the tasks at hand influences its final selection as a means of communication. Another interviewee similarly relegated email – as a medium of communication – to a distant second place as compared to the telephone. He related his experiential account in the following way.

‘Personally the email is a second option. I prefer the use of the telephone because that gives me a more appropriate description to the problems the staff may have. If I don’t get immediate response to emails and I can’t put them any questions for instant response. That means I can’t really fish out what the problem is when I use the email’ – ITM.

The aim of synchronous interaction, immediate feedback and high degree of richness in mediated interaction resulting in as low equivocality as possible to tackle the exigencies of contingent and planned assignments necessitate a richer medium of communication

(Ngwenyama and Lee, 1997). This is to heighten awareness through orientation to a common frame of reference that raises the level of cognition to enhance performance on a given task.

6.3.4 Miscellaneous accounts

Apart from these obvious instrumentalities, motivations and conditions that drive the trend of interactions at EFSL, there are other interaction-driven issues that the findings stumble upon. These issues border on informal interaction, privacy and security concerns as well as the critical mass syndrome necessary to carry out meaningful interaction with one's working colleagues.

Informal communication is found to be a key channel through which organisational intelligence can be acquired. Relating his personal experience during this study, one interviewee made the following remark: *'I think sometimes the information you get while having lunch or walking in the corridor has got more weight and value than the one you get from a formal meeting. I've learned, with amazement, over the years ... that the formal meetings do not always bring everything out'* (see chapter 5 above). The value and richness of the source of this information may not be due to its personal or impersonal nature. It may not even be down to the 'privilege' of its unmediated format. However, the content it provides is full of unadulterated richness. Part of this can be explained by the context within which such information is generated. Parties to this form of interaction are relaxed; presumably they are under no obligation as they operate under what Goffman terms conditions of 'engagement enclosures' (Goffman, 1963a).

By engagement enclosures, Goffman meant the ability of interaction partners to engage in public conversation without involving those present or around them. Psychologically, less significant regard is paid to the immediate or remote consequences of the ongoing conversation. The parties are therefore open and less inhibited about the atmosphere within which the content of their conversation is generated. This notwithstanding, privacy and security concerns have also been noted to be the driving forces behind the invocation and application of a particular interaction activity. This is

when the communicating parties feel the need to confine the content of their interaction within themselves, and at the same time, as far as possible from third parties.

6.4 Chapter in review

In line with the stated intentions of this research, this chapter confines itself to three key arguments gleaned from the research findings:

- The existence of multivariate sources of the manifestations and mechanics of mediated control in ICT interaction;
- That mediated control mechanisms are instrumental in building and encouraging vibrant customer relationship management activities
- ICT interactions have unintended consequences, and that the choice of a medium is premised on one's philosophical leanings, sometimes, based on lived experiential account.

The central position so far is that administrative behaviour in contemporary times which deeply involves the application of ICTs challenges the traditional assumptions about control; and that effective control implies the use of multiple strategies in meeting the challenges of corporate objectives. In other words, once ICTs have become embedded in everyday work, control should be approached from a portfolio standpoint to ensure it is in sync with the changing and emerging character of administrative behaviour. Communication through control and coding schemes are some of the manifestations by which mediated control is administered. Surveillance and electronic supervisory notions of control techniques also extend the view of administrative control. The overall argument in this context suggests that human and technology are combined in their categorical spheres of strengths to oversee the administration of mediated control. The deployment of these assortments of control measures addresses the key research question: *How does mediated control manifest and is ensured in ICT-driven interaction in an organisation's collaborative work?*

Analysis suggests that mediated control is inextricably linked with the use of discretion; therefore any discussion on control should equally incorporate discretionary elements that inevitably surface due to unanticipated events that result from the

performance of legitimate tasks. Examining discretion in this vein provides the opportunity to understand mediated control from two ontological standpoints: the power of the superior and the authority of the subordinate in realising corporate objectives. Customer relationship management also features prominently in the findings of this study. And Simon's theory of administrative behaviour provides a strong foundation on which we can extend its conceptualisation in the context of this research.

Given the rapid rate of employee turnover among telesales reps and delivery drivers the internal loyalty situation in EFSL can be described as weak. Underlying factors to this observation are tension, stress and frustration that often characterise their work. The extent of the high rate of employee turnover can be appreciated when viewed against the fact that the writer did not even get the opportunity to conduct a second round of interview with some of the respondents over the brief data-collection period.

The provision of specialised services through the use of mediated interaction introduces us to one central postulate: the emotional repercussions associated with communication through ICTs. The other major theme of this chapter brings us to a near puzzling situation, that mediated control inevitably induces the idea of discretion in its administration due to the lack of foresight to anticipate the many possibilities of performing assigned tasks. There are several situated rationalities connected with the employment of a specific technology tool and medium for carrying out ICT-mediated interaction. This section argued, with a particular force, for the case that there is hardly a superior reason for preferring a particular medium of interaction to another. It also alluded to the notion that the communicated message is of greater significance than the circumstances around which the message is transmitted. Second, the cost implications, social presence, media richness and other incidental factors are perceived to constitute the conditionalities, and not the instrumentalities, for engaging in mediated interaction. Therefore the ends, rather than the means, dominate the thinking of some people who communicate through mediated interaction.

These issues have fleshed out the recurring theme of this research in general and the analysis section in particular: ICT-driven interaction, mediated control, discretion, monitoring and the ambivalence of the situational rationalities in the use of ICTs. Contemporary work of business heavily reliant on ICTs characterise the combination of

these concepts as a reflection on the dynamics of daily challenges associated with organisational life. Therefore extending our understanding on the theoretical concepts of administrative behaviour to bring it in tandem with ICT-driven work is essential. Consequently, this essential challenge constitutes the priority of the next chapter.

CHAPTER SEVEN: DISCUSSION
MANIFESTATIONS, CHALLENGES AND UNDERLYING RATIONALITIES
OF ICT-DRIVEN INTERACTION AND MEDIATED CONTROL

Drawing on the key research findings, the previous chapter subjected the emerging themes from chapter 5 to detailed interpretive analysis. Consequently, the chapter settled on three fundamental viewpoints: that control has a multi-faceted application with varied manifestations in its administration; that customer relationship management could analytically be understood from mediated control mechanisms and that ICT-driven interaction with its manifold situated rationalities has unpredictable consequences in organisational discourse. These themes form the focus of discussion through the lens of the theory of administrative behaviour in this chapter.

