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**Influence of Managerial Connectivity on Strategic Choice - The Role of  
Middle Managers**

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**Submitted in fulfilment of the requirements for the degree of  
Doctor of Philosophy**

**Adam Smith Business School**

**College of Social Science**

**University of Glasgow**

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## **Abstract**

This thesis aims to craft a richer description, and deeper understanding, of the work of middle managers in strategy making. In so doing, this study brings together the concepts of connectivity and strategic choice in order to elaborate how middle managers' roles unfold during a strategy building exercise. The influence of connectivity on middle managers' strategic choices is traced over the life span of a major strategic initiative in a telecommunication company. A careful examination of the connectivity literature paved the way for a conceptualised working mechanism of connectivity. The thesis introduces this conceptualised working mechanism to the strategic management stream of literature. The proposed mechanism captures managerial connectivity and investigates connectivity's influence throughout various periods of the formulation and implementation phases of the strategic initiative.

The context for the research project is a telecommunication company located in Jordan. The collection of data comes from an in-depth case study with reference to a significant strategic initiative. The initiative concerned a major expansion to the firm's operations that concerned extending the company's offerings to wider range of services and newer geographical areas.

The case study approach in this research is informed by critical realism ontology. Furthermore, the interviews with managers -top and middle- who worked on the expansion project constitute the primary source of data. An inductive reasoning to the research inquiry along with a theory building exercise led to the development of the research propositions. These propositions are then depicted in a theoretical model aimed at addressing the research question which centres on how connectivity influences strategic choice of middle managers.

The research findings, and their related discussions about connectivity's role in forming middle managers' strategic choices, disclose the importance of incorporating managerial connectivity to understand strategy making and implementation processes. This thesis makes the case for the introduction of managerial connectivity as a primary influence in the organisational studies. The thesis argues that presenting strategy process via a connectivity lens sheds light onto how different states of connectivity, under varying conditions, influence the strategy work of managers and the progression of strategic

initiatives. Theorising through the lens of connectivity will aid in understanding of complex processes such as of strategy making in the organisation. This thesis sheds light on the interplay between managers, the connection of their interplay to organisational strategy formation, and the formation of choices managers make while strategising.

Including connectivity in strategy process research enriches strategic management conversation revolving around participation and involvement. Such inclusion also has implications on middle management perspective of strategy process research in terms of fine graining both their roles and contribution dynamics in strategy making and implementation. Finally, viewing strategy making and implementation from a standpoint of managerial connectivity has implications for management as to how and when to compress and/or expand connectivity to suit the requirements of a given strategy in order to realise its objectives and obtain its benefits.

**Keywords: Connectivity, strategy making and implementation process, middle managers, strategic choice, formulation and implementation.**

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**“A life spent writing has taught me to be wary of words.  
Those that seem clearest are often the most treacherous.”**

**“I was born on a Planet, not a country.”**

Amin Ma'alouf - In the Name of Identity:  
Violence and the Need to Belong

**“My argument is that history is made by men and women,  
just as it can also be unmade and rewritten, always with  
various silence and elisions, always with shapes imposed  
and disfigurements tolerated.”**

**“Texts are not finished objects.”**

Edward Said - Orientalism: Western  
Concepts of the Orient

**“In life it is all about passion and appreciation, that is  
what it comes down to. You want to have passion  
from the inside to what you desire and you seek  
appreciation for your efforts from the outside. And  
it is only later on in life you come to realise that they  
both arise and emit internally; true meaning and  
fulfilment is an inside-out process. Always has been,  
always should be.**

*My Dad - Ahmad Jafar*

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Glasgow, 25<sup>th</sup> of September 2016

## **Author's Declaration**

I declare that, except where explicit reference is made to the contribution of other scholars, that this dissertation is the result of my own work. This dissertation has not been submitted for any other degree at the University of Glasgow or any other universities or institutions.

Signature

A handwritten signature in blue ink, consisting of stylized, overlapping loops and a final upward stroke.

Printed Name

Haitham Ahmad Jafar

## **Abbreviations/Definitions**

### **Abbreviations**

MM:	Middle Management
TM:	Top Management
MLM:	Mid-Level Management
TMT:	Top Management Team
CTO:	Chief Technology Officer

### **Definitions**

This thesis maintains the following definitions for its core concepts. These definitions are my own, they are derived, and crafted, from the concepts' pertaining literatures.

#### **Strategy Making and Implementation Process:**

Strategy making and implementation process is a process by which both planning and execution of strategies interact and blend together. Actors at multiple organisational levels interact to affect the processes found in both the formulation side of strategising and the implementation side of it.

#### **Connectivity:**

Connectivity is defined here as the mechanisms, paths, processes, and relationships that link managers together through a social exchange (which is strategy work) with the purpose of producing a result or an outcome (which is a strategy)



### **Strategic Choice:**

Strategic choice is a part of the strategic process that involves the identification and evaluation of alternatives which then leads to making a set of choices. These choices are represented by the decisions managers pursue during a strategic process which may occur during both the formulation or the implementation stage of strategising.

### **Middle Management:**

The manager is at least two managerial levels below the CEO, has responsibilities for the designing, and/or developing, and/or executing the research's strategic initiative, his/her contribution in the initiative extends the role of others in his/her unit, his/her contribution in the initiative outreaches to alter the roles of others beyond his/her unit, and is accountable for the operations for at least one team implementing the initiative's plans in the field.

### **Senior Middle Manager:**

*(In addition to the above definition):* The middle manager is the ultimate accountable manager for the output of his/her unit before top management. She or he is no more than 2 levels below the CEO.

## Chapter 1. Introduction

This chapter starts with presenting a rationale for conducting the research by identifying the positioning of the PhD topic. Next, the chapter locates the research area and its boundaries. Then it moves to stating the research aims, the research question, its basic assumptions, and the research approach. The chapter concludes by providing an outline of the structure of the thesis.

### 1.1 Purpose and Motivation of the Dissertation

What is strategy process in practice like? Why do some strategies succeed and why most of them fail? How do strategies actually get realised? Are the successes or failures of strategies attributed largely to a sort of timely responses to external measures, or more so for having an internal equilibrium that adapts to the business environment? To what extent do external pressures mandate the shape of strategies? Can organisations strategies drive outer change? Or do strategy endeavours result from a combination of both? What are the routines that constitute the optimal elements in strategy making? What are the set of practices of strategy process for members of the organisation, and why do these practices differ? What is the role of middle management in strategy process? How can middle managers prepare themselves for the varying roles during strategy making and implementation processes? And later on; is connectivity an element in the day-to-day activities, practices, and processes of strategy building in organisations? Is it worthy to investigate the descriptors and details of connectivity, or is it an elusive by-product? And, why is connectivity a useful lens for monitoring strategy progression, how can it be administered to benefit the goals of strategising?

These are the generic questions that have stimulated the interest in writing this dissertation. These questions ultimately led to the research question of this dissertation, which is **“What is the influence of connectivity between middle managers in strategic choice?”**. This question addresses a gap in the literatures of connectivity and strategic management that explores the dynamics of middle managers’ connectivity working mechanism and elucidates connectivity’s influence, exemplified by its levels and conditions where it works best, on the strategic choices middle managers engage in during strategy making and implementation processes.

The motivation for the research came originally from an attempt to understand the particularities of the “making of” strategies in business organisations. This thesis investigates the business-level strategy of a telecommunication company by exploring the capacity of middle managers to make strategy through the lens of their connectivity. This attempt was originally prompted by the researcher’s own educational background in management studies. After graduation, the working experiences in both junior and middle level management positions extended the interest in the area of strategy making. A key experience the researcher encountered was working in the human resources department of a large company in Jordan. The job entailed the integration of human resources management strategies and practices for diversified industries in which the company operated, such as banking, manufacturing, tourism agency, and import and export. The company was a family business and the four business units worked as a group. The researcher’s direct boss, and mentor, was the human resources consultant of the company. This gave the researcher access to top management deliberations, such as meetings and broad policy directives, along with the task of allocating resources and monitoring progress of human resources strategies and programmes. The day-to-day operations handed a lot of insights, and questions, to the researcher’s experience of that job.

A milestone that triggered an interest in understanding the dynamics of strategy processes was when the human resources consultant was dismissed from his job. This was amid an extensive programme that was agreed to be implemented all over the four sectors where the group operated. When the researcher questioned why was the programme terminated and why was the five year plan halted after only 14 months, the consultant replied by saying that the CEO is retiring and the successor, his son, had a different view. He also added that “we never won over the middle managers who could help us to spread and support our programme”.

This incident in specific prompted an interest in strategic management field, and more specifically, in strategy process and strategising activities by managers at various levels, particularly middle managers. This led to embarking a PhD to investigate an array of interests. Issues such as whether strategy, as a phenomenon in organisations, is about control or participation, whether strategy making and implementation is a power laden phenomenon and all what follows in strategising is merely an extension of this power struggle, how are the roles of managerial levels identified and executed, and if involvement was key; then who ought to participate and when. This thesis hopes to offer some answers to the above conundrums and their trade-offs.

## **1.2 Research Topic**

### **1.2.1 Strategy Process**

The strategy process research is “concerned with how effective strategies are shaped within the firm and then validated and implemented efficiently” (Chakravarthy & Doz, 1992 : 5).

The origin of strategy process research can be traced back to the work of Hofer and Schendel (1978) about strategic planning literature (as cited in Ronda-Pupo & Guerras-Martin, 2012). Mintzberg (1994) challenged this strategic planning and designing view and coined the concept of “emergent strategy”, thus providing a more realistic view to how strategy making and implementation processes take place. That is, the making of strategy comprises the integration of both deliberate intentions and emergent actions which can be thought of as two ends of a continuum. Strategising cannot always be planned a priori nor can its efforts every time be discovered empirically (Mintzberg & Waters, 1985).

One central approach in strategy research relates to the relationship between organisations and their environment (Rasche & Seidl, 2016). Organisations face certain requirements from the environment and the organisations respond to those by adapting to a given strategic environment (Rasche, 2007). Strategising is “mainly about managing this adaptation process in a successful manner” (Rasche & Seidl, 2016 : 9). Further, the purpose of a system to make strategy is to set the grounds for renewal or transformation (Huff, Huff, & Thomas, 1992). The strategy work into the adaptation process to the mandates of the environment and/or to the forming of a renewal base for organisations has been largely attributed as the job of CEOs and top management teams (Gioia & Chittipeddi, 1991). Top management’s monopolisation of strategising and strategic change efforts implied a split between the two functions of “thinking” and “doing” in strategic management field (Mintzberg, 1978). This split originates from the choice perspective that dominated the view of strategic management (Bourgeois, 1980; Chakravarthy & Doz, 1992; Jarzabkowski, Balogun, & Seidl, 2007), a view that paid some attention to the importance of inclusion and involvement of other managerial levels (Bourgeois & Brodwin, 1984), mostly in carrying out the role of strategy implementation. Largely, the crucial role(s) of middle management levels in the processes of strategy formation have missed proper recognition (Floyd & Wooldridge, 2000; Küpers, Mantere, & Statler, 2013).

The research on middle managers can be divided into two distinctive streams of literature: the pessimistic view of their role in strategy making and the optimistic view (Dopson &

Stewart, 1990, 1994). The former broad outlook sees middle managers' role in strategy as a convergent action where their contribution is principally related to the implementation of top management's intended strategies (Balogun, 2003; Floyd & Wooldridge, 1992b, 1994). However, such traditional view is increasingly being balanced by research efforts that recognise the importance of middle management's input and influence (i.e., Huff et al., 1992; Kanter, 1982; Van Rensburg, Davis, & Venter, 2014; Schilit, 1987). This latter view considers middle managers' contribution as a divergent action (Burgelman, 1991; Burgelman, 1994; Floyd & Wooldridge, 1997) where middle management's "divergent thinking has the potential to reshape upper management's concept of strategy" (Wooldridge, Schmid, & Floyd, 2008 : 1203).

### **1.2.2 Middle Management Perspective & Middle managers' Strategic Choice**

In the middle level perspective on strategy process view, middle managers are active members in the strategy making and implementation processes. Furthermore, middle management's exclusion from playing a pivotal role prevents the organisation from reaping the benefits middle management levels enjoy and harms the organisational strategising effort (Chen, Berman, & Wang, 2014; Dutton & Ashford, 1993; Floyd & Wooldridge, 1992b; Guggenberger & Rohlfing-Bastian, 2015; Wooldridge et al., 2008). The strategic choices of middle managers are an element of the strategy process that follows an assessment of strategic options that are in alignment with the strategic intent or strategic purpose. Those strategic options entail choosing a course of action that has a significant effect on 1) the shared understanding of strategies and strategic consensus (Floyd & Wooldridge, 1992a), 2) the quality of strategic decisions which leads to improved strategy making (Burgelman, 1991; Mintzberg & Waters, 1985; Wooldridge & Floyd, 1990), and 3) the facilitation of a wider co-operation from the organisation as a whole (Macmillan & Tampoe, 2000). In many accounts of strategy endeavours, middle managers are considered the dominant coalition in the organisation due to their unique position that brings together otherwise disconnected layers in the organisation (Raes, Heijltjes, Glunk, & Roe, 2011). Middle managers are the linking pins between organisational strategies and daily operational activities (Nonaka, 1994). The term "dominant coalition" coined by Cyert and March (1963) "does not necessarily identify the

formally designated holders of authority, it refers to those who collectively happen to hold most power over a particular period of time” (Child, 1972 : 13).

Middle management translates broad directives into congruent operational plans and programmes (Hrebiniak & Joyce, 1984), thereby helping to “align organisational action with the strategic intentions of executive management” (Currie & Procter, 2005 : 1327). Middle managers have this ability because of their intermediate position in the organisational hierarchy which hands them a unique access to top management coupled with their knowledge of operations (Wooldridge et al., 2008 : 1192). Such in depth knowledge of both the organisation’s strategic direction and its daily operations provides middle managers with the capacity to influence the strategy process by mediating vertically between the conceptual knowledge at the top and knowledge of operations at the bottom of the organisation (Nonaka, 1991, 1994). Empowered by their embeddedness and intermediate position, middle managers can directly and easily reach any layer of the organisation. Middle managers’ knowledge of organisational discourses and social connectedness represent key resources that they have to nurture. When they have these resources, middle managers are likely to influence top managers, peers, and employees (Radaelli & Sitton - Kent, 2016).

Rouleau and Balogun (2011) propose that an effective middle manager needs to have a strong discursive competence. They define the term “discursive competence” as the ability of a middle manager “to knowledgeably craft and share a message that is meaningful, engaging, and compelling within his/her context of operation through discursive performances... [we] emphasize the fact that our findings show influencing [of middle managers] to move beyond the skilful use of language” (Rouleau & Balogun, 2011 : 971). In their study, Rouleau and Balogun (2011) developed a framework showing two sets of activities which are critical for middle management’s role on the formulation and implementation process of strategic change. Both of these activities; “performing the conversation” and “setting the scene”, share a theme signalling the importance of interacting with the right people, at the right time, and with the right tools or formats during a strategic change episode. The method of communication middle managers use, as well as how and where middle managers are situated in their network during strategising, are noted in middle management research (i.e. Carmeli & Spreitzer, 2009; Dutton & Ashford, 1993; Dutton, Ashford, O’Neill, & Lawrence, 2001; Dutton & Heaphy, 2003; Pappas & Wooldridge, 2007; Rouleau & Balogun, 2011; Westley, 1990). Yet it seems that these studies have steered away from putting the connectivity of managers as the main

focus by treating it as a by-product of the communication and interaction processes in a strategy setting. Such studies held connectivity, and its influence, as either taken-for-granted outcome and/or treated connectivity as of secondary importance in explicating how middle managers perform their strategic roles. For example, we know middle managers manipulate the way information is presented to others, we also know they use certain discourses to publicise their own agendas, ideas, and concerns with regard to strategy building efforts (Huy, Corley, & Kraatz, 2014; McDermott, Fitzgerald, & Buchanan, 2013). But we do not know enough about how and why the connectivity of the middle manager played a role in him/her succeeding in sharing or blocking information (or support for instance) or failing in it. Were the paths/roads he or she used too many leading to thwarting the effort? Why did the middle manager succeed during a specific phase of the strategy making and implementation process and not another? And how can we grasp the contingencies in which connectivity's influence works best?

Overlooking answers to such questions about the influence of managerial connectivity misses on the opportunity to pinpoint the significance of socialising middle managers into their strategy making context of operation. Recognising middle managers' connectivity, on the other hand, can provide valuable insight into how to "appreciate which middle managers are likely to be more effective than others" (Rouleau & Balogun, 2011 : 977) in performing their strategic roles.

### **1.2.3 Connectivity**

The research on connectivity chiefly focuses on how the technological connecting advancements and applications affect the personal connectedness of people, whether in a business setting or a personal one (Breidbach, Kolb, & Srinivasan, 2013; Collins & Kolb, 2011; Collins & Kolb, 2013; Dery, Kolb, & McCormick, 2014; Kolb & Collins, 2011; Mazmanian, 2012; Waizenegger, Remus, & Maier, 2014).

The literature on connectivity within an organisational boundary can be traced back to Losada (1999), who measured connectivity "by the number and strength of cross-correlations among time series of participants" (Losada, 1999 : 179). In his research, Losada (1999) measured the degree of connectivity as the number and strength of cross-correlations obtained from the time series analysis of the data generated by coding speech acts. These acts were episodes of verbal communication between team members during

strategy planning sessions (Jafar & Canales, in press). Losada (1999) concluded that the higher the connectivity, up to a certain level, the teams' enjoyed better learning opportunities as well as more idea-sharing atmospheres (Losada, 1999; Losada & Heaphy, 2004).

Although there has been some research after Losada (1999) about connectivity in a managerial setting (i.e. Carmeli, Brueller, & Dutton, 2009; Carmeli & Spreitzer, 2009), the studies investigating the influence of connectivity on strategy making and particularly on middle management's connectivity influence(s) on strategising are rare. A number of the studies that involved the conception of middle managers' connectivity took a quantitative, network theory measures-dependant, approach (i.e. Ahearne, Lam, Kraus, 2014; Pappas & Wooldridge, 2007) without delving into the dynamics of connectivity's role. Dynamics such as how middle managers behave when they perceive another person's high or low connectivity, or when is it better to surround oneself with needed people, when certain situations arise, during strategy formation activities. So the questions of how connectivity manifests itself during strategy making and implementation, and what are the implications of connectivity's influence on middle managers strategising roles, are left largely unanswered.

There is a need to understand this social phenomenon better because it is interwoven into the fabric of communication and participation in strategic management. We could do with knowing more about the specifics of connectivity's influence and develop a new, complementary way to examine strategising from a middle management's perspective.

The dissertation places heavy emphasis on the personal aspect of the conception of connectivity to showcase the vital role of the situated individuals; the middle managers as strategists. This is not, however, discounting the definite role of the technology in connectivity. Rather, this aspect of connectivity is evident in the investigation of this phenomenon but not treated, as it is the case in wide arrays of the literature on connectivity, as the central aspect in which connectivity of individuals and groups revolve. Technological aspect is apparent in this thesis in the form of the treatment of the analysis of email data. In it, the clarification as well as verification of other sources of data gave fruitful insights which, ultimately, paved the way for the research's findings, its theoretical elaboration, and the research model. By focusing attention on the personal aspect of connectivity among middle managers the research was able to capture the details of strategising efforts and the implications on the strategy making process, which is one of the key aims of the thesis.

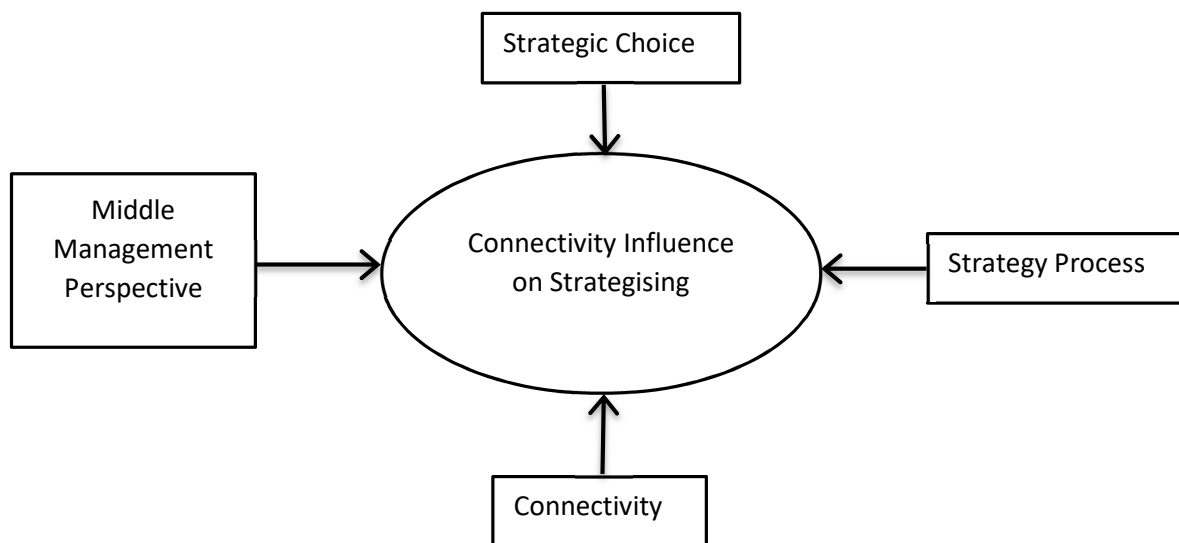


Exploring connectivity's influence leads to apprehending micro-organisational processes and practices of key actors within strategy research. We do not know enough about managerial connectivity and if we do, the constructing of better equipped strategies to the demands of both the internal and external environments can improve and get realised.

Figure 1 - 1 represents how the research topic is located in relation to the relevant literatures it intersects with.

### 1.3 Research Aims

The purpose of this thesis is to explore a new way of perceiving the strategy making and implementation process that would complement other understandings of how strategies, strategic choices, and strategy processes are constructed. The aim of such exploration is to gain an increased understanding of middle managers' connectivity. This is done to



**Figure 1 - 1:** Locating the Dissertation's Subject Area

elaborate on the effects of such connectivity between managers on the strategising activities of middle managers during the strategy making and implementation process. After a careful review of literature, the Research Question of this study that tackles this aim is:

What is the influence of connectivity between middle managers in strategic choice?