Therefore the order of discussion proceeds as follows. Section 7.1 delves into a reconceptualisation of ICT-enabled organisational control drawn from the observation of the field study. It takes a reflective look at how managerial control is enacted from two specific complementary viewpoints as far as the organisation is concerned: telesales delivery drivers' perspective. The particular focus of 7.2 examines the application of discretion as an often overlooked concept in most organisational discourses on control. Relationship management forms the running theme in section 7.3, which explains a dynamic approach to understanding the role ICT plays in managing employee relationship as a worthy cause of the organisation's commercial undertaking in mediated control. The strategic implication of training in the whole process of employee relationship management receives analytical attention. Section 7.4 discusses ICT-driven interaction from the standpoint of multiple situated rationalities as an organisational discourse. The last segment of 7.5 provides a cursory look at the whole chapter highlighting the drawback and relevance of Simon's theory of administrative behaviour in explaining the various dimensions of the field study.

7.1 Expressions of ICT induced organisational control

The nature of contemporary work, involving extensive utilisation of ICTs, and the different modes of its performance, calls for the execution of control in different formats if organisations intend to keep up with the pace of its challenges. This includes the enduring desire to remain competitive through the application of motley survival techniques (Holmberg and Mathiassen, 2001). To gain any appreciable degree of insights into the manifestations of control, it is apropos to explain the notion of ICT-driven organisational control. The phrase ‘ICT-driven organisational control’ suggests the crucial role information technology plays in the interaction of both subordinates and superiors in managing their respective legitimate and sometimes arbitrary or emergent contextual organisational engagements. To this end, it is appropriate to take a further look at the different styles of control, however subtle and startling, as it became manifest at EFSL.

7.1.1 The manifest character of control – a sales perspective

Control of telesales staff by their immediate superior managers at EFSL occurs in an atmosphere that nearly lumps and merges common ground and context into a complete, seamless one. In a sense, interaction – even in a mediated mode – in this context occurs within the same physical setting (copresence) which makes it relatively easier for, especially, the superior managers of telesales reps to maintain close visibility of the functions and activities of their subordinates. This common operating context enables so much to be taken for granted, at least from the point of view of managerial control. Easy access combined with a sense of almost guaranteed feedback raises a platform of trust on which control seems to function. Thus people are more ready to trust others when opportunities exist for shared experience with a more transparent approach to negotiating commitments. In this case, the other interaction partner is not kept in the dark as to current status of events (Mayer et al., 1995). In other words, even if control by means of human strategies is difficult to accomplish, its technology equivalent is on hand to effect effective managerial monitoring and control of subordinate activities.

The foregoing provides the frame by which all the essential control mechanisms, such as monitoring, feedback and its allied forms towards telesales reps are applied. In short, the very context of the control for the telesales reps included the presence of their superior managers at the same time.

7.1.2 The manifest character of control – a distribution standpoint

Unlike the telesales staff, the working environment of delivery drivers at EFSL is subject to shifting and emergent boundaries. Seemingly, trust can be counted on as a viable coordinating device to ensure effective administration of control between the immediate superiors at the centre of authority and their subordinates in remote locations. Control in this environment demands a different strategy, flexible enough to accommodate the ever-changing dynamics on the field of operation. Here too, the centre of authority (superior) depends on the remote source (subordinates) to furnish them with the right information on the situation pertaining to the conditions of work. Given that the superior has limited perceptible abilities of determining and understanding the prevailing circumstances of his working colleague, trust becomes the feasible alternative for sustaining the bond of cooperation at a distance (Olson and Olson, 2000). It must be mentioned nonetheless that trust in mediated control environment is arguably delicate. Similarly, there is limited possibility of having recourse to independent alternative monitoring mechanisms to update the centre of authority on the status of operating events confronting the subordinates.

This makes mediated control in case of delivery drivers a more challenging undertaking on the part of their superiors, an observation that resonates quite well with the view that ‘remote work is hard to conduct, even with the best of today’s technologies’ (Ibid. p. 152). Schmidt and Simone (1996) provide a graphic detail of the conditions of work that are reminiscent of the delivery drivers’ in this study and for whom different control strategy is pertinent.

The field of work may have a multitude of possible states, the state of the field may be ambiguous, and state changes may be interdependent in numerous ways, may occur intermittently and concurrently, and may be dynamic and unpredictable. Since members of such ensembles therefore are faced with complex interdependencies between individual

activities, they cannot rely on accomplishing their individual and yet interdependent tasks merely by changing the state of their field of work (p. 157).

It is this very working environment that necessitates and suggests a different control approach for the delivery drivers though, it must be emphasised without any equivocation, the point that the work of these drives is considerably structured. However, a structured work in unpredictable operating conditions changes the picture of control for this group of workers, and therefore demands a different dispensation of control to be effective. The subordinate necessarily has to demonstrate a cooperative behaviour in order for control to be purposefully meaningful. In this wise, the subordinate at the instance of operation is expected to continuously coordinate with the central authority to provide up-to-the minute information on what obtains on the ground.

The decision to engage in this cooperative behaviour is, to some greater extent, dependent on the thinking of the subordinate. It is during this process that the use of discretion enters the frame to inform his action. Therefore control in this situation manifests a flexible, cooperative character that is reasonably shaped by the ever-changing environment at the point of performance (Schmidt et al., 1993). Indeed, the unpredictable working environment of the controlled (the deliver driver in this instance) grants him a near-autonomous position. This enables him initiate certain actions and decisions consistent with the current circumstance of his work. The subordinates on one hand and the superior on the other have inchoate understanding of the circumstances that may orchestrate a favourable disposition to a given course of action. Lack of present knowledge about the exact turn of events in the future in respect of the operating conditions of the delivery driver then precludes any possibility of initiating effective predetermined structured rules of control. And this happens to be the kind of environment within which the control of delivery drivers is administered. Control in this close proximal relationship then becomes heavily dependent on trust, due to the observation that ‘trust needs touch’ (Handy, 1995) to enhance the chances of its meaningful administration. In short, the form of control that obtains in the domain of the delivery drivers – relative to the telesales reps – has a higher degree of discretion and a lower degree of fixed rules of behaviour at the instance of performance.

7.2 The Control-discretion tensions in ICT use

The necessity to maintain a working balance between organisational priorities and individual preferences in ICT-driven interaction demonstrates some of the fundamental challenges and tensions in ensuring organisational mediated control. To discuss the administration of control in a working environment with intense reliance on ICTs that support both distributed and local activities calls for consideration of the possible tensions between the exercise of mediated control and the use of discretion. One of the key arguments of the previous chapter is the observation of apparent difficulty for EFSL to structure all future actions and prescribe a set of conditions for their execution at the operational level. The difficult situation becomes even more problematic in work characterised by a significant degree of uncertainty due to emergent circumstances. An evolving situation has the propensity to give rise to the uncertainty and indeterminacy of administrative objectives at the point of performance. The process therefore demands converting a rule into action, which is an interpretative process of turning abstraction into reality.

Recognising the tension between control and discretion, certain organisational scholars have called for and observed a constant negotiation between the centralised authority and the periphery to guarantee that final decision is in tandem with the overall organisation's interests (Courpasson, 2000). Coombs and his colleagues (see Chapter 2) specifically suggest reinforcing administrative surveillance techniques while at the same time ensuring uncontrolled acquiescence (Coombs et al., 1992) to minimise the lingering tension between control and the use of discretionary judgments. Indeed, Courpasson (2000) is convinced the tension could be conveniently dealt with via his notion of 'soft coercion' (p. 154). Soft coercion emanates from threats peripheral to actors whose reflexivity is shrouded in their willingness to abide by instructions considered to be the most efficient means of coping with a given situation. The capricious uncertainty encountered by mobile workers, for instance, delivery drivers in this study remains oblivious to the head office for which negotiated collaboration by means of ICTs for a course of action is almost impracticable. This is in spite of the fact that mediated ICTs make it pragmatically feasible for a connection to be established with the central authority for a shared responsibility in meeting the challenges of the present moment.

The circumstances of the 'here and now' introduce actors to situations where there are no clear guidelines for taking or favouring a specific course of action. This exemplifies the notion of 'organised complexity' (Weaver, 1948) which illustrates the manner work is organised and performed under uncertain, new circumstances that demand pragmatic response because the known, traditional or existing set of imperatives appear inapplicable. Connected with this thought, is the perception that the significant aspect of information necessary for engaging in the most appropriate action could no longer be concentrated within the core of the organisation. Rather, such vital information may emerge and be made use of at the fringes, the place and scene of unfolding events. The unfolding events instigate a constant state of fluidity; thereby orchestrating the organisation's dynamic transformation with a forceful challenge to its traditional understanding. This imagery reflects Mol and Law's (1994) metaphoric description of 'fluid spatiality' which adequately captures, and significantly represents, the emergent properties of contemporary organising.

Managing interdependencies through the use of ICTs by sharing and updating the knowledge between the central authority and periphery in a shared sense of situational awareness remain a feasible option. However, the case of the delivery drivers in this study evokes the imagery of 'organising on the edge' (Scott, 2006); in which certain decisions involving work configurations and its subsequent performance occur on the fringes or outside the immediate boundaries or even the immediate authority of the organisation. Again organising on the edge demonstrates the fleeting nature of managing work under situations characterised by relatively high levels of uncertainty and risk. The everyday assumption of organisations being perceived in the light of structured routines of collective support for organisational action is fundamentally challenged on this account. What appears to be a fitting description in this particular instance is 'organising' instead of 'organisation' (Scott, 2004). Organising presents a vivid description which alters the entity formulation of organisations from a static to a process one, emphasising ongoing, recurrent adjustment of work patterns (Weick, 1979) which are "inseparable from the transactional contexts in which they are embedded" (Emirbayer, 1997 p. 287).

In this situation, the circumstances of the moments suggest the adoption of a different approach that emphasises the importance of constantly negotiating the patterns

and processes of work in unpredictable set of circumstances (Weick, 1995). Therefore discretionary action arises out of the judgement of individuals, contingent on personal conviction which has little to do with past experience or predetermined rational rules of logic. It is this contingent aspect of discretion that paints an aspect of control, at least from the standpoint of the controlled, as a process of human reasoning and sense-making, rather than a set of conditions that should be mechanically pursued. Discretion, then, can be argued as being located in the individual which is activated by soul-searching activity and reflection motivated somehow by self-interest, in line with self-referential exercise against the backcloth of Alberts and Hayes idea of 'self-synchronisation' (2003 p. 36).

Illuminating the concept of self-synchronisation, Alberts and Hayes make reference to an attempt to increase a subordinate's level of autonomy through his own manoeuvres in anticipating the intentions of his superior should he – the superior – be confronted with a similar circumstance. Though the use of mobile IT can support remote collaboration, the exigencies or the urgency of the situation of the delivery drivers demand that the use of such distance-bridging devices is temporarily suspended. The temporal suspension of the use of communication devices could hardly be argued to be either planned or accidental. The abandonment therefore prompts a sense of individualisation at the expense of co-operation, and hence a reliance on the self as the basis for undertaking assigned tasks.

A final decision to settle on the self rather than collaboration with the organisation as a starting point for choosing a course of action, according to Simon, is the culminating effect of two opposing factors collectively called stimuli. Each of the factors fights for the psychological attention of the individual in this fashion: 'the stimuli' by which the organisation determines to affect the behaviour of the individual; and the psychological frame of the individual, which establishes his reaction to the stimuli (Simon, 1997 p. 177). It is these two-ever opposing stimuli that create the environment for the use of individual discretion. The tensed moment effectively signals the marginalisation of the use of ICT as a coordinating mechanism to create a shared cooperative platform for undertaking corporate mission. This is because the individual comes to depend and trust his own sense of judgement rather than even a remote consideration of the potential benefits of joint assessment prior to performing an assigned task.

Empirical confirmation of this situation is when routers call delivery drivers on their mobile phone on the night prior to delivery to update them on the current developments on their routes in terms of diversions and other emergency traffic arrangements. On the morning of delivery, the delivery drivers plan their delivery routes without any prior consultation with the routers or the transport department to whom they are directly responsible. This is against the backdrop of the fact that packing the various food items in the lorries is a centrally planned activity; the delivery drivers have little say in this respect. This notwithstanding, the use of discretion is not altogether arbitrary; because effective application of discretion is shaped by a certain degree of control just as constructive administration of control is influenced by a considerable dose of discretion (Courpasson, 2000). On this principle, the delivery drivers are always conscious to temper their discretionary powers with the controlling influence from the head office to avoid discipline or punishment of noticeable deviations. Viewed from this perspective, discretion could be said to carry the weight of the command of the superior, however subtle it may appear to the user, but recognises the volition of the subordinate.