This research question draws together two concepts that have not been previously approached in the fashion this research is suggesting. To answer this broad research question various data with regard to managers' connectivity aspects are collected and analysed. Moreover, connectivity literature and observations during data collection led to a theoretical elaboration of connectivity's influence in strategy work. The research data and its theoretical elaboration concerned primarily the capturing of connectivity among middle managers and mapping its influence past a theoretical model depicting connectivity's working mechanism and connectivity's influence on strategic choice. The discussions of the examples where managers' connectivity is captured supports the findings of the thesis and constitutes the answer to its research question.

#### **1.4 The Basic Assumptions of the Dissertation**

There are several assumptions throughout this thesis. First, this research views middle managers as active members in strategy formation. They are capable of performing various strategic roles across the strategy making and implementation process, such as championing alternatives or synthesising information on the one hand, and fostering adaptability or implementing strategy plans on the other hand (Chen et al., 2014; Floyd & Wooldridge, 1992b; Van Rensburg et al., 2014). Second, connectivity is not predominantly seen from its technical dimension which drives its social dimension (Dery et al., 2014; MacCormick, Dery, & Kolb, 2012). The dissertation acknowledges this duality of connectivity but accords no precedence for the use of smart devices and technical gadgets over the actions, decisions, and deliberations of managers using them. Three, this research perceives connectivity as a resource in the organisation (Kolb, 2008) which can serve as basis for gathering new insights or detecting weak signals for strategic directions. Four, this research sees that connectivity has no substance in itself but it is regarded as a pathway network that develops as a product of the social interactions between members of the organisation (Jafar & Canales, in press). And lastly, the research observes the strategic choices of managers through the decisions they either take or abstain from taking due to a specific stimulus (i.e. connectivity of a manager).

#### **1.5 Research Approach**

The research approach for this thesis is an inductive, theory-building case study approach. The term “case” in itself is used in many different ways. “It is used to refer to data categories, theoretical categories, historically specific categories, ..., and so on” (Ragin & Becker, 1992 : 217). According to Ragin and Becker (1992), “making something into a case or “casing” it can bring operational closure to some problematic relationship between ideas and evidence, between theory and data” (Ragin & Becker, 1992 : 218). Yin (2009) proposes an abbreviated definition of case study where he says that a case study is “an empirical inquiry about a contemporary phenomenon (e.g. a “case”), set within its real-world context- especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 2009 : 18).

The research data is analysed by qualitative content analysis method. Content analysis is a research method used for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, and a practical guide to action (Krippendorff, 1980). The ultimate aim of content analysis method is to “attain a condensed description of the phenomenon, and the outcome of the analysis [are] concepts or categories describing the phenomenon” (Elo & Kyngäs, 2008 : 108).

Other methods for analysing the data, namely social network analysis (SNA), were not considered in the thesis. SNA is an approach and set of techniques used to study the exchange of resources among actors (i.e., individuals, groups, or organisations) (Haythornthwaite, 1996). It is a discipline aimed at collecting statistical data from the analysis of social network topology (Wasserman & Faust, 1994). SNA is concerned with the mapping and measuring of relationships and flows between actors with the aim of providing both a visual representation and a mathematical analysis of complex human systems (Borgatti, 2013; Haythornthwaite, 1996). The measurement techniques used in SNA are “based on the principles of graph theory, which consists of a set of mathematical formulae and concepts for the study of patterns of relationships” (Haythornthwaite, 1996 : 331). Although SNA is based on the assumption of the importance of relationships among interacting units or actors, its techniques rely heavily on quantitative tools and approaches for analysing data to indicate characteristics of positions held in a network and characteristics of the network structure (Wasserman & Faust, 1994).

The qualitative content analysis method suits the purposes of a theory-building case study approach as the theoretical concepts reached at the end of the analysis process constitute the base for building a model or a conceptual system that apprehends the mechanism by which the observed phenomenon operates (Elo & Kyngäs, 2008).

## 1.6 Thesis Structure

Each chapter of the thesis starts with a brief introductory section which suggests what the researcher is expecting to accomplish from the chapter, and also to show the reader how the contents of the chapter are relevant to what the research topic is about. At the end of each chapter there is a short summary of what was carried out in the chapter and it offers a linkage to the next chapter. The thesis is structured in six chapters, which are introduced below:

### Chapter one: **Introduction**

This chapter reveals the motivation for the research. It sets out the broad context for the research. It proceeds to present the research topic, assumption, and aims. Also, this chapter outlines the approach and the structure of the dissertation.

### Chapter two: **Literature Review**

In this chapter there is a discussion of the relevant literatures for the choices of this study. The literature review also defines key concepts and terminologies. This chapter intends to clarify as well as position the literature of connectivity in relation to the wider academic literature of strategic management.

### Chapter three: **Research Methodology and Design**

This chapter concentrates on explaining and justifying the methodological choices of the research. Also, it presents the rationale behind taking a qualitative, inductive case study approach for its investigation. The chapter argues how the case study approach is an appropriate methodology for the research topic. Further, the chapter reasons why as well as how, through the research methods used, a triangulation of data helps to support the attainment of research findings.

### Chapter four: **Case Study Data Collection, Data Presenting, and Data Analyses**

Chapter four provide details of the selected case study setting, i.e. the company, the strategic initiative, and the divisions working on the initiative. Next, the chapter explains the research design through providing detailed information on data collection processes, data reduction, research methods such as semi-structured interviews, direct observations, and document analysis, coding and coding tables, and finally presenting the data analyses processes. This chapter concludes by stating the findings of the research based on the data analysis method used in the dissertation.

## Chapter five: **Research Findings**

This chapter offers a conceptualisation of the research's main phenomenon's working mechanism. Next, it presents the findings of the research along with the set of propositions stemming from them. Using the proposed working mechanism, those findings are explained. Further, the chapter depicts a theoretical model demonstrating the influence of connectivity on middle management's strategic choice at the end of this chapter.

## And finally, chapter six: **Discussion and Research Conclusions**

The last chapter purposes to discuss the research findings in relation to the extant literature and in the light of the research question. The chapter highlights the similarities and differences with the relevant previous research. Next, the chapter showcases the contributions and limitations of the thesis. Chapter six closes with research conclusions, implications of the findings for practicing managers, and with a set of research agenda for future studies.

## **Chapter 2. Literature Review**

### **2.1 Abstract**

The literature review begins with a brief introduction of relevant literature pertaining to this thesis. Namely, the introduction comprises strategy process, middle management perspective on strategy making, connectivity, strategic choice, and strategic initiatives literatures. Next, I summarise the views and positions of key journal articles and books pertinent to this thesis and display how they relate to this research. Finally, I delineate both the research gap and the research question that is proposed to fulfil this gap.

## 2.2 Introduction

The focal objective of this current research is to bring together the concepts of connectivity and strategic choice. This research maintains that connectivity with its focus on the relationships between organisational members influences the choices and decisions those members undertake. This influence is investigated at the level and through the life stages of a major strategic initiative in a telecommunication company. Strategic initiatives are major undertaking by the organisation in order to achieve specific goals or develop certain capabilities. This research aims to explore the effects of connectivity influence on the evolution of a key strategic initiative and investigate how connectivity contributes in realising the initiative's goals. Another, related, aim for is to explore the implications of that influence on strategy making within the company and on strategy process research.

The term “connectivity” has wide usage as a pure technical term in mobile communications which describes connections between electronic tools and devices (Castells, Fernandez-Ardevol, Qiu, & Sey, 2009; Kolb, 2008). However, the term is increasingly including the non-technical aspects of connectivity in human interaction (Cartwright, 2002; Kolb, 2008). In 2005, Angwin and Vaara proposed connectivity, as an alternative to “culture”, as the salient new metaphor to be used in social sciences generally and in specific in organisational studies (Angwin & Vaara, 2005).

Connectivity is regarded as a resource in organisations (Kolb, 2008) that can frame the organisation's strategy. Connectivity affects how to spread knowledge and learning in organisations (Kolb, 2008; Kolb, Caza, & Collins, 2012) and this can influence how to approach or direct organisation-wide strategies. By its focus on and embeddedness in relationships between organisational actors, connectivity can result in having an internal environment, represented by congruent strategic organisational choices, that fits the demands of the external environment (Child, 1997). Connectivity between organisational members represented by the presence, intensity, and patterns of interaction among them can constitute integral parts of the answer of how to better equip organisations to handle their turbulent and chaotically complex environments (Losada, 1999). With connectivity being present between organisational members, the learning potential of organisations and their members' ability to produce innovative work systems and behaviours increases (Carmeli & Spreitzer, 2009). Such a connectivity between organisational members can come about from close and direct access to higher managerial levels, having a large number of subordinates, or using previous connections with others.

The digital revolution, fewer barriers to entry, globalization, and hyper competition are making competitive advantages which businesses enjoy harder to maintain (McGrath, 2013). The knowledge-based view argues that knowledge is the most necessary resource for pursuing economic opportunities (Barney, 1991; Grant, 1996) and that knowledge is an important organisational asset for developing new applications and pursuing market opportunities (Nonaka & Von Krogh, 2009). The knowledge creation process in organisations can take place either by innovating in new capabilities (Jyoti, Rani, & Kotwal, 2013) or through the development of already existing capabilities (Alavi & Leidner, 2001). Through both social and collaborative processes as well as an individual's cognitive processes, knowledge is created, shared, amplified, enlarged, and also justified in organisational setting (Alavi & Leidner, 2001; Nonaka, 1994). These processes lead to new knowledge generation and conversion of existing explicit knowledge and such knowledge creation forms can be drawn from strategy formation. This thesis advocates that by adopting the view of connectivity as a resource, organisations can develop strategies equipped for their environment needs, better attain or keep competitive advantages over rivals, and understand strategic change.

The research presented in this dissertation shows how connectivity has the potential to enhance organisations' capability and to devise strategies that respond timely and adequately to external challenges. This dissertation argues that connectivity enhances strategy making and implementation processes through its influence on central elements necessary for strategy building. These elements are evident in the fabric of relationships and communication patterns of any strategy effort such as idea(s) creation and sharing, persuasion, acceptance, and support. Furthermore, this research states that the influence of connectivity ensues under certain circumstances and across varying levels or degrees of connectivity. Some strategy formation efforts require higher or lower connectivity between organisational actors than others. For instance, at the early stages of a novel idea or a new project, connectivity will be different to the later stages of a continuation project. This difference is present in the role that connectivity between actors involved in strategising plays in inducing new ideas and its influence on developing ideas for carrying through the plans.

Managerial connectivity focuses on relationships and connections between people. How these relationships emerge and what consequences do they hold with regard to strategy making and implementation processes are questions which this research attempts to uncover. Burt (1992) maintains that a focus on relationships between organisational



members can explain the capacity for knowledge creation in the organisation as a whole. This capacity resides in the social interactions embedded within groups and networks (Burt, 1992). Such focus on relationships can shed light on the importance of connectivity in bringing up knowledge as well as disseminating it in the organisation. Strategy and strategic management practices are forms of generating knowledge and thereby put organisations in a better position to cope with the requirements of their environments.

Appreciating the value of relationships is not something new in approaching strategic management or strategy process literature. However, in studying the relationships in the strategy literature and from a theorising perspective, the focus was on issues such as the organisations' position in their industry network and the emphasis on network centrality (Venkatraman & Subramaniam, 2002). This meant that external relationships received more attention than the network of internal ones. Further, approaching the internal portfolio of relationships within the realm of strategy process research was done mainly by quantitative studies. The objective of these studies was to identify attributes of the network, like centrality (Burt, 2000; Ibarra, 1993), or outcomes of the ties between people, such as trust (Burt, 1992; Granovetter, 1983), that contribute to the best application of strategies (Pappas & Wooldridge, 2007). This thesis aims to address the internal relationships among organisational members, with a specific interest on the relationships of middle management. Studying the relationships of middle managers through the lens of their connectivity should shed light on strategic differences in companies. Deducing how connectivity relates to strategy making and implementation processes might better explain the performance differences between companies. These strategic differences that lead to performance consequences, or provide insights to why organisations act the way they do, are at the core of what strategy research strives to explain (Barnett & Burgelman, 1996; Hambrick & Mason, 1984).

## **2.3 Key Concepts of the Research's Literature**

### **2.3.1 Strategy Process**

The many dichotomies in strategic management are sources for the varying views and interpretations of the field (Hart, 1992). For that matter, the literature usually splits strategic management into two main categories: strategy content and strategy process. The former concerned with the subject of the strategic decisions and what managers decide to

do while the latter focusing on the actual processes involving the strategic decision and its associated actions and how managers behave (Bourgeois, 1980; Huff & Reger, 1987). This split is still evident in approaching strategy and strategic management studies and constitutes one of the ways for viewing the field.

In its beginning, the literature on strategy process research focused heavily on top management team actors (e.g. Barr, Stimpert, & Huff, 1992; Bourgeois, 1980; Hambrick & Mason, 1984). However, the role of other organisational actors, like middle management (e.g. Kanter, 1982; Mintzberg & Waters, 1985; Wooldridge & Floyd, 1990; Wooldridge et al., 2008) along with the introduction of other units of analysis, like strategic initiatives (e.g. Bower, 1970; Burgelman, 1983b), began to receive attention and presence in the literature of strategy process (Hutzschenreuter & Kleindienst, 2006).

Strategy process research's founding concern was to confront the rational actor model, or the choice perspective, with a more collective as well as socialised orientation outlook to strategy making (Schmid, Floyd, & Wooldridge, 2010) where the input and learning of multiple managerial levels is considered (Burgelman, 1983b). The split between strategy formulation, which is conducted by top management, from strategy implementation, which is executed by the rest of the organisation members, stems essentially from the choice perspective which has dominated the view of strategy making and implementation process (Bourgeois, 1980; Chakravarthy & Doz, 1992; Jarzabkowski et al., 2007). With the development of strategy process research, this view shifted and the strategy making and implementation process began gradually to be viewed as a process emerging from autonomous initiatives triggered by experimentation which comprises learning that occurs at multiple managerial levels (Burgelman, 1983a). So although strategy process research still suffers from little attention to participation research that involves "strategy work which involves others in addition to top managers" (Laine & Vaara, 2015 : 1), strategy process research is starting to focus on the identities, subjectivities, micro foundations of strategising, and the agency of managers and other organisational members (Laine, Meriläinen, Tienari, & Vaara, 2016; Vaara & Whittington, 2012) as primary components of strategy conversation. Strategy process research needs to focus more on the strategising capacity of different organisational levels to deal with the strategic uncertainty, flexibility, and foresight (Floyd & Lane, 2000). This means, among other avenues, creating a chance for more, in-depth, investigations of middle management's contribution to strategy making. Also, in parallel with an enhanced focus on middle management's practices while performing their strategising roles, the integration of connectivity into the strategy research

relates to the embedded social aspect of strategy making and implementation processes. The next two sections present the literature review of these two respectively.

### **2.3.2 Middle Management Perspective**

The concepts of middle management and middle managers are still ambiguous and not well defined in the literature (Osterman, 2008; Wooldridge et al., 2008) making it problematic to state exactly where middle managers are positioned or what tasks they perform in organisations. Middle managers can be defined as “a position in organisational hierarchies between the operating core and the apex whose occupants are responsible for a particular business unit at this intermediate level of the corporate hierarchy that comprises all those below the top level strategic management and above first-level supervision” (Harding, Lee, & Ford, 2014 : 1214). Or in simpler terms, middle managers are “any managers two levels below the CEO and one level above line workers and professionals” (Huy, 2001 : 73). Such definitions of middle management “use the reference system of an organisation” (Radaelli & Sitton - Kent, 2016 : 312) to distinguish who is a middle manager and who is not. Intermediary position of middle management forms the base for defining middle managers in these definitions. Nevertheless, many scholars say that definitions of middle management based solely on their position or location in the organisation is not enough. They argue, i.e. Floyd and Wooldridge (1992a, b, 1994), that it is neither sufficient nor informative to define middle management as only being situated at certain managerial level(s) under or above the CEO or line workers. Another way of introducing a definition of middle management is in integrating middle managers’ actions and their linking pin activities such as the following definition “middle management [is] the coordination of an organisational unit’s day-to-day activities with the activities of vertically related groups” (Floyd & Wooldridge, 1992b : 154)

Also, the various roles and behaviours middle managers play makes it hard to establish a stable and agreed on definition for them (Floyd & Wooldridge, 1992a, b, 1994). In addition to the several roles they play, discussions about middle management’s functions in organisations lack agreement as well. There is “a body of literature states what they should do, empirical studies show what they actually do, and a third group of authors are concerned about the effect of the role on the people who occupy it” (Harding et al., 2014 : 1214). Middle managers are responsible for sending and receiving information throughout

the organisation, for implementing strategies, and other times their functions revolve around being influential strategisers (Glaser, Fourné, & Elfring, 2015; Kuratko, Ireland, Covin, & Hornsby, 2005; Wooldridge et al., 2008). All this suggests that a holistic view of middle management's function or strategic role is not on solid grounds yet. More systematic, theory-driven sampling of middle managers combined with methods that triangulate the identification of managers (Wooldridge et al., 2008 : 1217) are needed to better grasp the concept of middle management and to reach a classification and definitions of middle managers.

The relationship between top and middle management layers has appeared in the strategic management literature since the emergence of strategic planning began in the early 1950s (Ansoff & McDonnell, 1990; Floyd & Wooldridge, 1992b). The emphasis of the middle management's role in the strategising effort at the time was merely as implementers (Thakur, 1998), while the CEOs and top management teams (TMTs) engaged in formulating strategies and ensuring strategies progressed as planned in a top-down fashion (Hambrick, 1981; Hambrick & Mason, 1984). The idea was that CEOs or the top management level in general controlled the strategising process whereas mid-level management's (MLM) main role was implementation of strategies. MLM adhered to assigned budgets and criteria and contributed little to the evolution of the strategy process and to its development.

This implied a split between thinking and action in strategy making (Mintzberg, 1978) that restricted middle management's role appreciation (Floyd & Wooldridge, 2000; Küpers et al., 2013). Such split halts attaining any gains derived from involving middle managers in the strategy making and implementation processes (Floyd & Wooldridge, 2000; Wooldridge et al., 2008). Inadequate involvement of MLM in strategy making creates a void in the business level in the organisation (Thakur, 1998). Nevertheless, MLM's strategic role began to expand and include more than just mere implementation of directives and plans. In the 1960s, "a more decentralized planning approach leading many organisations toward a divisional structure" was underway (Thakur, 1998 : 732). The information required to make strategic decisions was becoming so extensive to top management alone, delegation of some strategic functions to other managerial levels was necessary for strategies to succeed (Thakur, 1998).

Numerous studies attempted to reveal the vital role of middle management. Bower (1970) suggests that middle managers have a powerful impact on resource allocation process. Middle managers make selection decisions on proposals that are then sent up to top

management (Bower, 1970). Bower notes that having an intermediate level among the three phases he proposed, which Bower calls the corporate, integration, and initiation phases, is better suited within middle management's level. In his study, Bower argues that middle managers play an important strategising role as only they were able to assess whether an issue was relevant to its context (Laine & Vaara, 2015). Middle managers are "close enough to top management to embrace their systemic sense of change; and close enough to the frontline to take its pulse for change" (Radaelli & Sitton - Kent, 2016 : 325).

Along the same line of Bower's middle management's participation in defining as well as implementing strategies, Kanter (1982) argues that productivity of organisations depends to a large extent on the innovative skills of its middle managers, who seek to acquire information, power, and resources needed to carry out their ideas and initiatives. Burgelman (1983a) presents a model for internal corporate venturing where middle managers play a key role in its bottom-up process, in which they handle the resource allocation for the new business opportunity idea and facilitate collaboration between people responsible for it. Burgelman emphasises the entrepreneurial potential of middle managers as they bring their own ideas and solutions for strategic change.

Perhaps two of the most significant works, that form the basis for many studies on the middle management perspective on strategy research, are Floyd and Wooldridge's (1990) and (1992b). These papers identify the importance of involving middle managers in the strategy making and implementation process (Wooldridge & Floyd, 1990). Furthermore, these authors propose a typology for such involvement of middle managers (Floyd & Wooldridge, 1992b : 154). The authors conclude that substantial involvement of middle managers improves organisational performance. Also, they say that top management should expect middle level managers to question strategic decisions. Floyd and Wooldridge (1992b) present four forms of middle management's involvement types or activities that relate to their roles in strategy making. Two of these forms of contact or involvement are with top management, upward forms of involvement. They are called "Championing Alternatives" and "Synthesizing Information". In "Championing Alternatives", the middle manager communicates, persistently and persuasively, information of strategic options to upper management. Here, the middle manager is championing changes by supplying information on innovative ideas to the attention of top management (Lassen, Waehrens, & Boer, 2009). This championing role is in harmony with Bower's (1970) description of middle managers' involvement process in communicating

strategic proposals upwardly. The “Synthesizing Information” involvement form comprises collecting of information from various sources available to the middle manager and then it is sent up to top management. Before it is communicated to top management, however, middle managers do add their interpretation and evaluation to the information prior to passing it upward (Dasgupta, 2015). This enables middle management to push for some of their own issues and ideas, or at least their modifications depending on realities of change occurring at their domain (Dutton & Ashford, 1993; Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997). This synthesizing role, according to Floyd & Wooldridge (1992b), serves as a precursor to the championing one. These two sets of activities or roles are essential for middle management layer's interaction process with higher management. By framing information in certain ways and in certain times, middle managers are often able to control, or at least influence, top management's perceptions about strategy direction or orientation (Floyd & Wooldridge, 1994).