7.2.1 Flexible diversity in ICT-driven organisational mediated control

The adoption of different but tactical approaches to mediated control in ICT-driven interaction reflects diverse situational dynamics and complexity of organisational behaviour. It also reinforces the notion that no one particular control technique is adequate in encouraging and guaranteeing the proper behavioural standards both internally and externally (Beniger, 1986). Enriching our understanding on the complexity inherent in organisational mediated control, Perrow (1999) points to the manifold interacting strategies and suggests the critical need for feedback loop at the points of information to meet changing challenges in unpredictable work environment. Expressing a similar opinion on interaction motivated by the application of technology about the notion of *interactive complexity* (Weick, 2001 p. 171), Weick proposes the use of flexible control techniques as a means of addressing the inevitable challenges of equivocality likely to associate with those control strategies. Such control strategies, Weick suggests,

may contain the requisite variety to deal with the changing challenges associated with administering organisational behaviour.

This study amply exemplifies the employment of many elements of control in interaction substantially based on the use of IT. Some are direct and, others by means of mediating devices but equally functioning as effective behaviour regulation tool albeit in disguised and sometimes subtle fashion. Telesales reps and customer service agents especially are under constant but variable monitoring techniques designed to shape their behaviour towards strategic organisational objectives. The measurement of specific targets and the demonstration of expected behaviour are some of the means by which efforts and attitudes are assessed. Behaviour shaping techniques come in different hues and shades, emphasising the dynamic approach through which EFSL administer its control strategies. This diversity of control techniques reinforces the distribution of controlling influence as a result of distributed and decentralised information flows (Shapiro, 1999). For instance, it was discovered during the course of this study, that reward mechanisms, known in educational psychology circles as positive reinforcement (Skinner, 1950), were in use to encourage increase in sales through the application of different ICT means. Under this marketing arrangement or technique, telesales reps are rewarded if they are successful at introducing and selling new products to new customers or new products to existing customers on the telephone.

Control in this condition is perceived by both the controlled and the controller as something pleasant, tension free and mutually satisfactory. The motivation behind such strategies and both their immediate and remote implications are not lost on the superior managers who are agents or sometimes the initiators of such behaviour-changing and performance-oriented schemes. This faultlessly and vividly marks out the idea of *soft bureaucracy* which finds expression in ‘ambivalent structure of governance, within which domination is not essentially exerted by means of, for example violence, direct punishment or local hierarchical supervision, but through sophisticated managerial strategies’ (Courpasson, 2000 p. 142). However – and interestingly – the subordinates have the slightest of inklings into the rationale behind such administrative moves in implementing this specific aspect of non-enterprise wide control technique.

Another administrative indication of ICT-inspired control at the EFSL occurred in the area of planned daily sales target through the use of the telephone, a strategy which very nearly sums Simon's illustration of 'organisational influence'. Simon's explanation of organisational influence centres on the idea of shaping the psychological decisions that drive the route of the decision making processes and, naturally, the final behaviour of the individual. Indeed, the process of decision-making forms an elementary tenet of the theory of administrative behaviour. Simon situated human behaviour at the centre of an ongoing psychological process and submitted that the ultimate decision leading up to a specific human action is sensitive to conscious or unconscious choice in anticipation of the attainment of a particular goal. Therefore the action that the individual finally settles on is a cumulative effect of the exercise of influence and authority by his superior intermeshed with his own sense of volition. What could be implied from Simon's exposition of administrative behaviour is the possibility of an individual to pursue a course of action radically different from a superior authority in spite of the existence of prohibitive measures.

Our fundamental understanding of the use of individual discretion in work involving remote and mediated collaboration therefore challenges Simon's clarification of the decision-making processes that an individual goes through prior to making a judgement on a specific course of action. For tasks such as those undertaken by delivery drivers or field sales reps, highly characterised by off-premises engagements, very little is seen in terms of the input by their respective superiors into their final decision. Even though working together apart (Zakaria et al., 2004) as a specific essence of their joint collaborative endeavour as they share knowledge within a common cultural work background, the inter-team reciprocity has little bearing on their eventual decision.

7.3 Managing employee relationship via the dynamics of ICT-driven interaction

Given the ever-increasing emphasis on productive efficiency in most commercial organisations to ensure sustainable competitive standing, the importance of relationship management in analysing the study can hardly be overlooked. Deepening the level of rapport between subordinates and their superiors in the interest of the organisation's

commercial objectives can be an axiomatic factor of its success in several ways. Effective relationship management strategies among employees culminate in building corporate goodwill and commendable effectiveness that can potentially translate into the organisation's bottom line, though it is difficult to establish a linear relationship between organisational relationship management and productivity (Jauch and Glueck, 1978). The challenge to develop healthy rapport at EFSL is organised around a variety of ICT inspired strategies that involve expending money and time to satisfy customers. These ICT-driven strategies as evidenced in the findings include the customer relationship management techniques designed to strengthen the bond of familiarity, association and alliance with the company and the services it renders.

Given the background of this study, organisational loyalty can be analysed from two distinct areas, internal and external, though the theory of administrative behaviour emphasises just the internal aspect of organisational fidelity. Internally, loyalty towards the organisation stresses the unflinching support of organisational members for the operations of the organisation towards the general public, or specifically, its customers.

7.3.1 Managing employee relationship

Managing relationship through ICTs by EFSL involves the establishment of specific interaction instructions through mediated control aimed at encouraging as low staff turnover as possible. Generating and managing employee faithfulness in the interest of the organisation in the midst of lingering discontent remains a daunting challenge for any organisation. Attempting to build organisational strategies and operational sale tactics through the application of ICTs in diverse areas of enterprise-wide activities can be seen as somewhat enterprising. However, there are opposing accounts to facilitating internal organisational fidelity. On the one hand, some employees exhibit behaviour or attitude that are considered as harmful to corporate objectives, while others evince attitude to embrace strategic relationship activities. Instances from the field study offer a ready perspective of the two scenarios.

The business demand to meet seemingly intimidating call targets, the barrage of insults of fuming, disappointed customers are a direct affront to employee loyalty

towards their company. This study uncovered evidence of employee protracted disgruntlement with their assigned duties due to the company's unbending determination to establish strong customer loyalty at all times. While techniques aimed at encouraging loyalty are supposed to align customers to the cause of organisational commercial activities, the unpredictable nature of the process harbours a certain degree of personal inhibitions due to uncharacteristic and unexpected customer behaviour. The experience of a particularly untoward treatment of one employee potentially neutralises, and even diminishes individual motivation. Overall performance may thus be affected in a negative way.