Other studies examined middle managers' contribution to strategy making by understanding the mechanism(s) they enact the roles allocated to them. This stream of middle management research looked at how middle managers make sense of their strategic roles, how they influence the sensemaking of others (sensegiving), or what political tactics they exert to influence change outcomes (e.g., Balogun & Johnson, 2004; Hope, 2010; Rouleau, 2005; Rouleau & Balogun, 2011). A common finding of these studies illustrates the importance of middle managers' sensemaking for carrying out their respective strategic roles throughout different strategy building projects. Balogun and Johnson (2004), for example, studied middle managers' sensemaking during a change period from a hierarchical structure to a decentralized one in the organisation. The authors highlight the importance of the change recipients', i.e. middle managers', social reaction to the change process and how their schema developed during that change. Middle managers had to make the transition to the new structure form without having much involvement in, or understanding of, the change decision (Balogun & Johnson, 2004). How the socially negotiated nature of schema change and the significance of middle managers' interaction leveraged the way to achieve such change (Balogun & Johnson, 2004 : 523) is an important element for this dissertation. Moreover, (Beck & Plowman, 2009) explain that a more active role for middle managers in interpretation contributes to learning from rare and unusual events that organisations face. They propose that such interpretation is the result of the processes of creating meaning as well as of distributing meaning, i.e. sensegiving in addition to sensemaking. The two authors offer a multi-level multi-staged model for organisational interpretation in which “middle managers take an active role in

the interpretation of rare and unusual events, chances that the organisation will avoid the mistakes of ignoring warnings, normalising that which is not normal, and downplaying ambiguous threats increase” (Beck & Plowman, 2009 : 918) by virtue of their position in the organisation.

All of the above-mentioned studies point out the unique position middle managers enjoy in the organisation. Being situated in the middle grants them a leverage point where they can make use of their informal ties alongside the knowledge of operations to influence the strategy making and implementation process (Huy, 2001). Moreover, middle managers are well-positioned to recognise and understand the social context of the organisation’s strategy. This is not just due to their location on the organisation chart, as mediators between top and operation levels, but also for the hands-on knowledge of organisational operations they enjoy (Wooldridge et al., 2008). Middle level perspective on strategy process sees middle management as well-positioned for recognising, understanding, and dealing with the social context of strategy (Wooldridge et al., 2008), for making both ascending and descending forms of communication (Barnard, 1968), as capable of carefully locating supporters and opponents so they can monitor and control the information sharing process with them (Hope, 2010), and for knowing the day-to-day activities as well as the organisation’s broad strategy (Nonaka, 1994). These understandings of, communications around, and dual knowledge about the organisational social fabric establish middle managers’ strategic roles. Such strategic roles aid organisations in their strategic renewal process of their capabilities (Floyd & Wooldridge, 2000) and as a result to enhanced performance of the organisation (Floyd & Wooldridge, 1994).

The shift from viewing middle managers as obstacles to change efforts in organisations (Huy, 2001) or only as mere implementers (Thakur, 1998) to viewing their crucial role as key input sources and entrepreneurial advocates is noticeable (Wooldridge et al., 2008). Development of budgets, monitoring day-to-day performance of other members, and taking minor corrective actions if matters or behaviours deviate from assigned goals (Floyd & Wooldridge, 1994) are not the only fundamental task of middle managers during strategy effort anymore. Middle managers engage in defining strategic paths (Floyd & Wooldridge, 2000), communicating strategy (Kuratko et al., 2005), and solving problems (Arneson, 2008). Middle management contribute to the strategy effort by suggesting and anchoring feedback to plans during their formation, not just after they are pushed down the hierarchy. Middle managers’ involvement in the detection of new ideas and in mobilisation

of resources around these new ideas might be affected by management control systems (Marginson, 2002). These management control systems, such as beliefs systems and of key performance indicators (KPIs), disturb the development of new ideas and initiatives within the organisation and its overall strategic climate (Marginson, 2002). Middle managers are “at once controller[s] and controlled, resister[s] and resisted” (Harding et al., 2014 : 1231).

More studies on the middle management perspective on strategy process started to concentrate on the roles of middle managers. For instance, researching middle managers’ role expectations (Mantere, 2008), role conflicts when middle managers faced with internationalisation strategy (Mair & Thurner, 2008), and role conflict during uncertainty environment of an organisational change (Herzig & Jimmieson, 2006). These studies aimed to bring out clarity of roles played by middle managers amid different situations. How management should react in light of the varying and sometimes rotating roles was a common theme for future research on middle management perspective on strategy process issues.

The literature review presented so far shows an understanding of how a collective group effort transcends any single or few individual(s) activity in organisational studies (Lisiecka, 2013). A collective group effort in the strategic management field necessarily means the involvement of middle managers. The view that top management or strategic leadership teams that consist of handful of people are the ones who are solely, or even largely, in charge of setting organisational overall direction is no longer viable. The huge amount of information and accelerating competition pace mandates on organisations to actively involve middle managers in their strategy making and implementation processes, otherwise they would miss the benefits and opportunities of such inclusion.

Next, I present additional studies that highlight the importance as well as the consequences of involving middle managers in strategy making. I outline more aspects of the strategic role of middle managers in the strategy making and implementation process. These studies offer a closer review to the consequences of MLM participation in formulation and implementation of strategies.

Rouleau and Balogun’s (2011) study proposes that the development of middle managers’ strategic role is key for enhancing the likelihood of realisation of strategic change efforts (Rouleau & Balogun, 2011). Similarly, Canales (2013) states that in top-down change, “involvement of middle management in strategy making requires top and middle layers to find common ground” (Canales, 2013 : 498). In his study this common ground came to



happen when restructuring the attention structure was initiated by top management. This was then followed by middle management's development of that structure to permit them to take part in decision making. Enabling middle management and allowing them to take action in the strategy making and implementation process makes them true strategic actors and supports change and transformation efforts in the organisation (Canales, 2013).

Conway and Monks's (2010) study of Irish health service middle managers suggests that the role those middle managers played in a bottom-up change was an important one. Middle managers championed the efforts that the top-down programme intended to enforce, thereby contributing to providing solutions these programmes were seeking, such as reducing waiting lists and improving patients' care. Championing these activities was possible "by making sense of the problems with which they were faced" and as a result middle managers "were able to engage in the dismantling of the old structures underpinning the organisation" (Conway & Monks, 2010 : 200). The middle managers, through their active participation, were successful in implementing the strategy objectives. This corroborates Al Rashid and Samardali's (2000) study on middle management participation in developing strategies where middle managers' participation can make the difference between realising the strategy's outcomes or not (Al-Rashid & Samardali, 2000). Additionally, middle managers are more involved in implementing a strategy when they deem themselves as holding an important role in its formation (Raes et al., 2011). Otherwise, difficulties in strategy implementation might occur (Mintzberg, 1994a) and middle managers might hinder strategy execution or even sabotage its implementation (Guth & MacMillan, 1986).

Mollick (2012) studied the impact of individual differences of middle manager on firm performance using a multiple membership cross-classified multilevel model. He reports that there are few studies that separate firm performance into individual differences versus organisational factors, with the exception of those studies examining the specialised cases of top management. Leading to the prevention of a thorough understanding of which individuals, i.e. middle managers, actually play a role in determining firm performance (Mollick, 2012 : 1001). Mollick (2012) found that variation among middle managers has a particularly larger impact on firm performance than that of organisational factors.

The relationship between the top management and middle management constitutes a central feature of strategy and strategising in the organisational community (Jarzabkowski, 2005). Following from such relationship is how participation and involvement of middle managers in strategy making process have crucial payoffs (Mantere, 2008). Such

participation and involvement can positively influence organisational learning (Lines, 2005). Also, participation can smooth the coordination during strategy implementation and contribute to enhanced appreciation of strategic priorities of the organisation as well (Vilà & Canales, 2008). This aids in the overall aligning of organisation's strategy with its external as well as internal environment.

As for middle managements' involvement in formulating of strategies, incorporating them in strategy formulation improves quality of decisions (Wooldridge & Floyd, 1990). The act of involvement of organisational members depicts, alongside with rationality and vision, a major dimension for constituting strategy making archetypes (Hart, 1992). While a lack of participation and involvement in strategy formulation leads to poorly developed strategies (Floyd & Wooldridge, 2000) and dissatisfaction and alienation among the ones who are excluded potential producing intraorganisational conflict (Westley, 1990).

In an increasingly knowledge-based environment, middle management's roles and activities, engagement patterns, and involvement shapes are changing (Bartlett & Ghoshal, 1995; Floyd & Wooldridge, 2000). The depiction of middle managers as an organisational control system or as a status quo assuring tool is no longer existent (Floyd & Wooldridge, 1994; Huy, 2001; Schilit, 1987; Wooldridge et al., 2008) nor fruitful. The middle manager is becoming increasingly critical as organisations become more complex and distributed (Balogun & Johnson, 2004). Accordingly, there is a pressing need for the identification of effective middle managers who facilitate change (Huy, 2001) and contribute positively to strategy making in organisations. Also, specific training and attention for middle managers to cope with their responsibilities and dealings with both top managers and frontline workers (Parera & Fernández-Vallejo, 2013) is a venue for consideration in MLM research.

Evaluations on part of middle managers for strategic ideas can depend on the evaluators' perception and/or attributions of idea submitters' connectivity (Reitzig & Sorenson, 2013). “[F]ailure to adopt an idea or innovation can arise from an in-group bias among employees within an organisational subunit that leads the subunit's members to undervalue systematically ideas associated with members of the organisation outside their subunit” (Reitzig & Sorenson, 2013 : 782).

Reitzig & Sorenson (2013) study how middle managers may form biases while assessing innovation proposals. They concentrate on the selection phase of the evolutionary perspective on strategy; the variation – selection – retention model (Aldrich & Pfeffer,

1976; Campbell, 1965). The authors introduce the term ‘intraorganisational provincialism’ to mean “a tendency to [by middle managers] to favour ideas and projects forwarded by members of the subgroups with which they have come to identify”. In this identification, the size of the subunit as well as the perceived status of the person behind the introduction or submission of an idea play a role in shaping any biases on the part of middle managers “the evaluators” to accept/reject that idea or proposition. The main aspect of Reitzig & Sorenson’s (2013) which relates to this thesis is that biases depend, largely, on middle managers’ interactions with others from their own as well as from other subunits. This has implications on how strategies are formed and executed. This research adds detailed descriptions of how such interactions form while observing the strategy work in strategic initiatives. In addition, it adds a significant element that was somewhat absent in observing the materialisation of biases: The time in which the (event) of evaluation/selection is happening.

This thesis maintains the view that a middle management perspective on strategy process enhances strategy formation, leading consequently to positive implications on organisational change efforts and ultimately on organisational performance. The strategic choices middle managers make in formulation strategies, in better implementing them and in identifying or clarifying strategic decisions are traced here by the connectivity between middle managers. I carry out an in-depth investigation in order to build theory on the relationship between connectivity and those strategic choices. This investigation responds to calls for research made in the micro dynamics of strategising field (Johnson, Melin, & Whittington, 2003; Schmid et al., 2010), where there is a need for detailing of the “how” managers perform strategic roles and responsibilities. The strategic roles of middle managers as networkers, entrepreneurial advocates, and clever implementers all undergo in the conception of connectivity offered by this thesis. Those vital roles and activities performed by middle managers can influence many decisions in the organisation. Connectivity between and around middle managers can influence the way these decisions are carried out. In the following section I present a review of the literature for the main construct of this current research, connectivity, and how it is applied in this thesis.

### **2.3.3 Connectivity**

Connectivity is a concept that is gaining attention in social sciences because of its focus on relationships between people (Kolb, 2008). It has moved from being regarded just as a

metaphor that highlights the complexities in organisations (Angwin & Vaara, 2005) to being viewed as a phenomenon for explaining change and contemporaries of organisational life (Wajcman & Rose, 2011). Connectivity can be defined as “the mechanisms, processes, systems and relationships that link individuals and collectives (e.g. groups, organisations, cultures, societies) by facilitating material, informational and/or social exchange (Kolb, 2008 : 128). Connectivity includes “geo-physical (e.g. space, time and location), technological (e.g. information technologies and their applications) as well as social interactions and artefacts” (Kolb, 2008). Connectivity -in its social sense- can be viewed as a resource in organisations because it is not just about ubiquitous computing and per capita internet access. Rather, it is situated within historical, social, and economic context, and adding social and technical aspects of connectivity together offers a multitude of ways of conceiving human interactions (Kolb, 2008). This dissertation states that as with other resources, for example money, simply noting that one has connectivity or not is generally less informative than determining how much of the resource (i.e. money or connectivity) one has at a given point in time.

The dissertation sees connectivity as a phenomenon that deserves attention to its deployment and influence. It follows Kolb (2008) view in considering connectivity as a resource as opposed to placing it in the dynamic capability literature. Dynamic capabilities research aims to “explain how firms manage to change in order to sustain their competitive advantage” (MacLean, MacIntosh, & Siedl, 2015 : 340). Organisations’ utilise their competences in order to adapt to their environments, and dynamic capabilities can be defined as the “firm’s ability to integrate, build, and reconfigure internal and external competences to address rapid changing environments” (Teece, Pisano, & Shuen, 1997 : 516). Teece et al. (1997) explain competitive advantage as arising from the confluence of assets, processes, and evolutionary paths (Barney, Ketchen, & Wright, 2011). One way to conceptualise the dynamic capabilities view is that it seeks to maximise competitive advantage with a focus on optimality on the level of the firm as a whole (MacLean, MacIntosh, & Siedl, 2015). This is, chiefly, why this research does not view connectivity as a dynamic capability and rather sees it as a resource.

Two points further elaborates this stance, first is that connectivity in the form introduced in this research is still new to the management research in general and to the strategy research in specific. Regarding connectivity as a dynamic capability that enhances organisations’ ability to create, extend, or modify its resource mix or base seems as a second logical, as

well as methodological, step in strategic management research. Just as the dynamic capability conception built on the resource-based view, the consideration of connectivity, this thesis attests, should begin with viewing it as a resource first. Second, connectivity more appropriately falls under what Barney (1991) in his classification of organisational resources call the (human capital resources) which include the “training, experience, judgment, intelligence, relationships, and insight of individual managers and workers in a firm”. (Barney, 1991 : 101). This seems plausible with the conception of connectivity offered in this research, one that renders it as a resource. This research aims at measuring connectivity among organisational members and illustrating what such connectivity levels among middle managers mean for the strategy making and implementation process.

Connectivity is not limited to technical systems or settings and is, increasingly, starting to include many aspects of human interaction in organisations within its notion (Kolb, 2008). It is more than a metaphor for organisations, entailing a range of new meanings and applications (Angwin & Vaara, 2005; Kolb, 2008), and it is increasingly becoming a phenomenon of contemporary organisational life (Wajcman & Rose, 2011), occurring on multiple dimensions, and with particular attributes of its own (Kolb, 2008; Kolb et al., 2012). Kolb (2008) makes a case for transferring the metaphor of connectivity to social sciences by presenting four attributes of the term and stating that connectivity is not just applicable to social phenomena but also uniquely helpful in understanding and describing them. These attributes are: firstly, the word “connectivity” has a “Latent Potentiality”, giving it a unique meaning from other terms, such as connectedness or connected which yields an established past condition, in the sense it can mean a past quality, current condition, some latent future potential, or all three. Secondly, Connectivity has what Kolb (2008) calls “Actor Agency” which means we can choose not to be in a state of connectivity even if we have connective potential (having a fast internet connection but not using it for example). Thirdly, “Temporal Intermittency”, Temporal Intermittency means that connectivity comes and goes, for reasons other than (and beyond of) agency, causing temporary breaks, whether it is because of technical issues or one party is unavailable for a contact or meeting. And finally, “Unknowable Pervasiveness”, which means the inability of assessing and/or knowing all of our real or potential connectivity with the other. These four attributes have wide implications on perceiving intra- and inter-organisational interactions and the concept of connectivity is gaining wide usage as a metaphor for it (Kolb, 2008).

Research about connectivity was developed by Losada (1999) who found that connectivity served as an excellent predictor of team performance. Losada's approach for measuring connectivity was by the number and strength of cross-correlations of interactions between individuals (Losada, 1999). He observed and analysed the interactions of 60 teams that were conducting annual strategic plans meetings. Teams were initially selected based on three performance measures: profitability, customer satisfaction, and assessments of the team by their seniors, peers, and subordinates. Based on those measures, teams were classified into three categories: high, medium, and low performing teams where a team was assigned to the high performance category if it achieved high ratings in all three measures. In turn, these teams were characterised by their degree of connectivity. Such degree of connectivity was measured by the number and strength of cross-correlations that were obtained through a time series analysis of the data generated by coding speech acts, that is, verbal communication between team members (Losada, 1999).

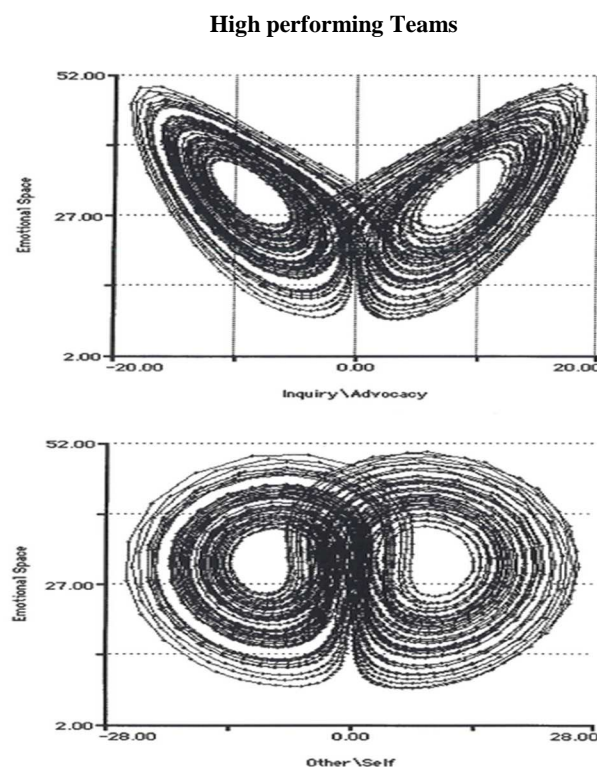
Losada chose the word *nexi* to call these cross-correlations. These *nexi* represent "sustained couplings or matching patterns of interlocked behaviors among participants throughout the whole meeting" (Losada, 1999 : 180). The coding of speech acts of the participants was conducted through usage of three dimensions: inquiry/advocacy, other/self, and positivity/negativity. These three dimensions were selected on the basis of previous research and practices (Losada, 1999). Inquiry/advocacy dimension is prominent in the works of: Argyris and Schön (1978) and Senge (1991) where they state that balancing inquiry and advocacy should lead to effective learning and action. Other/self was chosen as it reflects an essential role in strategic planning exercises where environmental scanning and internal scrutiny analyses take place. Losada observed 60 teams who were conducting strategic planning sessions. High performance teams were expected to be balanced in this dimension as it demonstrates ability to recognise both internal as well as external strengths and shortcomings (Hax & Majluf, 1991). Positivity/negativity dimension has been used in the work of Bales (1950) as well as Bales and Cohen (1979) on small group processes, where small groups face-to-face interactions were hypothesised to follow a system of 12 categories. The categories were used as indicators of observing interactions between people along with relations those categories have to major frames of references (Bales, 1950). Two out of four of these generic frames of references were related to positive social-emotional reactions and negative social-emotional reactions. These two were used as lenses to classifying behaviour as it occurs in small face-to-face groups. The classification entailed identification of both the member(s) performing a speech act and the one(s) to whom it was directed to. Next, the consequences of the interaction "event" were

analysed based on the categories and frames of references with relations to the results and decisions that constituted the outcomes of the members' interaction. Another significant work that used positivity/negativity dimension was Gottman's (1994) study. Gottman studied couples using time series analysis of the positivity/negativity dimension to predict whether the relationship would succeed or fail and found out that unless couples are able to maintain a high ratio of positivity to negativity, it is highly likely that the relationship will end.

Speech acts in Losada (1999) experiment were coded as "inquiry" if the speech between group members involved a question aimed at exploring and examining a position. If it entailed arguing in favour of the speaker's viewpoint it was coded as "advocacy". If the verbal communication referred to the person speaking or to his or to her group then it was coded as "self". If it was referred to a person(s) outside the group or organisation it was coded as "other". And supporting and encouraging speech between members of the group was coded as "positive" while sarcasm or disapproval conversations were coded as "negative". The data Losada gathered showed that the three teams varied in their performance level on each of the three dimensions observed. High performance teams showed high ratios of positivity to negativity and a balance between inquiry/advocacy as well as other/self dimensions whereas low performance teams showed low positivity to negativity ratios and unbalances toward advocacy and self-orientation on the expense of inquiry and other-orientation (Losada, 1999). Losada produced a testable model from building on previous work of Lorenz (1963), which was on thermally driven fluid convection. He plotted the results on a phase space, which is a mathematical space spanned by the number of dimensions in a system, After running the data gathered through such model the findings of the experiment showed that high performance teams showed chaotic dynamics shapes. These chaotic shapes are due to the sophisticated pattern of interaction among the team. For low performance teams, point attractors shapes have emerged, suggesting a low pattern of interaction, and the medium performance teams representing limit cycle shapes ranging in the middle of the other two teams shapes (Losada, 1999). The corresponding shapes resulting from the speech acts and the patterns of interaction between team members are shown in the figure 2 - 1 below.