The management of customer loyalty through such programmes as customer relationship management (CRM), results from enterprise-wide database management practices. By this, customers' buying patterns are observed and analysed, which subsequently constitutes the basis for organisational design of sales and marketing techniques, aimed at maximising customer satisfaction. Managing loyalty programmes reveals a setting of two diametrically opposed pulling effects on the individual telesales reps. First, they are presented with the challenge of calling a certain number of customers (quota) – an instance of output control – given by their immediate superiors with whom they have to comply. They are also, simultaneously, confronted with a comparatively tougher demand of trying to please dissatisfied and disgruntled customers on the telephone, a reflection of behaviour control. The competing nature of these apparent contradictions as manifested in the legitimate duties of this category of employees (telesales reps) has implications for their loyalty to the organisation. This situation may at the same time account for both elements of legitimation and domination in ensuring administrative control. In this sense, legitimate actions is directed 'towards norms that establish the very validity of domination' (Courpasson, 2000 p. 154). On the one hand, they are on the receiving end of discontented customers' abusive language on the telephone, and on the other, they are the beneficiaries of incentives or rewards for selling new product lines to new customers. The latter situation strengthens their organisational loyalty while the former weakens it. Confirming evidence in the latter situation shows up in the telesales reps' use of 'we' rather than 'I' in dealing with customers' sentiments to

emphasise group solidarity as an approach to solving customer problems and addressing their concerns.

7.4 Mediated interaction provides ambivalence of situated rationalities.

Part of the challenge of this academic undertaking is the extent to which we can better appreciate the rationalities and motivations that drive ICT-driven interaction in a mutual collaborative environment, see chapter 1. An attempt to meet this challenge is an investigative quest that uncovered the following situation during the field work. And it is an interesting phenomenon because it underlies the utilisation of ICT artefacts for the engagement in communication which reveals the attribution of multiple situated rationalities for the execution of organisational assignments. Rationality is represented by motivated behaviour shaped by concerns of best performance. Varying degrees of responses are understood to motivate the use of various forms of communication tools for interaction between working colleagues and subordinates. These revelations imply that user appropriation of ICTs hinges on different situational factors connected with multiple rational justifications (Franz and Robey, 1994).

Rationality in this situation is synonymous with Weick's (2001) conceptualisation of sense-making which illustrates the emergent application of whatever resources – physical or otherwise – at the disposal of individuals or groups in meeting particular situational or practical exigencies. While knowledge from previous experience about the limitations of particular gadgets tied certain users to the use of certain communication technologies, issues of convenience, speed, synchronicity, security, flexibility and unexplained fondness defined the use of other communication devices. The specific aspect of collaborative undertaking with respect to order taking processes through to delivery of the processed orders and customer service activities demand dynamic application of mediated communication technologies. Consequently, a presentation of the analysis as indicated in the previous chapter at section 6.2 provides a framework for a discussion informed by the rationality that drives ICT-driven interaction among and between different interaction partners.

Simon (1997) makes two categorical distinctions about rationality from the standpoint of an individual's predilection towards the performance of specified activities or tasks. These are objective and subjective rationalities which reflect the ambivalent nature of the situational reality in which the context of organisational communication activities invite individual or group performance of their assigned responsibilities. As the study attempts to show, the use of mediated communication technologies at EFSL by telesales reps, customer service staff, delivery drivers, etc. is, at least, moderately or largely influenced by contextual conditions and situational demands of work. This, then, exemplifies both the objective and subjective duality that rational action involves at one point or another in organisational interaction in its diverse manifestations of collaboration, coordination and cooperation. The distinction between objective rationality and subjective rationality in this study is more of an empirical assertion or observation and less by virtue of any *a priori* general description of a particular situation. Therefore it (the distinction) may be the interlacing of ontology and epistemology driven by a cognitive obligation.

7.4.1 Objective rationality in organisational discourse

Objective rationality in organisational discourse emphasises the capabilities of an object or artefact for accomplishing a given task. To this end, the technical composition and the presupposed embodied functionality of the tool are the deciding factors that drive the use of the particular ICT tool. Under this logic, the real benefits of the technology object are the overwhelming consideration for its appropriation. Individual preferences, values, belief system and even previous experience of successful use may be submerged in favour of the means and goals attributed to the functional capabilities of the tool of technology. This was, at least, witnessed in the study (see chapter 5) by a number of respondents who assigned various rationalities as motivating their use of particular ICT devices for engaging in interaction.

Collaborating work at different levels of the organisational hierarchy at EFSL necessitates the use of largely mobile phones, emails, fixed telephones, laptops and

PDAs. With these technology appliances, information could be composed, deployed and exchanged both from within and outside of the organisation among working colleagues in a fashion reminiscent of Bill Gates' conceptualisation of 'the digital nervous system' (Gates, 1999). On this account, business processes are integrated with all other facets of the company's 'thoughts and actions' in making realistic application of its information marketplace (Dertouzos and Gates, 1998). The use of these technology communication applications introduces varying degrees of psychological factors that motivate their adoption. One of such motivating factors constitutes the preoccupation of the present section: objective rationality. When it comes to the appropriation of both portable and immovable ICTs, objective rationality affords us the opportunity to appreciate that social agents 'operate not only with internal restraints on instincts or impulse but with knowledge principles, plans and reflective critical judgement' (Adams, 1993 p. 688).

The intention of building evidence of a communicated message can appear to be a demonstrable account of objective rationality in ICT-driven interaction. For instance, some telesales reps preferred passing on customer information to their colleagues through email rather than by word of mouth or through the use of fixed telephone. The possibility of future denial by their counterparts and or even the likely instance of uncertainty about the presence of those working colleagues for whom a particular message is targeted constitute a preference for certain communication equipment. To this end, acting individuals unite the means-end processes of their activities with the capabilities of the mediated artefact and view the consequences of their action from the standpoint of the logic of its final accomplishment (Franz and Robey, 1994). To them, this may be a sure way of providing and establishing truth of their communicated act when later controversy or confusion erupts against which some form of order must be made to prevail.

The idea of minimising the potential of attributing conflicting accounts to a certain activity, especially the fleeting nature of communicated information, is what makes the action of some telesales reps conform to the principle of logical rationality. Logical rationality is a fundamental tenet of objective rationality. For, in logical rationality exists the necessity of comparing verifiable evidence with a record of the details of an interaction activity. To the telesales and customer service reps, this could be the only means by which any judgement of their effectiveness relating to their legitimate

organisational performance could be measured. In an environment where control is a dominant part of, and remains pervasive through, almost every organisational process, the establishment of irrefutable evidence is viewed in a positive light.

And this provides the frame by which acting individuals may seek to support their actions with an empirically confirmable act. Conflict resolution in periods of controversies and disagreements happen to be swift and appear satisfactory to either side of the conflicting parties due to the validity of empirical truth (Ayer, 1946). This is because the mechanics for the administration of judgement are seen to be ‘given’ and not ‘generated’ to suit any particular reason or person. The concern for evidence building is a reminder of the persistent nature in which the conduct of mediated interaction in a mode such as emails makes it possible for traces of the details of the interaction to be permanently available (Kakihara and Sorensen, 2002b). The usual subtle arrival of an email for instance, amounts to a persistent demand on its intended recipient(s) for the need to respond, either immediately or at a later convenient time.

Apart from the evidence that the email generates against any possibility of future denial, its content may constitute a reference point by which any controversy can be thrashed out. From a different analytical angle, specifically from the position of the BOM, the use of email simultaneously results in the enrichment of information and reach. The opportunities the technology opens for manoeuvrability allows for the attainment of other personal ends. Colour coding email message to make it more meaningful, rich and real, setting priorities of communicative patterns with colleagues and the ability to broadcast across space, time and context makes emailing an appealing choice for engaging in mediated interaction.

7.4.2 Subjective rationality in ICT-driven interaction

With subjective rationality, the belief system of the acting individual is brought into play in terms of the final decision, prompting the use of a particular object of technology according to the ‘perceptual and evaluational premises of the subject’ (Simon, 1956 p. 5). On this account, long time values, personal experience and mere faith in the

functionality of systems are rooted in favour of, and preferred against, their particular assumed benefits likely to be derived from their use. Engaging in an activity informed by subjective rationality is not motivated by 'a reference to any absolute standard, but by a reference to part of our own actual practice' (Ayer, 1946 p. 102). Less consideration is given to the perceived advantages or the embodied intentionality of the artefacts in undertaking a specified task.

The claims underlying a favoured disposition towards the use of a certain technology may even be traceable to an unconscious process or inexplicable reason. This brings out the indication of a shift in the awareness of the individual of some experience from being central to auxiliary (Polanyi, 1962), which is quintessence of 'exactly as the pianist acquires the skill of playing without thinking about the strokes' (Smith, 2008 p. 208). This however does not presuppose that the resulting decision is any less trivial because at times there is the 'possibility that the unconscious is a better decision maker than the conscious' (Simon, 1955 p. 104). In the same vein, subjective rationality does not necessarily need to result in a positive outcome in spite of the good intentions motivating the actor's action (Boudon, 1989). It can be argued from the foregoing line of thought that some element of inconsistency exists between the means and ends; processes are not initiated and pursued because of a certain final disposition towards the fulfilment of a determined goal.

On rationality driven by economic motivations, it was found out during the study that the use of emails, in the opinion of one team leader, is perceived as taking away precious time, which can be expressed as the loss of many precious hours in a commercial sense. At EFSL, team leaders are required to monitor the progress of their telesales or subordinates in a rigorous manner even if at irregular time intervals. Each of the team leaders has a span of control of about six telesales reps on the average. Therefore their daily work practices involve intense interaction with different groups of people, those within their immediate area of operations and those outside their operational vicinity, via diverse modes of mediated interaction and face-to-face communication. In view of this, there is a build-up of beliefs and personal, cultural practices that inform and orient such team leaders to the diverse benefits of conducting their work-related interaction in a particular situational mode. It is these learning

processes that shape their rationality in the use of certain types of technology objects at any specific point in time, not the projected capabilities of the object of communication.

In spite of the record-generating potentials of emails as compared to face-to-face interaction or even the typical traditional fixed telephone, which leaves barely any traces of an interaction activity, it still does not constitute a favourable choice of interaction. Acting individuals enter the mode of subjective rationality, thereby concerning themselves less with the implications of their activity. Being rationally subjective, especially in specific area of ICT-driven interaction has the potential of limiting the possibilities of conducting one's communication tasks. On this account, only a few options of the wide varieties of ICT-driven interactions are explored, thus, in a sense, other equally meaningful ways of engaging in interaction are almost ignored which reflects the realities of the concept of 'interactional mobility'(Kakihara and Sorensen, 2004). A situation that explains the flexibility and the several dimensions in the way and manner people conduct interaction with others in matters of work and social life.

7.5 Chapter in review

This chapter has fleshed out the underlying and enduring tensions between the administration of mediated control and the use of discretion in interaction highly and largely driven by technology. The ensuing discussions were sensitive to the flexible diversity championed by organisational mediated control in collaborative engagements. The chapter analysed the various strategic mechanisms by which organisational loyalty is accomplished and the instrumentality of ICTs in forging this bond of allegiance. Lastly, the chapter considered diverse psychological rationalities that dictate the adoption and use of certain ICTs under organisational mediated control in administrative behaviour.

CHAPTER EIGHT – CONCLUDING OBSERVATION

All good things which exist are the fruits of originality – John Stuart Mill

The overriding purpose of this research is to understand the administration of mediated control in the context of interaction chiefly driven by the application of ICTs. Its motivational relevance is focused on the need to make sense of how ICT interaction informs the use of variety of mediated control strategies in contemporary organising. The argument so far is, that organisational mediated control strategising has unexpected implications. Giving an account of this claim necessitated the application and interpretation of the key ideas of Simon's concept of administrative behaviour in the area of information systems. This concluding chapter, in effect, presents a cursory picture of the overall study, culminating in an abridged form of the research findings together with a summary of the key contributions to research and practice.

The opening section of this final chapter reflects on the overview of the study by way of the individual chapters up to this point. Following is the summary of the distinct contributions of this study in terms of the core findings. The second part of the chapter highlights the general limitations of the research strategy. Future research directions are suggested in the ultimate concluding remarks.

8.1 Dissertation overview

The first chapter of this dissertation set out the research agenda and immediately declared the preliminary themes around the entire study. The chapter continued with the motivational relevance aimed at confronting the challenges of the implications of modern-day ICT interaction. This led to a clear demarcation of the purview and remit of the research, culminating in the guiding and key research question: How does mediated control manifest and is ensured in ICT-driven interaction in an organisation's collaborative work? This query allowed for a proper orientation to the focus and significance of the unfolding, intended academic exercise.