Losada reports that the corresponding phase spaces were in harmony with Kauffman's (1993) findings on complex adaptive systems where he found that for highly interconnected Boolean networks the behaviour showed chaotic dynamics. Kauffmann observed that as the average number of connections in the networks got smaller, the

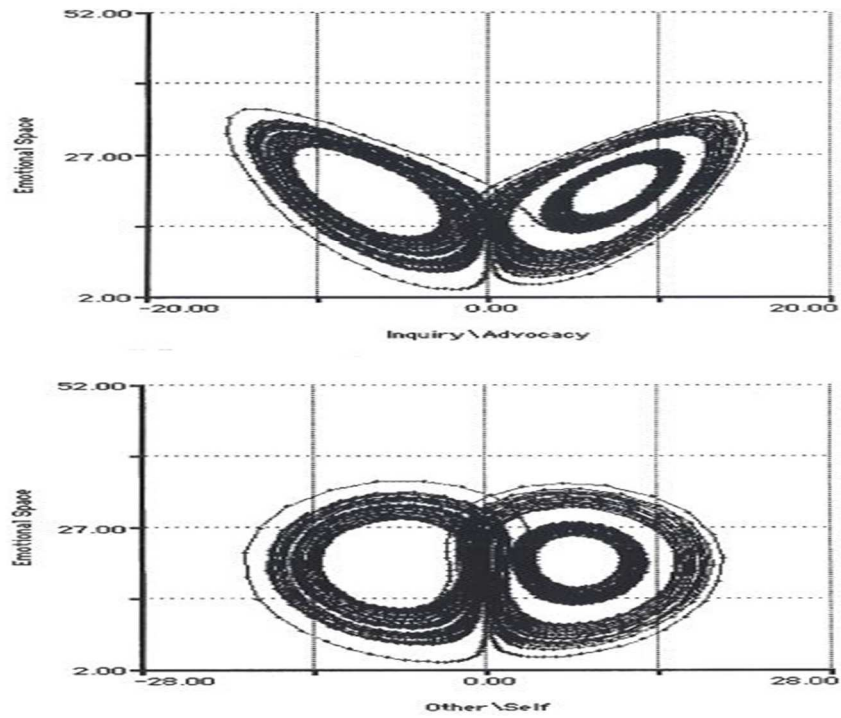
behaviour converges to limit “cycles” and “point attractors”. This passage from chaotic to rigidly, limited, ordered regimes and vice versa depended on the number of connections per node (Kauffman, 1993). The behaviours in the networks Kauffman studied devised adaptive responses according to connections or number of links per node, and if these connections exceeded a threshold value the responses inside the network or its members behaviour(s) suffered from paralysis as a result of the overload of conflicting inputs (Eidelson, 1997 : 46; Kauffman, 1993). This was important to Losada’s 1999 study because it demonstrates that within members’ behaviours in networks or groups there exists a transition phase driven by critical control parameters, connectivity (or number of connections in Kauffman’s 1993 study) being one of those parameters (Kelly, 1994; Losada, 1999). Losada, further, argues in favour of the association of chaotic dynamics with high performing teams by referring to the conclusions of Skarda and Freeman (1987), who say that “chaos constitutes the basic form of collective neural activity for all perceptual processes, ... as a means to ensure continual access to previously learned sensory patterns, and as the means for learning new sensory patterns (Skarda & Freeman, 1987 : 161). Freeman (1991) and Chirikov (1991) posit that chaos and chaotic interactions



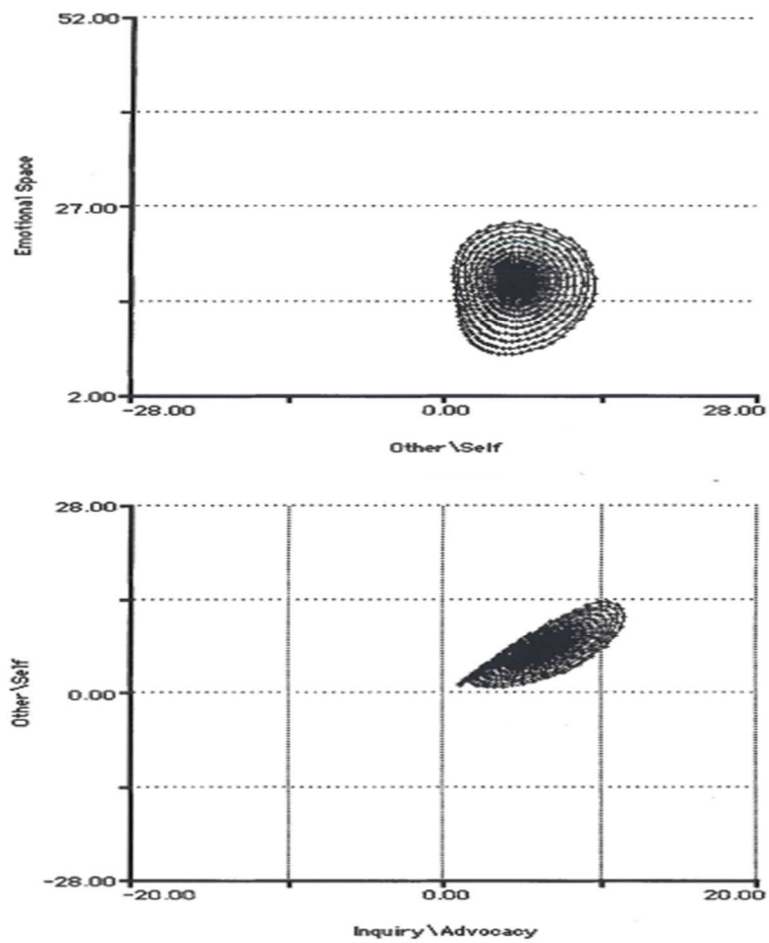
**Figure 2 - 1:** Attractor Dynamics Shapes for High, Medium, and Low-Performing Teams (taken from: Losada & Heaphy, 2004)



### Medium Performing Teams



### Low Performing Teams



**Figure 2 - 1:** Attractor Dynamics Shapes for High, Medium, and Low-Performing Teams (taken from: Losada & Heaphy, 2004) (**continued**)

or dynamics constitute a form of collective neural activity that leads to enhanced learning, creativity, and enhanced flexibility. Three characteristics Losada (1999) link to higher degrees of team performance.

Losada summarised his experiment's results, from a qualitative perspective, by saying that "high performance teams were characterised by an atmosphere of buoyancy that lasted during the whole time period; showing encouragement and appreciation created emotional spaces that enhanced the possibilities for action and creativity. In contrast, low performing teams struggled with their tasks and operated in very restrictive emotional spaces created by lack of mutual enthusiasm and support, often surrounded by an atmosphere of distrust and cynicism" (Losada, 1999 : 180). Positivity/negativity ratio in Losada's (1999) experiment was obtained through coding the verbal communication of the team members in terms of approving versus disapproving statements, where team members who showed more encouragement and appreciation to other members represented high positivity ratios and created expansive emotional spaces that opened up possibilities for action and creativity, and where team members demonstrated distrust and cynicism to other members of their team low positivity ratios were detected and this created restrictive emotional spaces that resulted in low performance measures (Carmeli & Spreitzer, 2009; Losada, 1999).

This can be found in many daily examples, whether in organisational setting or any other day-to-day encounters. For example when a group consisting of family members engage in drafting a support-effort plan for one of their members who is suffering a medical condition, as part of his or her recovery process. Positive environment characterised by flexibility, encouragement, and enthusiasm around the discussions of the family members will lead to opening up of novel ideas and also acceptance by all to become an action-oriented high performing team. Conversely a negative environment, where ideas are attacked or put down, will lead to unwillingness to share more or new ideas. Also, lack of mutual support is likely to occur, which results in unwillingness to execute the tasks or performing them badly.

Key criticism to Losada's work refers to the validity of the mathematical equations that he used in his research. Doubts in the mathematical equations' potential to be applied to human interactions and its consequential effect on human flourishing have been raised (Brown, Sokal, & Friedman, 2013). However, the claim that human flourishing is associated with higher connectivity, where connectivity is represented mostly by the "positivity" ratio coined by Losada, remains unchallenged (Fredrickson, 2013). This falls

within the spirit of the notion of connectivity regardless of the mathematical modeling element that Losada (1999) developed (Fredrickson, 2013 : 1) for which supporting evidence from the literature of psychology and health and well-being studies (Carmeli et al., 2009; Fredrickson, 1998; Fredrickson and Losada, 2005; Radey and Figley, 2007) about connectivity and connectivity's influence -specifically positivity dimension of its measure- on human interactions and how it revolves around relationships and their consequences is evident and corroborates Fredrickson's (2013) stance of such association.

These studies (Carmeli et al., 2009; Fredrickson, 1998; Fredrickson & Losada, 2005; Radey & Figley, 2007) that examined connectivity's influence looked into the consequences of having connectivity, such as trust, learning, and cooperation and its effects on individuals and groups. More specifically, connectivity in the above mentioned studies was approached as a measure of the quality of relationships between people and how to enhance this quality. This quality of relationships was measured and also explained by positivity to negativity ratio (Fredrickson & Losada, 2005; Losada, 1999) and hence suggesting that enhancing this ratio reaps more benefits of connectivity. The broaden-and-build theory of positive emotions (Fredrickson, 2004) is one of the extensively cited models to that end. This current research, though, differs on how it approaches connectivity. This research views connectivity not only in terms of the consequences connectivity generates but also as a set of roads emerging from the relationships occurring between people. Additionally, a description of the nuances of low levels of connectivity is offered within this research which aims at opening up discussions and deliberations on how the depiction of connectivity as roads or conduits in which interactions occur and the consequences of connectivity on organisational matters or processes. This addition disputes the notion that the more connectivity there is the better (Fredrickson, 2004; Fredrickson & Losada, 2005). Under certain conditions, connectivity may not always be positive. Negative connectivity, as in low levels of it, would be desired and still achieve anticipated goals. An explanation of how low levels of connectivity, i.e. negative connectivity ratio, and the implications of this on strategy making is an addition by this thesis to the literature of connectivity.

Although a number of studies have examined aspects of connectivity and connectivity's effects, research on connectivity in management field is scarce and still new to managerial studies (with notable exception of Carmeli and Spritzer's (2009) study). There are several research calls for connectivity's integration into social sciences (Kolb, 2008) and more areas and disciplines. This is because connectivity is woven into the fabric of human

interaction and communication (Angelopulo, 2014), it is a concept “that offers promising value across disciplines” (Angelopulo, 2014 : 220). Furthermore, Health and well-being research informs us that connectivity at larger scales (i.e. groups) shows a similar structure and processes to smaller scales (i.e. individuals) (Fredrickson & Losada, 2005). In mergers and acquisitions research, Angwin and Vaara (2005) consider that connectivity serves “as a metaphor that highlights the complexities, interconnected processes and synchronized activities in organisations and their contexts” (Angwin & Vaara, 2005 : 1448). Papas and Wooldridge’s (2007) study show that middle managers who occupy key external and internal network positions enjoy an increased amount of opportunities for exerting influence on strategy (Pappas & Wooldridge, 2007). These two authors use Network Theory in their discussion but without enough details on how, and in when instances of the strategy process exactly, middle managers engaged in divergent strategic activity. Moreover, Ahearne et al. (2014) integrate the social networks perspective into the formal structural and interpersonal views of strategy implementation to gauge middle managers’ adaptive strategy implementation behaviour. Specifically, they found that informational and reputational social capital influence the performance impact of either upward or downward influence behaviour, but not both. In their study, Ahearne and colleagues introduce a conceptual model and use factor analysis to validate its measurement scales. Attributed to this thesis is their call for research on the underlying mechanism, such as the mediating role of the effectiveness of middle managers’ adaptation behaviour, to shed more light on middle managers’ strategic roles.

In order to spread the application of connectivity, this current research places strong emphasis on connectivity as a centre concept to be used in managerial settings. The aim is to explore connectivity’s potential influences and implications on strategy making and implementation. The research postulates that there is a potential for connectivity’s effect to be applied within organisational settings, more specifically to the middle management layer and middle managers’ strategic choice. Strategic choice is what the next section of the literature review is about.

### **2.3.4 Strategic Choice**

The element of choice in the strategic management field was first acknowledged by Chandler (1962) where he states: “While the enterprise may have a life of its own, its present health and future surely depend on the individuals who guide its activity”

(Chandler, 1962: 8). Strategic choice can be seen as an element of the strategy process that follows assessment of options and is in alignment with the strategic intent or the strategic purpose on hand. Strategic choice entails choosing a course of action and has a significant effect on the organisation as a whole (Macmillan & Tampoe, 2000). Moreover, strategic choice forms the basis on which strategic decisions are shaped by (Chandler, 1962).

The strategic choice perspective highlights the element of agency in decision-making and offers a way at viewing organisation theory other than the deterministic view (Child, 1972). In doing so, strategic choice recognises the role of powerful managers, whom Cyert and March (1963) termed “dominant coalition”. The deterministic view in strategy research agrees on the idea that the environment controls the organisations’ fate (Dill, 1958; DuBick, 1978; Duncan, 1976). This view hold that the design and ensuing strategy of an organisation “follows more or less automatically from the degrees of variation and complexity presented by the environment” (Bourgeois, 1984 : 587), meaning that the market or industry forces in the outside environment constraint managers ability to act and make decisions in ways other than in reactive mode or fashion. Their responses are to a large extent secondary to the musts of environmental turbulence the organisation faces (Bourgeois, 1984). Under the strategic choice perspective, however, organisations are only partially preordained by environmental conditions and the choices made by top managers are the critical determinants of organisational structure and process (Child, 1972; Miles, Snow, Meyer, & Coleman, 1978). The strategic choice perspective does neither view environmental conditions as a direct nor the sole source of variation in organisation’s operations. Rather, the critical link lies in the dominant coalitions’ evaluation of the organisation’s position in the environmental areas they see as important, and in the action(s) they may take accordingly (Child, 1972 : 10). The term dominant coalition “does not necessarily identify the formally designated holders of authority, it refers to those who collectively happen to hold most power over a particular period of time” (Child, 1972 : 13). Strategic choice perspective views the evolution of organisations as a product of organisational actors’ decisions and not just as a passive environmental selection process. Key actors are seen to play a particularly important role in initiating, shaping, and directing strategic reorientations towards the environment (Tushman, Virany, & Romanelli, 1985).

Strategic choices concern the “decisions about an organisation’s future and the way in which it needs to respond to pressures and influences” (Macmillan & Tampoe, 2000 : 235). The choices which lead to deciding what options a manager follow develop into different directions and different methods during the strategy making and implementation process.

Such strategic choices in strategising can be of varied levels. For example, decisions regarding allocation of authority concern who are the individual managers in charge of making decisions about strategy planning and/or execution. Also, a strategic choice is in assigning the boundary of their authority. Another example of strategic choice of a higher strategy implication level is what types of products/services to offer and in which markets. Or what kind of resource sets are required to make or provide those products/services, along with how to acquire these resources.

Moreover, the literature concerning factors affecting strategic decisions processes has focused on environmental, organisational, and decision-content related factors (Rajagopalan, Rasheed, & Datta, 1993). The organisational factors generally missed addressing the effect of socially embedded factors in explaining the strategic decisions process, and instead focused heavily on organisational power issues and structural aspects (Rajagopalan et al., 1993). As a result, the effect of social elements on strategic decisions and strategy evolution that follows from them is sidelined. This negligence of social aspects on the one hand, combined with the view that the strategic management theorisation is now in an era described as a portfolio of relationships (Venkatraman & Subramaniam, 2002), where positions and relationships in wider networks of expertise within as well as outside the organisation are key to competitive advantage (Starkey, Hatchuel, & Tempest, 2004), from the other hand, call for attention toward the social aspect of the strategy building endeavours in organisations (Venkatraman & Subramaniam, 2002). This social aspect stems from relationships between people involved in the strategy activity. This dissertation argues that connectivity, as a concept, captures the notion of these relationships and predicts the implications of these relationships on the strategy making and implementation effort inside organisations.

By utilising several group activities toward a certain organisational direction or specific project, middle management can represent such a dominant coalition role described in Child's (1972) work. Their collective action(s) can push for, or at least modify, organisation-wide plans and decisions. This can be conducted by suggestions and/or entrepreneurial behaviours in cases where middle managers are the dominant coalition group over certain time periods, or reinterpretations and filtering of information that is presented to the dominant coalition group in other cases. This can occur, for example, while implementing certain decisions and strategies based on the directives of dominant coalition group (Child, 1972 : 13-14).

The role of, and the link between, connectivity and strategic choice can be highlighted by recognising how embedded social structures in organisations affect management and therefore also the strategic choice of dominant coalition members (Child, 1972; Whittington, 1988). Connectivity looks into the nature and intensity of such social structures. Besides, the ability to direct dominant coalition's decisions and/or attention toward certain matters is conducted within the political structure the organisation has as well as the roles different actors play (Child, 1972). Connectivity among groups, which are organised in order to serve the choices powerful managers make, is an important factor in performing influence activities of political nature. Connectivity has the potential to explain what makes such efforts both more noticeable to the dominant coalition and also what makes those efforts successful. Moreover, connectivity's link to strategic choice can be thought of, as suggested by Jafar and Canales (in press), as irrigation channels running in farming fields. The water channels portray the connectivity levels and the strategic choice can embody the actions of using the channels to water the crops in order for them to grow. In other words, water running through irrigation channels represents the various resources that can result from connectivity between organisational members (Jafar & Canales, in press). The choices of using those channels to reach certain destinations or otherwise blocking such channels denotes the various incidents where high or low levels of connectivity would be needed to water certain crops and not others. Some prioritised organisational outcomes might benefit from different levels of connectivity during different growth stages (Jafar & Canales, in press : 12). Choices will be the result of the action of a variety of individual operating along the network of channels and not solely by individual at the water source. The metaphor of connectivity as water channels running through fields highlights the relationship between connectivity and strategic choice. It displays a depiction of the conception of connectivity as well as its influence upon the strategic choices middle managers undertake. The implication(s) of this relationship between these two concepts on strategy making is what this dissertation is about. Next is a review of strategic initiatives & influence activities' literatures.

### **2.3.5 Strategic Initiatives & Group Influence Activities**

Strategic initiatives can be defined as proactive group undertakings intended to create economic value for the firm (Lechner & Floyd, 2012). They consist of activities that offer organisations quick reactions through change efforts in a way that is compatible with the

organisational systems and structures (Ansoff, 1980). Strategic initiatives can reach an alignment to changes in the organisational environment. This alignment can be reached by actors on different managerial levels even before these changes reach the attention of the top management team (Lovas & Ghoshal, 2000). Strategic initiatives are discrete activities that advance new ways, which depart from existing organisational practices, for the corporation to use or expand its resources. They are an entrepreneurial process, entailing problematic encounters and generally involving acquiring and using power and influence, that begin with identifying a need or opportunity (Birkinshaw, 1997; Kanter, 1982).

According to their nature, strategic initiatives can be thought of either as exploratory or exploitative. Along a continuum they may lay between exploring new capabilities at one end, to focusing on exploiting existing capabilities on the other (March, 1991). Strategic initiatives of exploratory nature are mainly concerned with market definition: what markets, businesses, and customers the organisation wants to be in. They can be about pursuing new markets, approaching new customer segments, developing new products and services, or fashioning novel processes/ways for the organisation to perform its business and operations. Examples on this sort of initiatives are the mergers and acquisitions or the alliances the organisations make (Shi, Sun, & Prescott, 2011). Strategic initiatives of exploitative nature seek to invest and build upon already established capabilities that the organisations have. They can be in the form of companywide improvements in an existing information technology system or increasing penetration in a certain market the organisation is already serving. Some examples of exploitative initiatives are changes in the recruitment information system, bundling the branding and advertising activities for the organisation's primary products/services (Lechner & Floyd, 2012).

Strategic initiatives' attention to bringing new learning and/or developing new ways for using the learning contributes to the renewal of the organisation. Strategic renewal is a process by which organisations respond to their environments in order to alter their path dependence (Volberda et al., 2001) This response represents a set of strategic actions aimed to align organisational competencies with the environment to increase competitive advantage (Flier et al., 2003) and takes the form of innovative behaviour and new knowledge promotion and utilisation in order to bring about change in an organisation's core competencies and/or a change in its product market domain (Floyd & Lane, 2000; Floyd & Wooldridge, 2000).

Strategic renewal's purpose is to align the organisation's strategy with the changes in its external as well as internal environment (Floyd & Lane, 2000). This alignment between



organisation's strategy and its environment can be attained through exploring new and/or exploiting already existent capabilities in the organisation (March, 1991). So, one way to execute exploratory and/or exploitation activities in order to reach such alignment is through strategic initiatives, which constitute central means for strategic renewal in adapting to changing competitive environments (Agarwal & Helfat, 2009; Floyd & Lane, 2000)

Many views have been explained in the literature on how to study the strategic renewal of organisations (Bower, 1970; Burgelman, 1983b; Floyd & Lane, 2000; Lechner, Frankenberger, & Floyd, 2010; Lovas & Ghoshal, 2000). Burgelman (1983b, 1991, 1994) adopts the variation-selection-retention perspective that comes from evolutionary theory to explain the strategic renewal process, adapting tenets of population ecology theory (Freeman, 1977; Freeman & Hannan, 1989) to the intraorganisational environment (Floyd & Lane, 2000). Burgelman identifies an internal corporate venturing process where middle managers play a key role in bottom-up learning and experimentation processes in the form of autonomous strategic initiatives. These initiatives in turn make it possible for organisations to adapt to the changes in their environments. Similar to Burgelman, Bower (1970) highlights the importance of strategic initiatives and identifies how, through an internal resource allocation process, middle managers champion for initiatives and compete for resources in order to see their success (Bower, 1970). This Bower-Burgelman model, explaining how initiatives compete for scarce resources through internal selection mechanism, has been widely used in the subsequent literature (Noda and Bower, 1996). Other theoretical perspectives for studying strategic renewal include social network theory (Lechner et al., 2010; Pappas & Wooldridge, 2007), strategic roles (Floyd & Wooldridge, 1992b; Floyd & Wooldridge, 1997) and strategic role conflict (Floyd & Lane, 2000). The focus in the above mentioned studies on strategic initiatives shows the linkage to and importance of strategic initiatives for strategic renewal and how they consider to be vehicles of the strategic renewal process.

Our understanding of the work of strategic initiatives and their processes is mostly concerned with the organisational context that shapes strategic initiatives (Lechner & Floyd, 2012). These include more specifically: the internal resource allocation process (Bower, 1970; Burgelman, 1991), the different structural contexts (Noda and Bower, 1996), and the supervisory arrangements (McGrath, 2001) surrounding strategic initiatives process. Recent studies advanced this understanding by investigating how different factors such as group influence activities (Lechner & Floyd, 2012), networks between strategic

initiative groups (Lechner et al., 2010), and learning activities (Lechner & Floyd, 2007; Walter, Lechner, & Kellermanns, 2013) may affect the performance of strategic initiatives.

Strategic initiatives, as noted above, can be thought of, according to their nature, as exploratory (focusing on finding new capabilities) or exploitation (focusing on using existing capabilities). However, the detailed nature of the processes that take place between different organisational members, during the stages of initiatives development, have received less attention. Furthermore, the patterns of interaction followed by individual members to pursue such initiatives have not received sufficient attention in the literature. Therefore, this research proposes to shed light on both the connectivity patterns between organisational members that are associated with different types of strategic initiatives as well as the connectivity patterns associated with successful and unsuccessful strategic initiatives. To achieve these two goals, this research probes to study the effect connectivity between middle managers has on their ability to exert power and influence to win approval for their initiatives.

Group influence activities are the concrete ways that groups seek to influence organisational support for a desired outcome or goal (Lechner & Floyd, 2012). They are the “concrete ways that groups seek to win organisational support for an initiative” (Lechner & Floyd, 2012 : 480). This current research builds on the previous definition of group influence activities from Lechner and Floyd (2012) and adopts the following one for the study’s purposes: the activities and practices middle management uses to gain support, resources, and acceptance for their initiative’s initiation and development.

“Strategy formulation and implementation is often the result of the influence activity among and within divisions competing for resources” (Schilit, 1987 : 287). Being able to exert influence both upwards and downwards is a hallmark of an effective manager (Pelz, 1952) and middle managers are in a unique position to apply such influence activities. In line with Lechner and Floyd (2012), three sets of group influence activities that various organisational groups associated with initiatives use are undertaken in this present research. Firstly, rational justification, in which formal justification for an initiative based on detailed data and analysis is conducted (Bower, 1970; Burgelman, 1991). Secondly, use of formal authority, where formal authority represented by management hierarchy would be used by groups to gain credibility and support (Burgelman, 1983b; Lovas and Ghoshal, 2000). Finally, coalition building, used here as informal influence activity (Bower, 1970; Burgelman, 1983b; Narayanan and Fahey, 1982). Contrary to the first two, coalition building considers various individuals and/or groups within organisations who have

different and often conflicting goals. Bargaining processes in coalition building are present in order to deal with these conflicting goals (Cyert and March, 1963). Such bargaining processes have many forms. One of them is shaping coalitions to secure cooperation and build relationships with other organisational actors (Cobb, 1980).

Lechner and Floyd (2012) studied the relationship between the three aforementioned sets of group influence activities and the performance of strategic initiatives of exploratory nature. They found out that the degree of exploration of the initiative did not moderate the relationship for all of the group influence activities with the performance of their selected strategic initiatives; in more detail, Lechner and Floyd (2012) study results state that coalition building and the use of formal authority were important for the performance of exploratory type of strategic initiatives but in the case of rational justification activities, its effect was important regardless of the nature of the strategic initiative. The first part of their results comports with prior research on the importance of formal power in accomplishing the objectives of exploratory undertakings that bring new ideas and learning to the organisation (March, 1991; Pfeffer, 1981). Moreover, as new learning emerges, the role of formal authority facilitates the integration of that learning and the subsequent new ideas that follow into group activities (Lawrence et al., 2005). As for the part of the study's results concerning the rational justification, Lechner and Floyd (2012) report that the effect of this type of influence activities, i.e. rationality, is important within dynamic and uncertain situations. Such situations, which are basic characteristics of exploratory initiatives, motivate groups responsible for the initiative's goals to engage in more solid justification efforts in order to build up a convincing business case (Eisenhardt, 1989) in the face of the uncertainties associated with the exploratory type of strategic initiative(s) (Lechner & Floyd, 2012). As the exploration level of strategic initiatives increases so does the learning challenge, the need for additional support, and the necessity to unravel ambiguities; three elements that are associated with formal authority, coalition building, and rational justification respectively. This research follows Lechner and Floyd's (2012) reasoning in selecting these three types of group activities for two reasons. First, they represent the full range of influence tactics identified in the literature of group influence activity; and second, because they capture both formal and informal tactics as well as tactics that appeal to rationality and those that appeal to the self-interests of affected subgroups (Lechner & Floyd, 2012). The current research at hand aims to investigate the effect of connectivity between group members on the use of these influence activities when promoting strategic initiatives, the group members being middle managers.

Strategic initiatives of a more exploratory nature are less likely to be successful in the resource allocation process (Lechner & Floyd, 2012). The reason for this is because they move away from what the organisation is already familiar with and the result is discouragement in providing resource investments needed for those initiatives' accomplishment. This is because the link between the initiative's goals and organisational performance is ambiguous and uncertain (Lechner & Floyd, 2012). Group influence activities represent an alternative way to allocation processes for strategic initiatives of exploratory nature to capture and/or obtain resources (Lechner & Floyd, 2012).

These influence activities aim at securing necessary resources for the strategic initiatives to come into happening and they address the performance ambiguities and political uncertainties associated with more exploratory strategic initiatives (Lechner & Floyd, 2012). The way in which the three previously mentioned influence activities address those ambiguities and uncertainties can be itemised in three ways. First, influence activities based on rational justification use data and analysis to reduce the uncertainties surrounding an initiative's consequences for organisational performance. This increases decision makers' confidence in supporting the initiative (Lechner & Floyd, 2012) even though the initiative's goals are departing away from what the organisation is accustomed to. Also, the use of data and analysis in this rational justification activity heightens the chances that decision makers will make the required investments to develop an exploratory initiative and abandon the status quo mentality that some powerful groups in the organisation are committed to (Hambrick et al., 1993).

Second, the use of formal authority serves to counteract the resistance created by ambiguities and uncertainties (Lechner & Floyd, 2012) associated with the choices suggested by middle managers for carrying out the initiative(s) proposed. This resistance can be from top management who are not convinced of the analyses provided in the rational justification activity in the previous point above or from various other groups who are competing for their own initiatives.

Third, coalition building is needed to close the gap between perceived risks and the decision to support a strategic initiative (Lechner & Floyd, 2012). The use of informal influence activities, exemplified in coalition building activities here, can make the difference in favouring middle managers initiatives in situations where their power or rational justification are low or lacking enough strength. Where that is the case, the gathering of informal support from different actors across the organisation will greatly

enhance the influence activities aim, carried out by middle management, to gain support for their initiatives (Lechner & Floyd, 2012).

Certainly, the process of using the influence activities does not necessitate it to start with rational justification and end with coalition building. Rather, their usage together and/or in combination augments the support for obtaining needed resources for the implementation of a strategic initiative the way middle management sees best.

The three influence activities discussed above aim at mobilizing resources and routines to direct attention toward certain issues (i.e. the strategic initiatives middle managers are postulating) rather than other issues (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997). Whether or not the presence of connectivity within middle managers as well as how much of this connectivity is needed to better perform those influence activities constitute one of this research's investigation areas. The presence and intensity of connectivity between middle managers might contribute to having an internal environment that better copes with the demands and requirements of the external environment (Child, 1997).

The relation between strategic choice and the three influence activities aforesaid stems from the view that strategic choice is in essence a political process (Child, 1972), and that the focus for strategic choice is environmental and intra-organisational dilemmas, those dilemmas are resolved -among other factors- by internal political factors (Pettigrew, 1977). Further, "Strategic choice is recognized and realised through a process whereby those with the power to make decisions for the organisation interact among themselves (so constituting a shifting "dominant coalition"), with other organisational members, and with external parties" (Child, 1997 : 60)

The influence activities are means of political nature targeted at shifting the attention and resources toward certain matters. Middle managers employing such influence activities could change the organisation's strategic choices and the influence of connectivity on such change efforts is one of the current research's interests.

The above discussion provides a description of strategic initiatives types, evolution, and contribution to organisational renewal process. Also, a detailed account of the major dimensions that shapes the group influence activities was shown. These two were then linked to how middle managers might utilise connectivity via different stages and types of strategic initiatives. All of which that can educate and sharpen our understanding of the strategic choices the organisations follow and the strategy making and implementation

process conducted to form their strategies. In the current research this is tracked through the lens of a connectivity-based focus.

Table 1 - 1 below presents key prior research according to chronological order. The table summarises what the literature review has covered so far. It lists theoretical lens, method(s) applied, and core findings per study as well as its relevance to the current research. The table situates and furnishes the dissertation's conception of connectivity in relation to the other concepts relevant to this study. The next section offers the viewpoint of the dissertation with regard to the implications, i.e. influence, of connectivity on the strategy making process. The argumentation is shown by explaining the dynamics of connectivity's influence (the how and when of connectivity's working mechanism) on strategic initiatives' evolution as seen by this thesis.

## **2.4 Connectivity and Strategic Initiatives' Evolution**

This section offers a discussion of the form of the link between connectivity and the two types of strategic initiatives. The aim of presenting this link is to uncover the details of the underlying dynamics of such linkage and their operating mechanism. Understanding those underlying dynamics is important for this research in order to clarify how connectivity influences strategising in organisations, and ultimately, in making use of connectivity's influence in the strategy making and implementation processes.

Exploratory strategic initiatives build on novel ideas, which mean treading unknown terrain for the organisation, for their development. The higher connectivity is, the higher the chances for generating more ideas and identifying such novel opportunities. Higher connectivity means having more interaction points, which bring along with them added open venues and possibilities for more people to participate, debate, compare, and contrast the novel ideas on display. These expanses develop information flow where the new idea(s) is allowed to be "experimented" by the collisions of enhancements, additions, or even abandonment of it(them). In short, high connectivity leads to spaces for extracting newer ideas and for learning something new, even if that new means dropping of the new idea and the adoption of a different, rather than a complementary, one. Also, higher connectivity would lead to more participation. Exploratory strategic initiatives' progression

Reference	Theory Lens	Method	Core Findings	Relevance to Research
Burgelman 1983b	Grounded Theory Building	Longitudinal Study/ 1 Organisation in High Tech. Sector	Successful internal corporate venturing depends on autonomous strategic activity on the part of operational level participants, on ability of middle managers to conceptualize these initiatives in more general system terms, and on capability of top management to allow viable initiatives to change corporate strategy	Recognition of middle managers role in identifying and promoting strategic initiatives
Floyd & Wooldridge 1992b	Strategy Process; Role Theory	Factor & Correlation Analysis / 259 middle managers in 25 organisations	Developed typology of four middle management strategic roles & activities and applied it in strategic choice context.	Highlighted relevance of middle managers in strategy making

**Table 1 - 1:** Summary of Key Literature Review Journal Articles

Floyd & Wooldridge 1997	Role Theory; Organisation Ecology Theory	Regression Analysis / 259 middle managers in 25 organisations	Supported the view that middle management's involvement in strategic renewal is associated with performance. In particular, consistency of downward influence and variation in upward influence is associated with higher performance	Further proof of middle managers' impact on performance through strategic renewal activities
Losada 1999	Learning Theory; Complexity Theory; Chaos Theory; Nonlinear Dynamics Theory	Laboratory experiment	Connectivity is an excellent predictor of team performance	Connectivity can be measured and attributed to high, medium, and low performances of teams

**Table 1 - 1:** Summary of Key Literature Review Journal Articles (**continued**)



Floyd and Lane 2000	Evolutionary Change; Role Theory; Organisational Learning Theory	Conceptual	<ul style="list-style-type: none"> <li>- Emphasized strategic role conflict as an implication of strategic renewal</li> <li>- Discussed contingencies related to strategic role conflict and responses for its resolution</li> <li>- Conceptually clarified the concept of strategic renewal (definition, subprocesses)</li> </ul>	Strategic role conflict between middle managers is inevitable in complex settings but can be reduced through control mechanisms
Wooldridge et al. 2008		Literature Review paper on middle management perspective	Middle management perspective needs advancement in 4 key aspects: a need for a holistic investigation of roles, a need to connect thought & action, a need to link processes, antecedents, & outcomes, and, a need for a multilevel theory	Future research directions to build on

**Table 1 - 1:** Summary of Key Literature Review Journal Articles (**continued**)

Carmeli and Spreitzer 2009	Learning Theory; Thriving at Work	Structural Equation Analysis / 172 Surveys - various org.s - cross industries	Connectivity is positively associated with thriving; it is a an important factor affecting individual's thriving which facilitates innovative behaviours in the workplace	Connectivity has a role in fueling creative and innovative behaviours at work. This relates to the nature of exploratory type of strategic initiatives
Lechner and Floyd 2012	Behavioural Theory; Strategic Renewal	Multiple Regression Analysis / analysis of 96 strategic initiatives & 246 informants	- Use of formal authority and coalition building's activities two forms of "group influence activities" has generally a positive influence on the performance of strategic initiatives, this relationship strengthens when the degree of exploration is high  - Use of rational justification activities is important to the performance of strategic initiatives only when the degree of exploration is high	Connectivity's influence on how and when to use group influence activities

**Table 1 - 1:** Summary of Key Literature Review Journal Articles (**continued**)

will depend mainly upon two factors. First, generating sufficient ideas to clear ambiguity and enable a risk assessment. Second, establishing credibility and viability for those new ideas during the formulation stage of the initiative. These two factors will tend to encourage subsequent endorsement or acceptance during the implementation stage of the initiative.

In exploitation initiatives, however, connectivity helps by building from an already existing pool of knowledge. Most ideas would be familiar to the organisation and the initiative development will not be attempting to produce new ideas. The aim is to make improvements, expansions, and advancements. Here, the need for continuous generation of ideas to unmask ambiguities or explore ways to integrate them into the organisation's events is not present. A low connectivity level might be more suitable where the communication between organisational members is creating bounded areas of participation that are geared toward focusing on already established idea(s). Fewer channels resulting from lower levels of connectivity between organisational members coupled with convergence around a set of ideas will tend to increase commitment and perhaps ease cohesiveness between organisational members.

Going back to strategic initiatives' literature and linking it to the concept of connectivity and the connectivity levels the following can be observed: connectivity may be high or low in either type of the strategic initiatives. Also, connectivity's influence has the potential to occur in either the implementation or formulation stage of the strategic initiative. This is illustrated in figure 2 - 2 and figure 2 - 3 below.

		Connectivity Level	
		High	Low
Formulation Stage	<ul style="list-style-type: none"><li>- More idea generation &amp; learning</li><li>- More development of interdependencies</li><li>- Higher support &amp; acceptance for initiative</li></ul>	<ul style="list-style-type: none"><li>- Less idea generation &amp; learning</li><li>- Less development of interdependencies</li><li>- Less support &amp; acceptance for initiative</li></ul>	
Implementation Stage	<ul style="list-style-type: none"><li>- Facilitates persuasion activities</li></ul>	<ul style="list-style-type: none"><li>- Less facilitation of persuasion activities</li></ul>	

**Figure 2 - 2:** High & Low Connectivity Level's Influence on Exploratory Strategic Initiatives

## Connectivity Level

	High	Low
Formulation Stage	<ul style="list-style-type: none"> <li>- Risk of groupthink</li> <li>- More development of interdependencies</li> <li>- More support &amp; acceptance for initiative</li> </ul>	<ul style="list-style-type: none"> <li>- Less idea generation &amp; learning</li> <li>- Less development of interdependencies</li> <li>- Less support &amp; acceptance for initiative</li> </ul>
Implementation Stage	<ul style="list-style-type: none"> <li>- Facilitates consensus</li> <li>- Facilitates persuasion</li> </ul>	<ul style="list-style-type: none"> <li>- Less facilitation of persuasion activities</li> </ul>

**Figure 2 - 3:** High & Low Connectivity Level's Influence on Exploitative Strategic Initiatives

As for the extent of connectivity needed there are two broad possible scenarios: One is having too much connectivity and the other is in having too little of it. In the latter, low connectivity levels will tend to impede idea generation because of relatively fewer interactions. Low connectivity may also cause reduced influence due to the fewer number of interactions. Similarly less connectivity would mean less ability for individuals to gain support from other organisational members for any given initiative. Using the analogy of roads connecting cities low connectivity would mean fewer roads. Thus, lower connectivity would likely lead to missed opportunity identification and/or lower capacity to building support for the goal(s) of the proposed strategic initiative. Conversely, in the former state, high connectivity levels would increase the potential for more idea generation, increased exercise of influence, and increase the possibility of support by organisational members for any given initiative.

The influence of high and low connectivity can be observed in both types of strategic initiatives, exploration and exploitation, as well as during the formulation and implementation stages of the two types of initiative. In strategic initiatives of an exploratory nature where the initiative moves away from what the organisation knows and is familiar with (Nelson & Winter, 2009), and specifically in the formulation stage the initiative is to benefit from high connectivity. This occurs because connectivity by itself will encourage idea generation and learning (Carmeli & Spreitzer, 2009; Losada & Heaphy, 2004). This is so, as explained above, higher connectivity means more points and

expanses for collaboration and conversation about the new idea(s). These points of dialogue would add to, modify, or challenge the presented idea which ultimately produces anew rounds of idea generations.

Idea generation and learning are attributes of exploratory initiatives where the ambiguity and the need for collaboration are both highly desirable. Thus, the higher connectivity is the higher the chances for identifying novel opportunities and developing learning in exploratory strategic initiatives. Moreover, higher connectivity would tend to encourage power tensions as interdependencies increase around a given initiative and people take different positions in favour or against such initiative. More idea exchange and more development of interdependencies resulting from high connectivity will tend to produce “buy in”, support, and even acceptance when a group of managers form a team.

An important effect of connectivity will be dissemination of information that prevents information loss (Burt, 1992) and consequently facilitates understanding and support by organisational members. It may even be the case that if an initiative makes progress and gains momentum it may attract new organisational members, generating more power associated with the initiative. Conversely, lower levels of connectivity at the formulation stage of exploratory strategic initiatives may not produce sufficient idea generation and exchange to develop the objective(s) of the initiative. Hence, these objectives will remain mainly unclear and detached from the overall organisation effort. Potentially, not enough interdependencies will be created for the initiative to be appreciated which consequently leads to lack of support.

In the implementation stage of exploratory strategic initiatives high connectivity levels will facilitate persuasion activities in favour of the initiative. Lower levels of connectivity, in contrast, will not facilitate persuasion. Persuasion will generate from the acceptance and support the initiative may have gained during the formulation stage. Such persuasion will positively affect resource allocation decisions and, in turn, higher connectivity will make such decisions easier while lower connectivity will tend to obstruct them.

In strategic initiatives pursuing exploitation there is less need for new learning. Rather, refinement, improvement, and extension of existing competences and ideas or learning take place (March, 1991). In the formulation stage of exploitation strategic initiatives less connectivity levels would mean less interaction between group members, thereby impeding idea generation, which will results in fewer ideas. Probably this would not constitute an issue for exploitation type of initiatives because their purpose is to further develop existing

ideas. However, reduced influence due to the fewer number of interactions might result from low connectivity levels. Similar to the case of the exploratory initiatives, high levels of connectivity in this stage would encourage development of power as interdependencies increase around a given initiative and people start taking different positions in favour or against initiatives. Low levels of connectivity would impede interdependencies created around the initiative consequently leading to lack of support for it. Exploitation ideas “often thrive on commitment more than thoughtfulness, narrowness more than breadth, cohesiveness more than openness” (March, 1996: 280) to be realised. Connectivity offers ways to achieve such commitment, narrowness, and cohesiveness on the existing ideas, which are already clear to the organisation but need to be highlighted, get noticed, and pursued. A point worth mentioning here is the risk of groupthink (Janis, 1972) where too much agreement too early in the formulation stage might be a result of high connectivity.

In the implementation stage of exploitative strategic initiatives high connectivity would help by facilitating persuasion in favour of the initiative that would result in resource utilisation decisions. Lower levels of connectivity, in contrast, will not facilitate persuasion. Here, persuasion, drawn from acceptance the initiative may have gained during the formulation stage, would be directed to resource utilisation decisions that revolve around capitalising on existing capabilities. Going back again to the analogy of roads and cities mentioned previously, high connectivity would make such decisions easier because more connectivity may generate more consensus. Such consensus is critical in strategy implementation as the basis of coordination and cooperation in realising strategic aims (Walter et al., 2013).

In other words, obtaining consensus is key for exploitation strategic initiatives to be implemented and the more connectivity is present the more consensus is obtained. This, consecutively, positively affects how currently available learning is being used to improve current returns (March, 1991) and also eases decision-making on how resources are utilised for the initiatives in question.

Next, and in order to elucidate how connectivity’s influence on the development and outcome of strategic initiatives draw a parallel to connectivity’s influence in strategic choice and its role in strategy formation, a description of connectivity’s relationship with important key constructs in the strategy making and implementation processes is presented.

As this dissertation previously argued, connectivity by itself does not have a direct effect on the way organisation’s strategies come to exist or how they progress. However, it has

the potential not only to explain the viability and intensity of strategies but also to facilitate or hinder organisational outcomes. Connectivity possesses such facilitation or hindrance potential simply because it is in the fabric of any interaction taking place between people in the organisation (Jafar & Canales, in press). Under certain circumstances connectivity can affect a range of elements necessary for strategy formation, such as idea generation, participation, support, acceptance, persuasion, and consensus. Here is now a description of how this thesis perceives connectivity's interplay with those elements.

#### Connectivity and idea generation

Connectivity paves the way for fresh ideas, which may be relevant for the initiative being generated. This is because having connectivity means having channels for communication. This communication ensures a flow of ideas occurs and it can take several forms such as discussions, brainstorming, and meetings (Floyd & Wooldridge, 2000). The flow of ideas can serve two purposes: first, generating more ideas and second, allow the ideas to be clarified, understood, and tied to organisational priorities. Connectivity can play a role where interactions can aid the ideas to reach, and furnish the opportunity for them to be discussed, by many people. Depending on one's connectivity, the ability to collect signals and making sense of the context of the idea(s) increases or decreases. Accordingly, deciding whether to get involved, positively by showing support or negatively by opposing, or what is known as appropriation (Phillips, Sewell, & Jaynes, 2008; Radaelli & Sitton - Kent, 2016) follows.

#### Connectivity and participation

Connectivity has the potential of becoming an area of participation for organisational members. Deliberation of ideas brings members together and they engage in participation. Mantere and Vaara (2008) state that organisational discourses are associated with participation and that the participation problems in organisations are traced to a complex set of social practices which are constituting strategies. The solution to that, they argue, is to identify dominating discourses that are hindering participation and actively seek the use of alternative discourses that promote it (Mantere & Vaara, 2008: 341). These alternative discourses can be promoted by the presence of connectivity leading to enhanced participation, thus lowering the dissatisfaction among members who feel excluded (Westley, 1990) as well as decreasing strategy implementation difficulties (Mintzberg, 1994b).

#### Connectivity and support

Idea generation will tend to contribute to increase support for the initiative via proof of a concept. Trying out and experimenting on such ideas will demonstrate their degree of usefulness and hence develop support (Gavetti & Levinthal, 2000). If these ideas succeed because of their usefulness they will gain support by organisational members who would stand behind the proposed ideas. Later, interdependencies between those different members will develop. As a consequence, power relationships will ensue due to support provided in favour of such ideas as they get implemented. Of course opposition is expected as change efforts might entice other members to stand against a new idea or an innovation endeavour.

#### Connectivity and acceptance

After organisational members start participating in discussions about the ideas being generated and subsequent support for such ideas accumulates, acceptance will build up and support will begin to get noticed (Canales, 2013). This acceptance would be facilitated by the understanding of ideas by organisational members, which will generate subsequent support. High levels of connectivity will encourage acceptance by providing more channels that would permit more people to be presented with the ideas and increase the likelihood of endorsing them. Conversely, low connectivity would restrict channels that would result in fewer chances for ideas to be distributed and consequently less chance for them to be accepted.