The first part of Chapter two was devoted to explaining the various perspectives on interaction to underscore the philosophical postulations underlining the research. Drawing heavily on ICT-driven interaction, there was a thorough presentation and discussion on the literature of its historical rendering and current considerations. The section also entailed exposition of the notion of mediation and, in the process, briefly reflected on the theories of mediated interaction. The second portion of the chapter traced the historical trajectory of control and explored its strategic manifestations in the design of organisations. In this context, I drew attention to the emerging research themes on the subject such as outcome control and behaviour control, and brought out their key distinguishing characteristics and implications in administrative behaviour.

Chapter three set out the methodological dimensions of this work, providing a comprehensive account of how the approach to conducting the study was functionalised. It first of all provided the three practical routes to perception, namely, faith, empiricism and rationalism in the formation of reality. A contrasting account on the two dominant scientific research traditions of positivist and interpretivist were clearly delineated leading up to the choice and subsequent justification for the adoption of the interpretivist perspective. Next, I sketched out the research design strategy, and examined the different facets for the execution of the empirical undertaking by having recourse to both primary and secondary sets of data. Specifically, the strategy served to legitimise the use of case study, together with its qualitative data-gathering techniques such as interviews, direct observation and document analysis. The concluding segment of the chapter presented the techniques for the interpretation of the research findings.

The fourth chapter launched Herbert Simon's theory of administrative behaviour as a lens for viewing and making sense of the empirical report. I, first of all, traced the three key philosophers, namely, John Dewey, William James and Alfred Jules Ayer, whose individual works in various fields of academic inclinations were instrumental in inspiring Simon's formulation of administrative behaviour. Following, I reviewed and discussed the fundamental elements of Simon's theoretical submissions on administrative behaviour for the analysis and interpretation of both the theoretical and empirical evidence of the study. I regard interaction mainly driven by ICTs as an aspect of organisational discourse. On this account, administrative behaviour was applied as an

instrument by which different angles of analytical discussions can be generated and pursued within the confines of mediated control in particular and the intentions of this study in general.

Chapter five represented the findings from the fieldwork, reflecting on the strategic application of control in ICT-driven interaction in a collaborative work environment. I began that undertaking by giving a short background to the organisation where the research work was carried out. The chapter revealed the various categories of participants directly involved in the study, especially, telesales reps, delivery drivers and customer service staff, and on whom the unit of analysis largely centred in chapter six. The chapter also narrated several instances of real-world situations where the use of ICTs resulted in unexpected implications. This led to the main research findings in specific matters of trust in the wisdom of systems; control and the use of discretion; and unanticipated ramifications in intense ICT-driven interaction.

The key research findings in chapter five provided the background for analysing the evidence of the field report in chapter six, which advanced the central arguments of the study in a manner consistent with the doctrine of hermeneutics. The chapter witnessed a sense-making application of control in technology mediated interaction from different pragmatic motivations. The arguments in this section of the study were organised around definitive themes. First, it examined the diversity of the sources from which control is initiated and the social repercussions of ICT-driven interaction. It narrowed this field of inquiry to point out the emotional effects associated with the familiarity that develops between people who have largely had their interaction mediated by ICTs. Secondly, the chapter discussed the modalities necessary for strengthening and managing organisational loyalty, by specifically outlining the role of the mediated artefacts in the process. Thirdly, it offered the philosophical dimensions that informed the adoption and application of different ICTs by the participants in the study, which, in effect, discussed the cost or economic implications of interaction as well as the notion of social presence in mediated interaction.

In chapter seven, the study fundamentally assumed an abstract posture. By this, the theoretical lens in chapter four was applied to subject the central ideas in chapters five and six to a thorough discussion. Consequently, the control puzzle became clear: having

at its core the concept of discretion, especially in matters of mediated interaction where organising at the periphery or on the fringe assumes a reality on its own. The concept of rationality with respect to mediated interaction received a certain measure of attention as a concluding phase of the write-up.

8.2 Research contributions

In this section, I give a condensed account of certain features of the thesis that, from my perspective, are distinctive contributions and, which by extension, qualify for the usual demands of original work. In any case, ‘all good things which exist are the fruits of originality’ (Mill, 1968 p. 123). Let me point out – without the slightest hesitation – that originality, and for that matter, original work in this context does not in any way imply that I plucked ideas and built knowledge of this academic enterprise *ex nihilo*. Indeed, I have built on the ideas of other scholars to reach this point. Therefore original work here is consistent with the idea that:

We never think entirely alone: we think in company, in a vast collaboration; we work with the workers of the past and of the present. [In] the whole intellectual world ... each one finds in those about him [or her] the initiation, help, verification, information, encouragement that he [or she] needs (Sertillanges, 1978 p. 145).

In other words, a vast conglomerate of factors – both internal and external to the circumstances and conditions of the writer – contributed, and combined together, to produce a product that is constitutive of these dynamic and fleeting set of circumstances (Ciborra, 2006).

8.2.1 Contributions to theory and practice

My concept of originality is rooted in two fundamental elements: new facts and independent critical judgement. I have brought novel or latest facts out of this empirical research and also demonstrated independent critical authority by marshalling some considerable theoretical arguments focusing on the themes of this study in a systematic manner. The application of Simon’s theory of administrative behaviour attests to this claim. I hereby present the contributions in an abridged format in the following paragraphs:

Clarification of the concept of mediated control and the use of discretion as integral part in the process of its existential administration in ICT-driven interaction;

Amplification of the social and psychological implications connected with ICT interactions in organisational mediated control and

Philosophical rendition of multiple situated rationalities that account for the psychological motivation connected with favouring a particular IT artefact for the consummation of interaction.

In matters of administrative control, practitioners can rely on the comprehensive examination of the theory of administrative behaviour to develop strategies informed by different analytical dimensions of control in organisations. Specifically, the analytical submissions on control can constitute enduring signpost to such management techniques and appropriate practices as supervision, monitoring, generation of feedback mechanisms in coordinating activities related to ICT-driven interaction.

With regard to design of both stationary and mobile ICT artefacts, the many interesting scenarios of interaction potentially provide meaningful, penetrating thoughts and serve as pointers for designers. This could consequently inform the necessary design properties of their technology devices to meet practical organisational challenges connected with organisational mediated control.