#### Connectivity and persuasion

Members of the organisation who accepted the ideas can be further persuaded for more support when the connectivity levels are high. This is also the case with members who have not yet accepted the ideas. High connectivity will facilitate persuasion efforts for the ideas because the more connections between people the more chances for rewarding (i.e. promises for future collaboration) and/or coercing (i.e. withholding information) are available. Having more connections means more access to resources and people that serve as means for rewarding or coercing and subsequently gaining persuasion (Pfeffer, 1994). Also, high connectivity enhances persuasion by pinpointing to credible sources of expertise as well as showing similarity between members who are already supporting the initiative and its ideas and members whom persuasion is required. Low connectivity, on the contrary, would hamper persuasion as access to communicate with others is restricted and as a result influencing others' perspectives, whether by rewarding, punishing, or referral to credibility and similarity, is less possible.



## Connectivity and consensus

The scope as well as the content of organisational consensus are two dimensions of consensus (Wooldridge & Floyd, 1989) where connectivity's effect can be highlighted. Scope of consensus refers to who participates in consensus whereas content of consensus deals with what participants agree about (Wooldridge & Floyd, 1989). Higher connectivity levels would allow for more participants to join and enable consensus to be expanded. Also, higher connectivity would mean ideas have more paths to be circulated and hence create spaces for reflection and deliberation. This would lead to better chances for ideas to be agreed upon. Further, more commitment would result as consensus includes the commitment dimension to ideas (Dess, 1987). Strong agreement on ideas is critical in the implementation of such ideas as it constitutes the basis of coordination and cooperation in realising strategic aims (Walter, Kellermanns, & Lechner, 2012).

In their study, Fredrickson and Losada (2005) explained human flourishing by associating it to nonrepetitive, innovative, and highly flexible dynamics (interactions) and stated that these interactions are a result of high connectivity between people (Fredrickson and Losada, 2005). These non-repetitive, innovative, and highly flexible features of the interactions between people address what strategic initiatives of highly exploratory nature need. This is because these initiatives require novel ways and ideas of developing capabilities within the organisation in order to meet the requirement of its environment. Further, this current research argues that strategic initiatives' success depends on learning patterns where previous as well as new learning is needed, depending on the nature of the initiative. Such success from the view of middle managers is pursued as a function of connectivity and influence activities. The above-mentioned interaction between connectivity and the elements found in strategy building exercises in the organisation extends connectivity's research, i.e. Fredrickson and Losada (2005), into strategic management and organisational studies. The subsequent section, and chapters, build on this discussion and identify examples and data that investigate connectivity's influence on strategy formation processes.

### **2.4.1 What is This Research Doing?**

This current research seeks to elaborate theory on the role connectivity between managers has on the strategy making and implementation process. This role that connectivity has is

depicted by the potential of connectivity to be an enabler or inhibitor of the evolution and outcome of strategic initiatives. Connectivity has such an enabling or inhibiting influence because it is basically a function of the relationships between organisational members. These relationships permeate the constitution of a roadmap for communicating and exchanging organisation's resources. Using the metaphor of connectivity as the streams that interconnect a river system, this research proposes that connectivity operates as a vehicle that carries information, ideas, and other resources. The influence of connectivity through the various "items" it carries along its channel varies depending on the situation (time and place of the influence), stage (formulation or implementation), and/or the type of the initiative (exploratory or exploitation). Moreover, the influence of connectivity on the strategic choice of middle managers depends also on the level of connectivity, high or low, a manager enjoys at the time of occurrence of the event. So a high connectivity level can work best in certain events for one manager, but it may be the opposite for another. Also, a manager with same, or very similar, connectivity may experience varying choices depending on what type of initiative or a phase of an initiative he or she is encountering. As such, connectivity has the potential to convey substance between members in organisations. It could serve as basis for future communications though it has no substance in itself. Connectivity can be beneficial or detrimental to the evolution and outcome of strategic initiatives depending on the conditions where it occurs. The depiction of connectivity as streams or conduits carrying ideas and resources can inform our understanding of how strategies in organisations come about. This understanding happens by considering the resulting effects of connections between organisational members on knowledge creation and knowledge utilisation at the level of strategic initiatives. In short, the present research highlights the concept of connectivity and brings it to the fore of strategy building. In doing so connectivity's influence on the strategy making and implementation process is being shown by explaining its effect on major components of such process.

The present research picks up on the notion which views strategy and strategy making as a portfolio of relationships (Starkey et al., 2004; Venkatraman & Subramaniam, 2002) by bringing to the fore the concept of connectivity among middle management while engaging in the strategy making and implementation process.

Middle managers' strategic activities need support and approval, such support and approval may be obtained through the usage of the group influence activities mentioned earlier. The more the middle managers are connected the more, the research proposes, the

influence activities to be successful in acquiring the resources required for strategic initiatives execution. Also, the research proposes that the more connected those middle managers are the more suited their preferences would be with the overall organisational strategy in general and with the initiative's goals in specific.

One of the key points, regarding the aspects of connectivity, this research points out is that connectivity is not always positive. The effect of connectivity would be different and context dependent and those effects would vary according to the situation which connectivity is present in. So, this research is to explore both the positive and negative effect that connectivity may have as well as the conditions and states under which these effects take place.

In events of strategic initiative development, type of initiatives as well as the stage of the strategic initiative. Connectivity would, for example, be more helpful in exploration initiatives where the need for new ideas is more pressing than in exploitation initiatives where the emphasis is on applying already existing learning. So, in the former, the higher connectivity is the higher the chances for generating and identifying novel opportunities and developing learning. But in the latter, high connectivity may not be desirable because the focus is on the using existing knowledge. High levels of connectivity level may actually be unwelcomed in the early formulation stage of exploitation initiatives, where focus is needed rather than brainstorming. Higher connectivity at earlier stages may lead to more ideas coming in, which would require assessment of whether they are in harmony with the aims of the initiative or not. This might result in drifting away from a needed focused approach.

Connectivity will tend to be path dependant. Connectivity established for one given initiative will carve the streambed that will be available for future initiatives. "Akin to temporary water streams that sculpt the landscape when they flow, connectivity will develop links between individuals. In turn these links [have a potential to] convey future flows. Recurrence of certain themes along a connection that is seen as beneficial may lead to a virtuous cycle whereby support may eventually be obtained for an initiative" (Jafar & Canales, in press : 16).

When connectivity has helped obtain desired outcomes in the past, it is likely to be perpetuated. Such recurrence would shape connectivity patterns over time in the organisation very much like how water streams form in the landscape. Continuous positive returns from this recurrence may lead such connectivity patterns to become part of the

organisational culture, one that is used over and over again whenever a similar need for it materialises.

A research holding connectivity as its focus would add to the understanding of the strategic initiatives evolution process and, as well, to better insights around their outcomes. In their study, Lechner and Floyd (2012) concluded that group influence activities are a significant factor in acquiring resources for the initiatives of exploratory nature and in their impact on the organisation's core capabilities. An extension of their work by introducing connectivity might be by identifying how connectivity can enhance those group influence activities. This is achieved by connectivity's role in building interdependencies around exploratory initiatives. Power and influence channelled by higher connectivity play a role on the possible outcome of initiatives contributing to extend the notion of effectiveness of decision-making (Elbanna & Child, 2007; Walter et al., 2012). Only a few studies address the relationship between influence and developing strategies where strategic initiatives are the unit of analysis (Lechner & Floyd, 2012 : 492). A contribution of this current research would be to better understand such a relationship and, in so doing, help to better explain how strategic initiatives develop, which fuels our apprehension of the strategy making and implementation process.

Along with the same lines of adding to key literature studies but turning on to the topic of connectivity, Losada's (1999) study on the performance dynamics of business teams found patterns that distinguish high from low performers. Losada stated that connectivity resulted from these dynamics that consisted of dimensions that were identified during team's talks. For Losada's and colleagues high performing teams had high connectivity levels, or what Losada termed expansive emotional space, which in turn created broader learning opportunities, new ideas offering, and freer information sharing. Low performing teams, in contrast, had low connectivity levels or restrictive emotional space, which repressed ideas sharing, risk taking, and decreased learning opportunities. This research on hand adds to the work of Losada's (1999) by providing a link between connectivity and idea generation as well as learning accumulation and utilization. This is furnished by describing and explaining the relationships between the aforementioned together with other constructs, which are important for organisational renewal and learning, namely connectivity's relationship with influence, power, persuasion, support, and consensus. Of importance is the theoretical distinction offered on the difference between the channel and the content that runs across the channel when using the concept of connectivity.

## 2.5 Research Gap and Research Question

After presenting and examining the literatures pertaining to this current research (i.e. literatures of connectivity, middle management perspective, strategic choice, and strategy making on the level of strategic initiatives), this section moves to identifying, explicitly, the research gap and the questions that attempted for answering such gap. But before that, a note on strategic choice might be worthy. Often strategic choice is considered in the literature of strategic management as a construct falling under the components of strategy formulation phase. This is understandable because if there are no choices to be made then it does not make much sense or value in thinking about strategies at all (Macmillan & Tampoe, 2000). Despite that the notion of choice is implicitly present in implementation phase of strategy making, and despite that categorising strategic choice in the formulation side is basically, for a lot of scholars, a form of theoretical classification. This research takes the stance that strategic choice exists in the two phases, formulation as well as implementation, not an element in formulating strategies only. This note is important because viewing strategic choice as part of the formulation side of the strategy equation emphasises the split between thinking and doing of strategy processes, a split that does not sit well with what this current research investigates. The choice element exists in implementing strategies and not just in a way that corresponds to changes that might mandate altering agreed on and/or planned strategy. Rather, there is a choice, for example, in not following the strategy as planned from the onset. This is due to numerous reasons and can be traced clearly in some situations more than others. As strategic choice in this present research is the dependant variable, the above clarification is warranted as it entails important consequences in conception of, and carrying out, the research.

This research is an exploratory study that links connectivity and strategic choice. The literature review above notes the minimal focus in the literature on what influence connectivity might have relative to strategy making. It is a focus that is rare in dealings within strategic management literature. The review also takes note of the utilisation of connectivity in other literatures as well as the attempts to incorporate connectivity in managerial studies but alongside other constructs which take the lead in the investigation while connectivity is dealt with as an auxiliary or minor catalyst. Also, the literature review conceptualised a new fitting of connectivity in organisational settings, this is done by clarifying the relationship connectivity has with other strategy-related elements and

concepts (such as idea generation, interdependencies building-up, and consensus) and by offering dimensions and conditions under which connectivity can work best.

Following from that, the current research efforts to draw together two concepts that have not received a direct nor adequate examination. The thinking behind this is that strategy making is an integral part in the activities and operations of any organisation. Exploring the potential(s) of connectivity's influence on the building and development of strategies could bring insights and practical solutions to the organisation. This eventually aids the organisations in realising their strategic renewal, strategic change, and performance enhancement efforts.

Connectivity is like a road network that develops from the relationships between people. It is a product of the social connections or interactions conducted between two or more persons and it manifests itself as the set of channels already present and/or created for such interactions to happen (Jafar & Canales, in press). In organisations, connectivity serves "as conduits for exchanging ideas, views, opinions, and even resources among various organisational members" (Jafar & Canales, in press : 15). Focusing on connectivity embedded within such relationships brings to the surface the linkages, interdependencies, and communication concerns that exist in organisational activity in general, and, specific to this research, strategy formation activity is where this research delves these linkages, interdependencies, and communication patterns into. This is done with special interest geared toward middle management layers in the organisation where middle managers' roles are explained and brought up to the realm of strategy field through their connectivity aspect. The way connectivity is presented in this research, this dissertation is arguing, serves as a metaphor that explains when and how middle managers engage in specific strategic choices during a strategy making and implementation process. As such, the research privileges middle management but acknowledges that the strategy making and implementation process ought to encompass and benefit from the participation of all organisational levels.

Introducing connectivity and its influence in organisational setting is the basic aim of the research. This is where the research makes a beneficial contribution to the connectivity, strategy making and implementation conversation, and middle management perspective in strategy process literatures. Knowledge, skills, and learning accumulated collectively over time by organisational members are one of the most important resources (Floyd & Wooldridge, 1994) any organisation could possess.

In short and in closing of this chapter, it is this following gap in both the connectivity and strategy literatures to which this research aims to contribute at filling:

Exploring the dynamics of middle managers' connectivity influence, exemplified by its levels and conditions where it works best, on the strategic choices they engage in during strategy making and implementation processes

The research question guiding the research is:

**What is the influence of connectivity between middle managers in strategic choice?**

## **Chapter 3. Research Methodology and Design**

### **3.1 Introduction**

The purpose of this research is to explore the influence of managerial connectivity on strategic choice and to provide a description of such influence of connectivity, i.e. its subtleties, its various states and types, and its potential effect on organisational events. The ultimate objective is to gain a better understanding of the strategy making and implementation process in organisations.

A research design serves as a blueprint for conducting research which deals with at least four problems: what questions to study, what data are relevant, what data to collect, and how to analyse the results (Philliber, Schwab, & Sloss, 1980). Research design is a logical plan for getting from an initial set of questions to some set of conclusions or answers about these questions (Yin, 2003). It focuses on what type of study is being investigated and what kinds of results are pursued. A research methodology is determined from the research questions and the current level of knowledge in the relevant literature (Janesick, 1994). Methodology focuses on the research's process and the kind of tools and procedures to be used in the research. It describes the best means for gaining knowledge about the phenomenon under study (Denzin & Lincoln, 2000) and the identification of specific ways we can use to try to understand that phenomenon. Methodology shapes the use of specific data collection as well as data analysis techniques. The research design and methodology employed for attaining the above for the current research are illustrated next.

### **3.2 Research Philosophy**

Decisions about which research method of inquiry is the most appropriate can be made after answering questions related to the basic belief system that guides the researcher, not only in method(s) choice but also about ontological and epistemological views (Guba & Lincoln, 1994). A paradigm is a "basic set of beliefs that guide action" (Guba, 1990 : 17). The author examined the following research paradigms in social sciences: positivism, post-positivism, critical theory, and interpretivism, in order to make his choice of paradigm and as a result the research methodology process to use.



Ontology refers to the nature of being (Crotty, 1998); what constitutes reality and how to understand existence of things and matters (Healy & Perry, 2000). Whereas epistemology attempts to define the nature of knowledge; what constitutes knowledge's scope (Delanty & Strydom, 2003); how to obtain knowledge and study the criteria by which obtaining knowledge is warranted (Johnson & Duberley, 2000). Methodology, like epistemology, is also concerned about how we come to know what we know but in a much more specific and practical sense and nature. Methodology focuses on the specific ways, i.e. methods of research, which are used to try to understand the world (Trochim & Donnelly, 2005).

So while positivists, post-positivists, and critical theorists ontological position hold that reality exists, interpretivists take a relativist approach stating that reaching an external independent reality is not possible (Johnson & Duberley, 2000). The former two paradigms' basic epistemic view is objectivism, which holds that meaning exists apart from consciousness and an objective truth independent of the observer exists. Such truth can be reached, comprehended, and confirmed (Guba & Lincoln, 1994; Squire, 2005). Critical theory's epistemology is of constructionism, which denotes that meaning is the result of interaction between the observer and reality. Truth is the outcome of the linked interaction between the object and the subject (Guba & Lincoln, 1994). Interpretivism's epistemic stance is subjectivism which stipulates meaning to be created and negotiated by human actors externally to consciousness; that there are multiple realities and truth cannot be separated from our knowledge of it. In the interpretivist paradigm, the subject and the object are linked and reality is fluid and it is also socially constructed (Crotty, 1998; Guba & Lincoln, 1994).

Although positivists, post-positivists, and critical theorists have a realist ontology in common, they differ in how to approach such ontology. Positivists' realism, which is also known as naive realism, believes that "observation of the empirical world -through our senses- provides the only foundation for knowledge" (Guba & Lincoln, 1994 : 23). If observation for a phenomenon is not attainable, and consequently not subject to empirical testing, then positivists reject it (Guba & Lincoln, 1994).

Post-positivists challenges positivism's assertion that only the observable constitutes reality and knowledge. They accept that reality exists externally to consciousness but argue that it is impossible to fully perceive reality due to imperfections of human's sensory and intellectual capabilities (Letourneau & Allen, 1999). Post-positivists realism is also known as critical realism since the posture claims about reality are exposed to widest possible examination to facilitate apprehending as closely as possible reality (Guba & Lincoln, 1994).

As for critical realism theorists, or historical realism, it maintains that an external reality exists but it is one that “changes over time and is shaped by social, cultural, ethnic, and gender values” (Squire, 2005 : 81). Also, meaning for critical theory proponents is not considered to exist externally to consciousness. Rather, it is constructed through interactions of observers with reality. Critical theory views research as a catalyst for change, and observers or subjects are agents of this change (Johnson & Duberley, 2000).

One key difference between the nature of interaction of object-subject embodied in constructionism (critical theory) and one that is in interpretivism, is that the former views knowledge to be contingent upon human practices and developed and transmitted within an essentially social context. Further, it sees reality as a mixture of subjective internal perceptions with an external reality (Crotty, 1998). While the latter posits that knowledge does not exist apart from human consciousness (Crotty, 1998) and that meaning is forcibly imposed on the object by the subject (Walsham, 1995). In table 3 – 1 below, a summary of the range of paradigms and their ontological/epistemological standing discussed earlier along with the most common methodologies associated with each paradigm is presented.

### **3.3 Choosing a Paradigm for the Current Research**

Based on all of the above and reflecting on the current research and its primary attention, the author is not a pure positivist or a pure interpretivist. Neither paradigm fits with the author’s view of the current research, a view that seeks to investigate how connectivity stemming from social interaction among organisational members plays a role in developing strategic choice. The author, therefore, pursues knowledge by following ontological/epistemological stances of post-positivism’s paradigm. And in particular, a critical realism approach of post-positivists’ paradigm. The critical realism approach or philosophy is a form of post-positivism which maintains that objective reality exists independently of the observer's mind, meaning that there is an external reality that is knowable and mind independent whilst acknowledging the roles of perception and cognition in reaching and understanding such reality (Bhaskar, 1978).

This external reality consists of abstracts that are born of people's minds yet exist independently of any one person (Sobh & Perry, 2006), a reality which is "largely autonomous though created by us" (Magee, 1985 : 61).

<div>Paradigm</div> <div>Paradigm element</div>	Positivism	Post-positivism	Critical theory et al.	Interpretivism
<b>Ontology</b>	Naive Realism: social world is external to individual cognition and consists of tangible structure and relationships	Critical Realism: social world is external to individual cognition but it can never be fully understood or comprehended	Historical realism: reality is shaped by social, political, cultural, ethnic, and gender values	Relativism: realities are local and relative to the individual or a particular time or culture
<b>Epistemology</b>	Objectivism: meanings exist apart from the operation of any consciousness. It implies the separation of subject and object of knowledge so that the observer is uninvolved during the research process		Constructionism: meanings come into existence through interaction with reality. There can be no meaning without the mind	Subjectivism: meanings are imposed on the object by the subject. Knowledge is generated from the mind without reference to reality
<b>Methodology</b>	Experiment Simulation Survey Statistics	Experiment Survey Case study	Action research Critical studies Case study	Ethnography Phenomenology research Case study Grounded theory

**Table 3 - 1:** Social Science Research Paradigms (taken from: Squire, 2005)

Because critical realism holds that the external world is imperfectly and probabilistically apprehensible (Guba & Lincoln, 1994) realists research should consistently look for deeper, unobserved, and unobservable reality in answering why a result has been found or reached (Neuman, 1991). For Bhaskar (in Blaikie 2007) reality comprises of three elements: the empirical, the actual, and the real. The empirical refers to what is observed, the actual refers to events or phenomena, whether or not they are observed, and the real pertains to the underlying mechanisms or structures that produce the events. These mechanisms or structures, although not always observable, can generate an observable event or cause manifest phenomenon. Hence the job of a critical realist is to explain social phenomena by revealing the underlying structures (Blaikie, 2007).

From the above, employing critical realism for studying connectivity and its influence on strategic choice seems plausible and a suitable fit. Connectivity is a phenomenon in organisations that results from interactions and communication between people. It takes place in various events, forms, and amounts, yet its direct consequences or effects are not easily detected because it is embodied in the fabric of relationships and also organisational systems and procedures.

Studying the influence of connectivity, this research argues, requires tracing its underlying structures on different organisational dealings, such as strategy making and implementation. This is compatible with what was discussed earlier regarding critical realism's belief that, in social sciences, there is an existence of unobservable events that cause observable events, and these can be understood only if people understand the generative structures of the unobservable. In the words of Roy Bhaskar (2011), the originator of the philosophy of critical realism, "we will only be able to understand—and so change—the social world if we identify the structures at work that generate those events or discourses ... [T]hese structures are not spontaneously apparent in the observable pattern of events; they can only be identified through the practical and theoretical work of the social sciences." (Bhaskar, 2011 : 2). The author is aware, nonetheless, that the views and understandings of people about what constitute the subject of interest of this research, i.e. connectivity and connectivity's influence, carry elements of interpretivism nature in them. This does not deviate from the logic boundaries of a realist who, along with interpretivists, contends that we can understand reality from our own perspective in it (Hammersley, 1995). Different perceptions of phenomenon under study are considered as fostering the understanding of the reasons for the complexities of such phenomenon. In other words, realists do not consider various accounts of perceived realities as a proof of

multiple realities, rather different perceptions of the same reality. Asking people about connectivity in order to establish the “empirical” domain (the observable) will lead to the identification of the “actual” and “real” domains confers with critical realism’s philosophy.

The author acknowledges the fact all paradigms are fallible and have demerits in applying them to research. There is no definite objective ground for choosing a paradigm over another. “there are no secure or incontestable foundations from which we can begin any consideration of our knowledge of knowledge – rather what we have are competing philosophical assumptions that lead us to engage with [social phenomena] ... in particular ways” (Johnson & Duberley, 2000 : 4). Staying within constructed logics of a certain paradigm is a rational choice by itself because that is the way each paradigm approaches the nature of existence (Lincoln & Guba, 1985) and using a paradigm that is consistent with one’s presuppositions of the world is what researchers ought to do (Sobh & Perry, 2006).

### **3.4 The Qualitative Research Approach**

This research pursues a qualitative design. The term “qualitative design” in pursuing research can be described as multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. Which means that qualitative research study things in their natural settings in an attempt to make sense of, or interpret certain phenomena with regard to, meanings and inferences people make of such phenomena (Denzin & Lincoln, 1994). Qualitative research uses words and meanings in smaller samples to build theories (Easterby-Smith, Thorpe, & Lowe, 1991). Qualitative research approaches are adopted when the focus is on the mechanism or processes of a phenomenon, on the “how” of its working, “how” it is constructed, and “why” it functions in a certain way (Patton, 1990; Patton, 2002). Moreover, two broad viewpoints support the use of a qualitative approach in this research. First one is the lack or limited level of existing literature in the field. And second, the exploratory nature of the research’s inquiry.

#### **3.4.1 Limited and/or Lack of Literature**

Despite connectivity’s growing presence in psychology and well-being literatures, the literature on connectivity in social sciences is still limited. Furthermore, theorising about

connectivity's influence in managerial studies, and specifically in strategy literature, is lacking. Connectivity appears to serve only as a secondary concept for identifying or explaining organisational events and processes (Kolb, 2008) especially in the leadership (Kolb, Prussia, & Francoeur, 2009) and strategy fields.

Connectivity, in the previous mentioned literatures, is not portrayed as roads or conduits for communication and resources to flow through, nor has connectivity by itself been considered as a competitive resource in business organisations. This research attempts at bringing connectivity to the fore of strategy literature and aims to discover connectivity's influence on crucial elements that affect the strategy making and implementation process in organisations. The recognition of connectivity as an essential resource and its role upon various organisational operations can have positive consequences in comprehending as well as practicing strategic management and strategic change. Researching organisational settings with a connectivity lens will be a step in overcoming the limited accumulated knowledge about this concept and its usages in managerial and organisational contexts.

### **3.4.2 Exploratory Nature of the Research**

For exploratory studies, such as the present study, the interest is in describing micro-level assumptions rather than producing generalizable knowledge and in achieving deep and detailed understanding of issues under research inspection render it to a qualitative type of research (Trochim & Donnelly, 2005). Also, uncovering how social factors interact to create certain events or outcomes -especially when these are not directly observable or quantifiable- is best suited with qualitative research as it is most effective when seeking to describe and explain particular phenomena that have not been previously or adequately studied (Denzin & Lincoln, 1994; Guba & Lincoln, 1994) and when building rather testing theory (Yin, 2003) is underway.

### **3.5 The Case Study Research Strategy**

Case studies are common in social sciences (Berg & Lune, 2004). They are useful for exploratory research (Yin, 2008) and are considered to be well suited to new areas of research (Eisenhardt, 1989a). A case study is a history of past or current phenomenon, drawn from multiple sources of evidence (Leonard-Barton, 1990). Cases investigate

“contemporary phenomena within its real life context” (Yin, 2003 : 1). Further, case study is a research method involving an up-close, in-depth, and detailed examination of a subject of study, as well as its related contextual conditions (Mills, Durepos, & Wiebe, 2009), it is a method which has the ability “to examine holistic and meaningful characteristics of real life events” (Yin, 2003 : 2).

According to (Voss, Tsikriktsis, & Frohlich, 2002), four types of case studies are commonly found in the management literature. These include exploration, theory building, theory testing, and theory extension/refinement. An exploration case study, which the current study falls under, aims to uncover areas that may be developed into theory (Squire, 2005). Exploratory case studies reveal something about a specific phenomenon that is yet not well understood, especially when the contextual factors surrounding the research are crucial for understanding the phenomenon under investigation (Yin, 2003).

“Case studies are generalizable to theoretical propositions and not to populations or universes” (Yin, 2003 : 15). Critiquing case studies for their little basis for scientific generalisation stems from an incorrect application of statistical generalisation logic that would treat the case as a sample of one (Bryman, 2003), this is flawed as case studies are generalisable to theories as opposed to populations (Yin, 2003). A case study’s goal is to expand and generalise theories (analytic generalization) and not to enumerate frequencies (statistical generalization) (Yin, 2003).

Compared with other research methods, case study research contributes to “examining the context and other complex conditions related to the case(s) being studied, which are integral to understanding the case(s)” (Yin, 2011 : 4). Yin also summarizes three research situations in which the case study method can be adopted, i.e. (1) addressing descriptive or explanatory questions; (2) emphasizing the study of a phenomenon within its real-world context; and (3) conducting evaluations (2011). Yin (2011 : 28) draws on Chen and Rossi (1989) and Sutton and Staw (1995) to address the important roles theory plays in case studies, such as “specifying what is being explored when you are doing exploratory case studies; defining the nature of the “case(s)” to be part of your case study; defining a complete and appropriate description when you are doing descriptive case studies; and stipulating rival theories when you are doing explanatory case studies”. Case study research also has a role to play in contributing to building and refining theories (Corley & Gioia, 2011; Eisenhardt, 1989a; Eisenhardt & Graebner, 2007)

There are different guidelines on how to conduct research using a case study research design (e.g. (Eisenhardt, 1989a; Stake, 1995; Yin, 2003). The common attributes found in case study method such as selecting the case(s), the research's question(s) and proposition(s), unit(s) of analysis, and data collection, interpretation, and analysis for which are pertinent for this research are discussed in the next section.

### **3.5.1 Case Selection**

Case studies often make use of purposive sampling technique (Squire, 2005). Purposive sampling in case study research means selecting certain cases because they have particular features or characteristics that enable a detailed understanding of the phenomena under study (Ritchie, Lewis, & Elam, 2003). Selecting the cases that will most likely illuminate the research question(s) is vital in conducting case study research strategy (Yin, 2003). Merriam (1998) identifies a second level of sampling in which selecting people within the case(s) whom are to be approached for data collection through one or more method (Merriam, 1998).

### **3.5.2 Research Question**

Some authors state that having clear and direct research questions from the start is important in conducting research (Langley, 1989). However, in exploratory research particularly, this is often hard to obtain. Identifying theoretical and conceptual framing together with specific research questions can sometimes be attained only after data collection is underway (Eisenhardt, 1989a). This research starts with a set of research questions that are informed from the literatures of connectivity and strategic management. The questions try to envision the shape of the relationship between the two literatures in an organisational environment. The research questions are formulated while taking note of the fact that former literature on connectivity probe into only specific dimensions of connectivity (notably, the positivity/negativity dimension), or have a certain outlook of connectivity that focuses on its role as an auxiliary for obtaining some relationship-imputed outcomes, such as trust or thriving. That is, connectivity is regarded as a secondary element or concept in explaining various outcomes. Also, prior literature on middle-level managers (MLMs) acknowledges the importance of their role and



contribution in strategy making process (Balogun & Johnson, 2004; Wooldridge et al., 2008). MLMs' activities, i.e. the day-to-day activities, however, remain largely unexplored. Questions such as how middle management's activities affect the strategy making and implementation process? How middle managers' interactions can have an influence on various organisational processes, for example on communication patterns, negotiations, organisational politics and power arrangements, and influence forms? How can such interactions create new structures? How connectivity between middle management actors shapes, or be used to manipulate, those interactions from the first place? And how all of that contributes toward landing on organisation's different strategic outcomes are the basic avenues of exploration for this thesis.

This research contributes by focusing on middle managers' experiences of the strategy process and exploring the influence of connectivity on the flow of strategy in organisations. To that end, this research aims to answer the following question:

What is the influence of connectivity between middle managers in strategic choice?

### **3.5.3 Unit of Analysis**

A unit of analysis refers to the research's precise object about which the researcher hopes to draw conclusions from (Yin, 2003). It is the level on which the research question is focused. In determining the unit of analysis the researcher can revisit the unit of analysis, modifying it as a result of findings that unfold during the data collection phase. Thus, the research at hand does not set a definite final unit of analysis. It does not close the possibilities of arriving at new units of analysis as the research unfolds. The author, however, notes the fact that as connectivity in an organisational setting is essentially a result of interactions, dialogue, communication, and dealings between people, the individual account, which is the middle manager, is of major concern and is seen to an appropriate unit of analysis. At the same time, and as the research delves into the effects of connectivity into other matters which are on the level of the organisation, the author is aware that the level of analysis can become the strategic initiatives or the connections themselves. This awareness is important in identifying the direction of analysis and in recognising the level of such influence of connectivity on the organisation and on the organisation's strategy making and implementation processes.

### **3.5.4 Data Collection**

For the present research the data collection methods are interviews, documents, and direct observation. Interviews are the main data collection method, while documentation and direct observation are secondary methods. From the researcher's selected ontological and epistemological stances, interviews represent an important and effective method for data collection (critical realism incorporates methods, such as interviews, which elicit participants ways of knowing and seeing (Angen, 2000)). Interviews can effectively probe into the views and interpretations of organisational members about the nature of interactions are crucial for constructing what connectivity means, how it flows, and how it affects organisation's various processes and operations. Documents represent a second method for obtaining data that will act to inform the data stemming from the interviews. Data from documents will help better understand the events and track the processes stipulated from interviews (Forster, 1994). Direct observation represents a third method for collecting the data. Observation is a technique that entails gathering data through direct contact with an object - usually another human being. This is done by watching the behaviours and documenting the properties of that object (Potter, 2013).

#### **3.5.4.1 Interviews**

Interviews vary in their form and style from open-ended to more structured ones. They are a characteristic method in qualitative research, with the aim of eliciting the thoughts and experiences of the respondents/interviewees (Bryman & Bell, 2011; Rubin & Rubin, 2011). Semi-structured interviews are the type proposed for data collection in this research. Semi-structured interviews can be defined as "interviews whose purpose is to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena" (Kvale & Brinkmann, 2009). Uncovering organisational members' thoughts and outlooks regarding connectivity, how or when it affects certain organisational events, and at different times is a complex matter to research. A pre-established interview questions or categories as in structured interviews type would not unveil such matters. This is so because imposing limitations through a priori questions will impede the purpose of revealing connectivity's influence. While a semi-structured interview will suit to unmask such relationships encompassing connectivity in organisational setting, so a semi-structured type of interviews will be followed.

An interview guide is presented in appendix 8. In this guide, questions are directed to a top management member to gauge into issues like: what are the strategic initiatives the organisation pursued lately, what are the triggers/rationales behind the initiatives, who are the people responsible for the initiatives, and how the initiatives relate to overall organisational strategy. Contacting a top management member is important for the initiation of this research and this step is carried out when identification of strategic initiatives is one of the aspects under study (e.g. (Lechner & Floyd, 2012; Walter, Lechner, & Kellermanns, 2013). Likewise, it is also important to gauge the role of top management in the initiatives' life cycle. The strategic initiatives represent the factor in which this research delves into to gauge the influence of connectivity on strategic choice. Put differently, investigating effects of connectivity on the strategic choices will be led throughout the development of the strategic initiatives being identified and selected. Such investigation informs how strategising and strategy formation work in the organisation are followed through since the initiatives are of a strategic nature, meaning they have a wide and eminent influence on the organisation. Also, any highlighted role of managerial connectivity in the initiatives' development process has several implications on how strategies are conducted in the organisation (Are the strategies a collective social process? In what form or shape is such process?).

A second interview guide is presented in appendix 9. These set of questions are targeted at middle managers in order to get a clearer apprehension of middle management's connectivity and the roles middle managers enjoyed in strategic initiative's life cycle. The questions here are aimed at identifying the network of actors responsible for a given initiative. Such responsibility will be mapped, related, and assessed in terms of the strategic change that was anticipated from the initiative to achieve along with middle managers' actions and views against their connectivity patterns, forms, and amounts.

#### **3.5.4.2 Documents**

Collecting and examining documentation is often a basic element in qualitative studies. Analysing documentation provides "a different level of analysis from other methods" (Bryman & Bell, 2011) because documents endure and have historical insight within its nature of written texts (Hodder, 2000). In fact, any retrievable format, printed, visual, or digital, may be considered a kind of documentation (Bryman & Bell, 2011).

Documentation is used to confirm or refine nuances generated by other sources of evidence/data, namely interviews and observation (Welch, 2000).

The use of documentation in this research will include internal data such as annual reports of the organisations, internal surveys or their final results, texts and/or circulars about organisational strategies, agendas, and memos of meetings. Or external public data about the organisation and its strategies like documents from various media outputs.

Analysis of the documents would be in the form of a qualitative content analysis approach. Here, the approach consists of searching for underlying themes or information. Usually, the extracted themes are pinpointed through brief quotations from a certain document (Bryman & Bell, 2011). In this research, the data from documents can serve as a secondary source that will corroborate the data collected from interviews. Minutes of a departmental meeting, for example, can include information on how a communication between certain members is encouraged or even demanded for a certain initiative to move forward. This may give an indication of the connectivity level as well as pattern that would develop as a result and can be traced to see its implication on the initiative's progress.

#### **3.5.4.3 Direct Observation**

Direct observation differs from participant observation in which the former is of a more detached form. The researcher is watching without taking part, s/he is not actively involved in the context of what is observed (Trochim & Donnelly, 2005). This paves the way to capturing phenomena in a more natural setting, which is one of critical realists' assumptions in applying a research methodology, i.e. a research methodology that allows for gathering contextual and situational data is pursued (Angen, 2000). The main purpose of any kind of observation is to supplement clarify data derived from other sources. This can generate new questions on which further interviews could be based (Dubois & Gadde, 2002).

This thesis can be classified as an interview-based study where the principal source of data is unstructured or semi-structured interviews, while less emphasis is given to other sources, such as, participant observation (Bryman & Bell, 2011). The primary data for answering the research questions are the interviews. Additionally, documents about the organisation's strategies, strategic initiatives' development, and about strategy building in general will provide a representation of the official, intended strategy processes. Further, direct

observation serves as a technique to apprehend behaviours and compare them to data obtained from other sources, chiefly from interviews.

The usage of multiple methods or sources for gathering data represents an important aspect for data verification, especially in qualitative research of exploratory nature (Silverman, 2006). This is evident in realism research too because realism holds that our knowledge of reality is imperfect and probabilistic (Guba & Lincoln, 1994), hence the use of several sources for producing more credible or rigorous data that will bring us nearer to the knowledge or truth (Silverman, 2006). This is what is referred to in scientific research as triangulation. Triangulation is 'the act of bringing more than one source of data to bear on a single point' (Marshall & Rossman, 2010 : 210). Denzin (1978) categorises four triangulation strategies: data triangulation, investigation triangulation, theoretical triangulation, and methodological triangulation. Data triangulation refers to comparison across data sources (Denzin, 1978). The sources for this research data, interviews, documents, and direct observation, are employed to attain data verification pertinent to the research. This will be conducted by triangulating the evidences generated via these three sources or methods.

### **3.5.5 Data Analysis**

Generally speaking, the procedure of analysing the data is a process of de-contextualization and re-contextualization (Tesch, 1990). The process starts with a large amount of information, which is reduced to patterns and themes. Through a particular schema the data is interpreted and analysed. In the phase of de-contextualization, the researcher becomes absorbed in the fine-grained aspects of the data, the findings, by re-contextualization, lead to a higher level, where a larger picture emerges (Rubin & Rubin, 2011; Tesch, 1990).

For case studies, data analysis is very iterative and requires the researcher to play with the data (Yin, 2003). The analysis needs to focus on getting solid conclusions that relate to theory. Also, the elimination of other rival explanations is needed (Eisenhardt, 1989a; Yin, 2003). In order to achieve the above, several steps and techniques can be employed.

#### **3.5.5.1 Data Reduction**

Because of the huge quantity of data in qualitative research studies a reduction of the data amount is required. Data can be carefully manipulated in a way they are manageable without losing their original meaning and context (Yin, 2003). Huberman and Miles (1994) suggest performing a data simplification, data focusing, and data condensing into more easily manageable units for later analysis. Qualitative data analysis software programmes can be of major help in finding and categorising meanings from quantified word usage and frequencies (Yin, 2003) but some cautions are in place on how these programmes cannot replace the researcher's judgment and interpretive skills (Easterby-Smith et al., 1991).

Data reduction involves coding the data, which is assigning a label to a piece of text that resembles a particular issue. These issues, in turn, are grouped into patterns or themes that facilitate in a more understanding of the phenomena under investigation. In other words, a breaking down of the qualitative data takes place in this step.

### **3.5.5.2 Data Display**

Data display means how the research data are presented and communicated. This presentation of data must ensure clarity and conciseness in order for the reader to make valid inferences from it. Tables, graphs, flowcharts, and lists are among the recommended display tools for research data (Huberman & Miles, 1994). There are several guidelines for realists to follow in their display of data. First, display can take the form of showing numerical frequencies of collected data, but the interpretation of these frequencies ought to be the focus (Sobh & Perry, 2006). For example, the frequency of the repetition of a certain middle manager's name that should have been included in a certain initiative, or a certain stage of it, ought to be highlighted and interpreted. Some insights on why this middle manager was excluded or how such exclusion affected (or not) the development of the initiative can be drawn.

Second, explanation of observations and why did they occur needs to be offered. In realism research, "these explanations should focus on the contingencies, structures, and mechanisms" (Sobh & Perry, 2006 : 1206). Third, representative quotations in support of the explanations must be given (Boeije, 2009). This is important because in realism research an in depth understanding of the phenomena is sought and a quotation linked to a certain observation or specific event serves such purpose. Finally, the use of software may help in analysing data but as mentioned above, cautions must be taken in applying software

for qualitative data (Easterby-Smith et al., 1991). This is true for critical realism research as it emphasises relationships, underlying structures, and connections which computer software may not adequately capture and hence falling short of generating the necessary richness of the complex events, real-life context, and understanding required (Carson & Coviello, 1996; Yin, 2008).

### **3.5.5.3 Conclusions and Verifications**

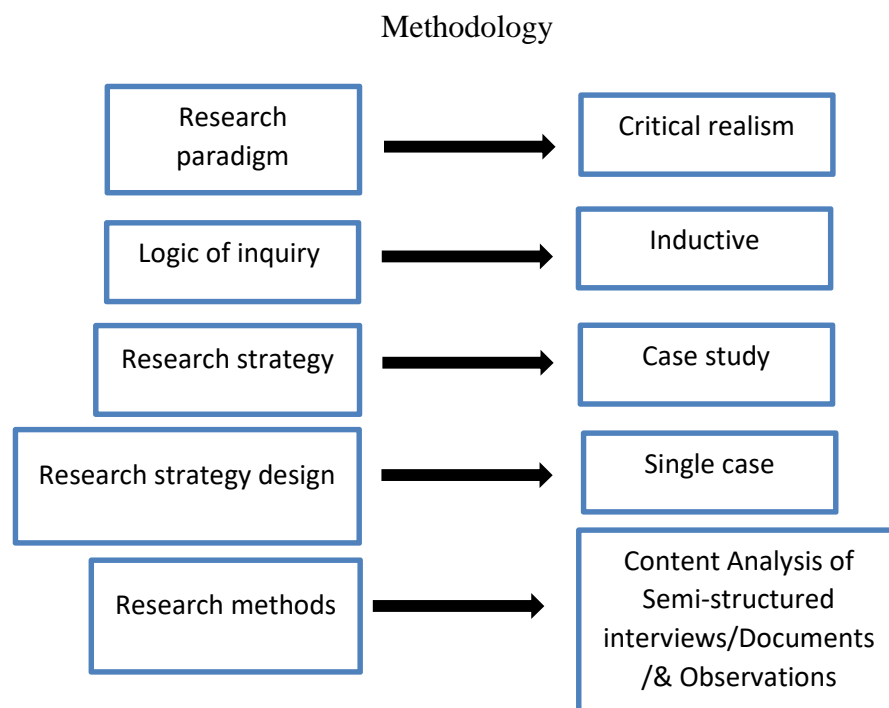
This is the last step in the data analysis where the data being displayed along various tools is now interpreted. Interpretation is aimed at reaching meanings, insights, and answers for the research question(s). This is done by the process of combining the data that was grouped into themes in the form of relationships among them in order to reach an understanding of the topic or phenomena being studied. Connectivity is a new concept in social sciences that places focus on relationships among people (Kolb, 2008). It is increasingly being viewed as a phenomenon for explaining change and contemporaries of organisational life (Wajcman & Rose, 2011). This current research offers an opportunity for the discovery of new knowledge in strategic management literature by exploring connectivity's influence on the processes of strategy making.

For the present research, references to new ideas, innovation, new services, and creativity can be grouped together under exploratory initiatives. This grouping can be linked to the presence of certain individuals and a relationship could be drawn between these two. A theme, then, might start to emerge connecting certain communication channels among people and the pursuing of a certain type of initiatives. Such themes can be tracked back to the literature and inferences be drawn accordingly.

## **3.6 Summary**

To sum up, a research design tells the reader what the research is attempting to do, how it is planned to be executed, and why it is done in this way and not another. The purpose of the ongoing research is one of exploring the influence of connectivity on strategic choice. This is pursued by exploring the relationship between connectivity and strategic choice through the life-cycle of strategic initiatives in a tele-communication organisation. This is conducted through an inductive mode of research of how and why connectivity plays a role

in setting/altering organisational strategies. The aim is to generate theory based of specific events. The methods for capturing events and making related inferences from them about the phenomenon, i.e. connectivity, are interviews, documentation analysis, and direct observation. The current research design accords to the exploratory nature of the study. The research question as well as the nature of the phenomenon under study considers the context in which the phenomenon is placed and operates, along with the experiences of relevant people involved (Eisenhardt, 1989a). Furthermore, by following a critical realism approach, it provides opportunity for discovery (emergent knowledge) as opposed to operating by testing a priori hypotheses (Angen, 2000). The research is conducted within one company which represents its single case study. Figure 3 - 1 illustrates and sums up the research's methodology.



**Figure 3 - 1:** Outline of Research Methodology



## **Chapter 4. Case Study's Data Collection, Data Presenting, and Data Analyses**

### **4.1 Abstract**

This chapter provides details about the research context. Then it moves on to demonstrate the handling on the research data. The chapter will start with brief overviews of the company, the strategic initiative, and the managers involved in the strategic initiative. Then offers an elaboration on the techniques and steps of data administration employed in this thesis including data collection, data reduction, data display, and data analyses processes. The chapter concludes with a critique of content analysis as a research method before ending with a summary of its subjects.