8.2.2 Methodological contribution

Observing delivery drivers and telesales reps in their naturally emerging field of practice as a feature of ICT driven interactions marks a critical point of contribution to this research. For, the set of data obtained from both delivery drivers and telesales reps for this study was distinctive and original in content in a work condition that intensely thrives on the application of ICTs for interaction. To properly articulate the working environment of delivery drivers (dropping customers' orders) and telesales reps (dealing with customer call enquiries), an ethnographic and participant observation approach were adopted. This largely 'unmediated' research approach was instrumental in an informed appreciation of the independencies, mutual cooperation and occasional independence that are brought to bear on the work of delivery drivers and telesales reps as with regard to

their immediate managers. It is possible for organisational scholars particularly interested in the application of ICTs in mediated interaction to benefit significantly from this research technique.

Data interpretation was intimately linked with their corresponding primary sources, thereby avoiding inflexible, dogmatic orientation to the methodological enquiry. This could have – undoubtedly – hindered the researcher from pursuing the true overarching issues of motivations, inducements as well as influences driving the key phenomenon of pursuit. The decision to employ ethnographic cum interviewing technique was tempered with pragmatic improvisation to meet the daily exigencies of following delivery drivers in and around London as well as observing telesales reps at work. Using an ethnographic means provided the opportunity to challenge the status quo of the real world background in which the organisational and social features of ICT application unfurled.

The qualitative interpretation of this study has unquestionably provided a refreshing understanding about the application of ICT that underscore the often taken-for-granted notions about the work of telesales reps and delivery drivers. To be sure, the rich and new dimension this explanation brings can set the tone for a debate on the work of delivery drivers and telesales reps together with its accessory issues

8.3 Limitations and future research directions

In spite of the contributions that the study originated, a candid admission of its shortcomings is necessary. One apparent limitation of this study is to do with the problem of logistics. The organisation where this study took place is dominated by Turks and Poles (see chapter five) and these categories of people hold key managerial positions in the functional areas of the enterprise. Unfortunately, most of them have a shaky grasp of English which directly feeds into their lack of fluency in communicating ideas and knowledge other than their mother tongue. Ideally, it would have been appropriate to employ an interpreter during the data collection exercise to aid in getting real insights from the respondents who struggled in relaying their messages in a ‘foreign’ language.

And I think, I could have had more pointed insights into certain queries on particular issues had some of the key respondents possessed a more convincing hold on the use of English.

This research has particularly focused on individuals, especially in matters of control and discretion. Therefore, in terms of future research directions, it would be interesting if scholars and researchers could pursue a line of enquiry that examines how teams or even groups apply discretion in their everyday organisational commitments. It is feasible that this could set up a parallelism so that meaningful insights could be drawn to pave way for analysis that would bring out how control and discretion work in practice between individuals on one hand and groups on the other.

It would also be interesting to see how research on mediated control in ICT-driven interaction can be understood in certain contexts or industries which are not fundamentally service oriented. Again, future academic commitment to this cause could pursue the sorts of impact that the unplanned implications of mediated interaction can have on organisational performance and employee behaviour.

This research illustrates how we can better appreciate mediated control in ICT-led interaction from the standpoint of administrative behaviour. However, the concepts gleaned from the theoretical framework cannot suggest how the insights from the case study could be used in examining and planning information systems. Thus a refreshing field of research would be to make application and advance the development of the theoretical framework where the major topical issues would reflect on the explication and design of information systems. To embark on this journey, I can say with measured degree of conviction, that this study would constitute such a helpful base of deliberations for both scholars and practising professionals.

8.4 Final remarks

This study has so far shown that control could spring many challenges for organisations whose work practices imply heavy reliance on ICTs. While the study has unearthed the adoption of portfolio of control mechanisms for ensuring best practice in enterprise-wide activities, it has, at the same time, brought to the fore the ever-simmering

tensions that exist between the two seemingly non-detachable concepts: control and discretion.

Telesales reps work is both transaction and relationship oriented; and this is what amplifies the tensions associated with the nature of this particular work. The telesales reps are assigned specific sales target, and sales necessarily involves multiple contacts or interactions. Maintaining quality interactions demands an equal measure of monitoring sales quotas. In a transactional mode, sales are expected to occur via a solitary contact; therefore more transactions are needed to guarantee a likely result in more sales. With respect to the relationship mode, multiple contacts are essential to generate a targeted sales level. This, too, essentially demands quality of contacts made to achieve a given sales target.

Given this dual-purpose business objective, the writer is of the view that telesales reps should be encouraged to be more independent, self-confident and motivated to aim at both raising the sales volume and strengthening the bond of relationship between the company and its customers. The telesales manager therefore has the responsibility of carefully striking a working balance between managing an effective and efficient telesales centre and achieving maximum sales volume for the company. Managers should – as matter of necessity – exercise a great deal of caveat in measuring the metrics of transaction with relationship points as motivation to raise the level of sales might be inconsistent with adherence to strict call or customer handling times.

Insisting on sales scripts carries with it a significant extent of risk. As a result, telesales reps should be motivated to articulate and apply their understanding on products they sell and their potential benefits with their own voice. This suggestion is illustrative of the following ever-present tensions between transactional and relationship modes of legitimate telesales function, challenging the effective administration of telesales section of the organisation: “I am hitting my sales goals why do you care about my handle times?” and “if we are on the phone with the customer, then our competition is lost”. With these opposing stances on the modes of transaction and relationship respectively, it is pertinent that management flexibility is demanded to apply sales scripts. Though the study does not propose any particular analytical or pragmatic suggestions for meeting the challenges of those tensions, it has highlighted this phenomenon for both practitioners

and academic researchers to be alert to their presence in any administrative endeavour with the view to avoiding the easy trap of taking them for granted, thereby risking the possibility of encountering and courting their unpleasant repercussions.

Last but by no means least, it is recommended that telesales reps and delivery drivers are highly and appropriately motivated to minimise the rapid rate of turnover that seems to characterise these specific areas of operations in the organisation. Specifically, motivating telesales staff should not only focus on the necessary financial incentives, but they should be duly supported to perform with a credible sense of initiative and conviction. This can, in small measure, reduce the stressful conditions they sometimes go through as result of tight scripts with which they are made to comply in most of their contacts with the customers. With reference to delivery drivers, two strategic management approaches could be mutually beneficial and fulfilling. In the first place, providing them with decent financial rewards can be crucial in sustaining long-term loyalty with the company. Secondly, robust technology devices such as context-aware systems (Soylu et al., 2009) can, for instance, provide the exact location of the delivery drivers in order to gain understanding of the anywhere anytime concept in connection with technology mediated interaction.

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