## 4.2 Umniah Telecommunication and Mobile Company

Umniah Telecommunication and Mobile Company (Umniah Telecom Company, Umniah Telecom, or Umniah hereinafter) was established in 2005 as the newest, of four, telecommunication operators in Jordan. Umniah, which means (a wish) in Arabic, is now a subsidiary of Bahrain Telecommunications Company (Batelco Group) which currently acquires a majority share of 96% stake in Umniah in 2006 (Khaleej Times, 2006). Umniah Telecom Company offers integrated services, including mobile, Internet, and business solutions. It employs around 700 employees in total, nearly 560 of them in full-time positions.

From its inception, Umniah Telecom experienced steady growth in its subscription rate. After only six months of its launch in June 2005, it attracted 300,000 subscribers who accounted for 10% of the market share in the country at that time (Umniah, n.d.-c). By December 2006, Umniah Telecom Company subscribers increased by 133% to reach a total of 700,000, representing nearly 17% market share for that year (Globitel, n.d.). In the first quarter of 2016, Umniah's mobile phone subscribers reached over 3 million and their broadband subscribers amounted for over 28,000. (According to the Department of Statistics, Jordan's population in August 2016 is just over 6,202,000 [http://www.dos.gov.jo/sdb/dos\\_home/dos\\_home\\_e/main/index.htm](http://www.dos.gov.jo/sdb/dos_home/dos_home_e/main/index.htm)). Umniah Telecom extends its wireless Internet services to more than 80% of the population in Jordan, making its current market share nearly 31.5% (Umniah, n.d.-a). At present, Umniah operates alongside two other telecommunication operators in Jordan.

In March 2005, Umniah partnered with Huawei Technologies, China's largest telecommunication equipment manufacturer, and with Hewlett-Packard, one of the leading corporations in the information technology industry. The partnership with Huawei was to provide equipment and design schemes to facilitate the installation and gradual upgrade of its network technologies (RCR Wireless News, 2005; TeleGeography, 2005b). Its partnership with Hewlett-Packard (TeleGeography, 2005a) was to supply Umniah with information technology infrastructure to build its business support systems and business support processes (TeleGeography, 2005a). In 2005, Umniah announced its plans to boost the cellular penetration rate in the country from the market's 30% penetration rate at the time to 55 - 60% within the following seven years (TeleGeography, 2005b).

Being the latest telecom operator in the market forced Umniah to differentiate itself in unique ways. Umniah telecom focused on differentiating itself by emphasising three key

foundations: affordability, unique services, and simplicity (Jordan Times, 2012, Marcopolis, 2010). Umniah Telecom built its entrance to the market around the concept of value-for-money. To fulfil this concept, Umniah introduced unique offers and manoeuvres targeted at low-income segments to achieve its affordability objective. For example, Umniah's Chief Executive Officer describes its niche market segment as "all segments that are not well served, like the youth... or if you are a student" (Jordan Business, 2012). Umniah Telecom was the first mobile operator in the Middle East and North Africa (MENA) region to offer per second billing scheme for its mobile phone calls which meant attracting more clients. In addition, Umniah introduced lower denomination scratch cards, which were not offered by competitors, for its pre-paid subscribers. Furthermore, Umniah gave its Internet subscribers an option to be billed per URL, which means paying only for service check into certain pre-determined sites over the web (Jordan Business, 2012). These examples and manoeuvres represent key elements of the "success factors of Umniah's rapid market expansion rate and its surging number of subscribers from 2006 until now by appealing to under-served segments and making our services affordable to them" (Jordan Business, 2012).

Umniah strived to differentiate itself by ways other than affordability. Along with the strategies directed to capture specific market segments, Umniah Telecom presented a range of unique services which were considered "first" moves in the telecommunication market it operates in. These services aimed at attracting more clients and increasing market share for Umniah. Examples of these services include Umniah's introduction of Voice SMS services. By launching this service in 2008, Umniah Telecom became the first mobile operator in the Middle East to offer this service for its clients (Umniah, n.d.-b; Al Bawaba, 2008). Another example showing Umniah's pioneered services was in its partnership with Truecaller. Umniah was the first operator in the region to have a partnership with Truecaller, a company that enables customers to access an international database of cellular and landline numbers. This partnership permitted Umniah's clients to identify unknown numbers and block spam calls (Al Bawaba, 2014). In 2011, Umniah was Jordan's first telecommunications operator to offer an interactive Unstructured Supplementary Services Data (USSD) menu for corporations (Umniah, n.d.-b). USSA is a tool for businesses to keep connected with their clients through updating them with the latest products or services via customisable mobile menus without the need of an Internet connection (Jordan Times, 2011). A final example of the special services offered by Umniah is in launching a healthcare application which provides free access to content from "Mayo Clinic" for its subscribers. By using this service, clients are able to receive up-to-

date medical care information and health-related education tips, videos, and articles (Al Bawaba, 2013). Such services were well-welcomed by the market and helped attract more subscribers for Umniah Telecom (Arab-Advisors-Group, 2014). These services by Umniah coupled with Umniah's strategy to focus on the lower-end of the market, sparked price wars in the market which consequently spurred the competition in the telecommunication sector. Offering unique and customisable mobile services became an area of intense competition between the 3 telecom operators in Jordan (Arab-Advisors-Group, 2014).

As for simplicity, Umniah intended to gradually position itself in the market by operating in key geographical areas and with a series of small networks. Umniah's Chief Marketing Officer was reported to say that Umniah did not want to move into a wide-spread expansion from the beginning of its launch (Jordan Business, 2012). Rather, its objective was to focus on "building a strong base on pivotal areas and then start to expand its market after gaining recognition for its brand and its services. This strategy continued for about 5 years in which Umniah Telecom was able to achieve its penetration targets". (Tim, personal communication, July 28, 2015). However, the increasing number of both clients and market share required the company to begin expanding its network and invest in additional resources faster than Umniah anticipated (Jordan Business, 2012). Simplicity at Umniah manifested in its internal structure and its organisational culture. The deputy Director of the Engineering department attributed Umniah's simplicity during the new expansion plans to "having a lean and efficient business model that depended on much less human resources than our competitors, yet still matching the number of subscribers of the telecommunication industry leader and surpassing the other competitor. We were number two, and not by much, in a relatively short time because we cut bureaucracy and routine" (Jordan Business, 2012; Harrison, personal communication, March 3, 2015). Also, by adopting a decentralised structure, Umniah managed to foster flexibility and knowledge sharing in a simple and straightforward fashion (Tim, personal communication, July 28, 2015).

Umniah Telecom enjoyed notable growth numbers from its early days. Six months after its launch, Umniah obtained the number of subscribers it estimated to have as its fourth year target (Umniah, n.d.-c). The 2013 annual report of Batelco Group, Umniah's parent company, noted that its subsidiary "was able to boost the penetration in the Jordanian mobile phone and Internet services market from 26% in 2005 to more than 150% in 2013" (Batelco Group, 2014 : 13). In 2009 Umniah started to pay more attention to corporate and "top" segments of the market while still embracing the price-sensitive ones. This required a

focus on how to expand its network in a way that maintains its existing, and growing, market segments as well as attracting the new target market segments by offering the latter a set of services that embody quality, high speed, and tailored features (Jordan Business, 2012; RCR Wireless News, 2014). This extension to new segments conforms with the strategies of Umniah's parent company, Batelco Group, about expanding and broadening the range and development of Internet and mobile services and offerings (TeleGeography, 2010). In 2010, Batelco Group announced its plans to invest \$150 million over the following two years in Jordan to expand in its subsidiary's services (Bloomberg Business, 2010).

Umniah Telecommunications and Technology Company is in a highly competitive market where the country it operates is the second most competitive cellular market in the Middle East region (Jordan Times, 2014; Jordan Times, 2015). Such volatile markets need organisational strategy making and implementation processes that are capable of rapid and effective responses to the environment (Brown & Eisenhardt, 1997). Also, Umniah Telecom has a structure of management hierarchies where middle managers are identifiable (See appendix 7 - Umniah Telecom's organisation chart). The company uses fewer resources, especially human, when compared to its rivals, yet it manages to achieve great success in terms of market share, number of subscribers, and profit earnings. So Umniah Telecom is considered efficient in conducting its business and operations. All of these reasons make Umniah Telecom Company a case study worth studying. The main purpose of this dissertation is to examine the influence of connectivity on the development of Umniah's strategy building. This is pursued through investigating a major project at Umniah called the Network Expansion Project, which is what I am going to discuss next in detail.

### **4.3 Network Expansion Project**

Strategic initiatives are "proactive, temporary group undertakings intended to create economic value for the firm" (Lechner & Floyd, 2012 : 478). These initiatives are aimed at renewing or expanding the capabilities of firms which substantially influence firms' evolution and performance (Birkinshaw, 1997; Lechner & Kreutzer, 2011; Lovas & Ghoshal, 2000). Strategic initiatives have become central to the strategic management of contemporary corporations (Lechner & Kreutzer, 2011). They may involve a variety of activities, such as corporate ventures (Keil, McGrath, & Tukiainen, 2009), acquisitions and

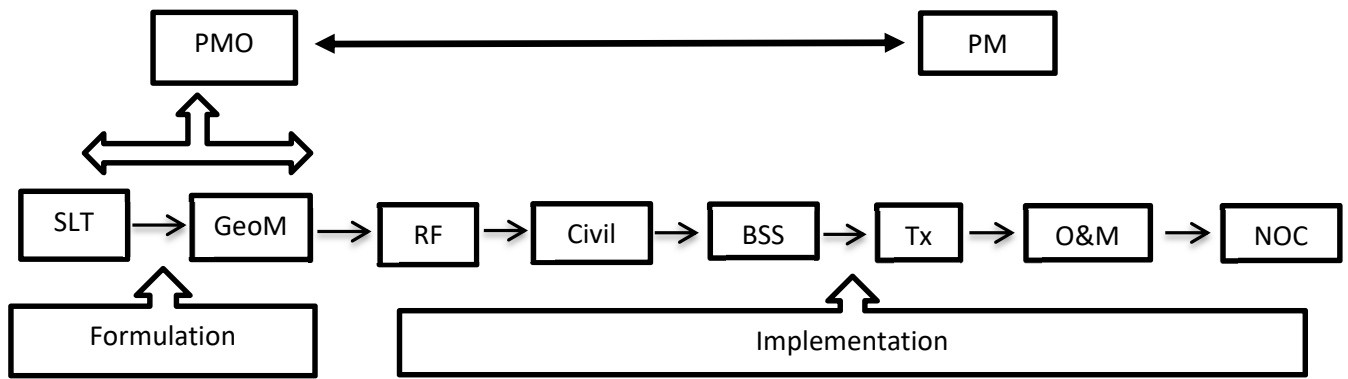
alliances (Shi, Sun, & Prescott, 2011), reorganisation efforts (Webb & Pettigrew, 1999), and product and process development (Cardinal, Turner, Fern, & Burton, 2011; McGrath, 2001). The studied initiative at Umniah Telecom is one that falls under the last type of the above-mentioned types of initiatives; product and process development. According to the interviews, middle managers say this initiative is considered a strategic project to Umniah Telecommunication Company. Top management agrees that it is one of a strategic nature to the company due to its huge financial and growth implications. Many of the characteristics stated in the literature of strategic initiatives (e.g., Lechner & Kreutzer, 2011) appeared in this project. Such as it being of a significant importance to the operations of the company and its core nature of business, it encompassed many divisions and levels in the company, major resource investment was undertaken in the project, and it lasted for considerably a long period of time.

The strategic initiative studied in this research is called the Network Expansion Project. As mentioned earlier, both top and middle managers who took part in this research considered this project as a vital one for Umniah. It constitutes a core operation for the company in its telecommunication industry. These types of projects aim at expanding the number of sites a telecommunication company operates in. They also aims to introduce more and/or better services by upgrading the technology employed in these sites in order to provide such services. The overall objective of the expansion is to serve more geographical locations and a wider customer base with Internet, mobile, and other associated services. This strategic initiative deploys the infrastructure required for the sites such as towers, shelters, air-conditioning equipment, power generators, and batteries. Additionally, it equips those sites with necessary programming and linking, such as the programming of microwave and radio frequency, antennas, signal processing and strengthening, and data transmission necessary for the sites to function. After concluding the programming of the sites they are ready for delivering the company's primary service in the new area; i.e. mobile and Internet services, for its subscribers.

This network expansion activity is a continuation project of an expansion plan that started since 2006. Typically, Umniah Telecom performs one major expansion project for its network sites each year. In the expansion project, several phases are undertaken depending on the identified market needs and the company's resources to accomplish the goals of the expansion effort. The phases covered in the research are phases 9 and 10 where the company pursued its expanding using third generation (3G) telecommunication technology in its sites and service offerings. 3G telecom technology is a mobile communications

standard that allows mobile phones, computers, and other portable electronic devices to access the Internet wirelessly. Before going into 3G, Umniah relied heavily on second generation (2G) technology which is a mobile communications standard allowing for voice calls and limited -compared to 3G- data transmission. Using 2G technology weakened Umniah's competitive position and its ability to increase its customer base because their competitors were already using the 3G technology in their operations. Umniah needed an expansion in 3G to meet the huge increase in demand for data from its clients. The 3G technology handles both voice calls and data transmission much more efficiently than 2G. For that reason, expanding 3G networks since 2012 has been a priority. Consequently, a yearly plan for an expansion phase in 3G technology was agreed on at Umniah since that time. Phase 9 of the network expansion started in February 2013 and finished in December of that year. Phase 10 began in March 2014 and completed in February 2015. The budget for phases 9 and 10 was for over 35 million US dollars. During the data collection phase for the dissertation, Umniah Telecommunication Company was already starting the underway plans for phase 11 and preparing for the necessary steps for acquisition and licencing of fourth generation (4G) technology protocol and its services.

Figure 4 - 1 depicts the major divisions involved in the initiative along with which of these divisions is concerned with which stage of the initiative. That is the formulating stage of the initiative as opposed to implementing it. The depiction presented in figure 4 - 1 resulted from discussions with the project's manager, the Director of Project Management Office, and with two other middle managers who had major roles in its development. The development of the initiative was discussed with 5 other middle managers in order to confirm, add, or clarify information related to the strategic initiative. The discussion with these 5 MMs elaborated two key information related to the initiative. One, the progress of the roles they and their divisions had to perform during the initiative, and two, detailing the timeline of the project according to their divisions' respective parts in it. In a second interview with both the project's manager and another MM the insights gathered from the 5 MMs were further discussed to clarify and confirm this set of information. Ultimately, this served to illuminate the initiative's timeline and the participants' duties and tasks in it. This, consequently, aided in capturing the notion of connectivity of the managers involved in the project and what effects connectivity had on those managers' strategic choice.



PMO: Project Management Office

PM: Project Manager

SLT: Senior Leadership Team

GeoM: Geo Marketing

RF: Radio Frequency

Civil: Civil Engineering

BSS: Base Station Subsystem

Tx: Transmission

O&M: Operation & Maintenance

NOC: Network Operation Centre

**Figure 4 - 1: Expansion Network Project Flowchart - Phases 9 & 10**

In figure 4 - 1, the arrows between the divisions refer to the initiative's progression and sequence. It does not necessarily, however, denote that the subsequent division does not communicate with the proceeding one or even a former division of that sequence. There are other divisions and departments involved in the initiative, such as procurement, legal, and quality assurance. However, either because their role was minor compared to Engineering and Marketing (legal department) or I had no access to data (quality assurance), these divisions' input was not incorporated to this research and investigation.

Next, I will briefly describe the major functions for the divisions in the Marketing and the Engineering departments during phases 9 and 10 in the expansion project. Furthermore, I will describe the progress of phase 9 and phase 10 beginning with top management's initiation of it and how the phase moves on afterwards. The information regarding these functions came from two sources. First, progression plans for phase 9 and 10 provided to the researcher by the company. Second, discussions during interviews with one top management team, the project's manager, and 3 middle managers who are division heads



in the Marketing and Engineering departments. All of them were involved in the project's phases 9 and 10.

Once top management and the project management office agree on the broad guidelines for the expansion project's phase, the plans for deploying the network sites are carried out. Radio frequency division finalises site locations list with Geo Marketing division. This list, then, goes to both the civil engineering division and the BSS division. The civil engineering starts acquiring plans for the locations of the sites (either by purchases or renting) and ensures these locations are suitable and ready for building of the sites. The BSS division makes the necessary first arrangements for the sites. These arrangements include commissioning the sites (programming them according to radio planning requirements), setting adequate resources for sites (hardware and software resources), and making first call tests on the field to check whether the capacity of the sites agrees with the planned expansion technology. After that, the transmission division begins to provide the needed microwave links for the sites. This is where two, or more, points are connected together through air-interface using certain frequencies which are assigned to the company by the Telecommunication Regulatory Commission (a governmental body that serves as the telecommunication industry's monitoring agency in Jordan). These frequencies require specific microwaves and because of that it is the job of transmission division to undertake the transmission planning needed for these microwaves to be operational. Requesting the usage of these microwaves falls also under the duty transmission division and this is done by requesting permission from the Telecommunication Regulatory Commission. The operation and maintenance division is in charge of all field maintenance work related to the activities of expanding the network. In addition, this division performs something called the backhauling test. The backhauling test is a test to confirm whether the transmission frequencies of a site are running according to plan. That means making sure that there is actually a connection from a certain point in the location to another within a range or frequency. The Network Operation Centre division is responsible for the overall site definition, which means programming the sites and ensuring their type is in accordance to the radio planning requirements. This division gathers data from the BSS and the transmission divisions then uses these data to supervise, monitor, and maintain any performance issues of the sites and the network as a whole. The Network Operation Centre has the authority to block/unblock the site from being operational (or on air) and it delivers the site announcement message to the project manager once all issues are cleared and the sites are ready for commercialisation. The Project Manager is responsible for co-ordinating the flow of information between all divisions and resolving any arising conflicts among

them that interfere with the initiative's time schedule. The project manager declares the final site announcement message and reports this to Geo Marketing as well as to top management.

The expansion project at Umniah Telecom can be described initially as a top-down project. Top management, represented by the Senior Leadership Team (SLT) at Umniah, estimates the preliminary budget, initiates negotiations with main vendors, and then oversees the project implementation. However, many of the key inputs in both the formulation as well as the execution phases depend on middle managers, most of whom took part in this research. These middle managers worked on the details of the contract with the main vendor(s), contacted additional (local) contractors to fill any areas not included in the main vendor's contract, produced execution timetables for each step during implementation, suggested and implemented modifications to the communication process during implementation, revised plans when situations demanded a change, reported progress to top management, and notified them once the project ended and sites were ready and operational.

This strategic initiative is principally about growing the operations of the company in terms of building new and/or switching old towers telecommunication technology (in phases 9 and 10 the telecommunication technology standard was 3G). This means having more sites and better coverage for serving customers. This entails identifying suitable locations, acquiring them, installing equipment, making necessary programming for the sites to be operational, testing the sites, and delivering the sites map once finished. By this last step it is a signalling message that the tower based on a certain site is ready to be launched and go live or to go on air to be accessed by customers. All of these tasks need to be planned and coordinated in accordance to certain criteria; technical, safety, and legal, and, of course, within a timetable.

#### **4.4 Data Collection**

The data set comprised mainly 3 sources: Interviews, documentation, and non-participant observations. Interviews served as the primary source of data while documentation and observations as the secondary sources for data collection. Next, I present a detailed description on all of the data sources and how they were collected.

Semi-structured, in-depth interviews were conducted with managers at various levels in the organisation. The interviews ranged between 40 minutes and an hour and a half long. The majority of the interviews were face-to-face with the exception of three interviews that were conducted over the telephone. The semi-structured nature of the interviews allowed for flexibility to ask questions and focus on pressing matters that emerged, which related to the research question and also its objectives. Nonetheless, key questions were systematically asked to all participants. These set of questions revolved around 3 basic themes: First, the development of the strategic initiative, second, the manager's role and responsibility in the initiative, and finally, the connections of the manager with others during the initiative's lifetime. At the end of each interview, I asked participants for additional data (emails, documents, business diaries, etc...), requested a follow up session if needed, and asked for suggestions about whom to interview next and why do they think so (this not only helped in indicator new candidates as sources of data, but also served as a potential identifier of a connectivity dimension between these managers).

All interviews were audio taped and transcribed verbatim. I applied full transcription method of the interviews conducted with participants. This means the whole interview was transcribed including any pauses or non-verbal utterances. Partial and reduced transcriptions would have not served the exploratory nature of this dissertation or its methodological design. It was important to have as much information as possible from participants during the interviews. For that matter, I applied full verbatim transcriptions of the interviewees' features of speech to understand the phenomenon under study. Full transcription method offers clarity of the discussion in the interview and how meanings around key concepts are created and shared during the conversation (Poland, 1995).

As mentioned earlier, these interview transcripts served as the primary source of data. The participants were top and middle managers responsible for the strategic initiative entitled network expansion project. This initiative was affirmed as an important project for the businesses of the organisation by top and senior middle managers. Appendix 10 provides an overview of the interviews. In appendix 11 and appendix 12, I present examples of the data set details for 3 participants and some examples of the observations I gathered respectively.

Alongside the interviews, I gathered various documents on the processes, mission, values statement, initiative progress reports, and strategic priorities of the company. Additionally, I obtained email exchanges between key managers in charge of running the initiative. These documents constitute this research's secondary source of data and I use them to

verify, elucidate, and to provide background context to the data obtained from interviews. Examples of the secondary sources which I accessed are annual reports, local business publications, sector-specific publications, organisational hierarchy, official statistics, business diaries, and governmental reports. The details of some of these secondary sources, though, were not explicitly or thoroughly documented in the organisation. The departmental strategy for the divisions responsible for executing the initiative, for instance, was not fully documented but rather stated in broad guidelines. This was the case “in phase 10 in particular where the combination of new technology, new material, and the amount of new sites to construct was intense” (Nigel, personal communication, 5 March, 2015). As a result, business procedures on “how to perform the tasks by each division were vague and mostly broad” (Nigel, personal communication, 5 March, 2015). However, the strategy making and implementation processes for the key responsible departments of the initiative, i.e. Engineering department and Marketing department, emerged from the interviews with higher ranked middle managers. It was possible to delve into departmental strategy processes and procedures by: identifying top management’s directives and guidelines to middle managers before and during the initiative, by tracing how middle managers followed those directives, and by asking top managers for the control mechanism and any corrective measure they undertook during the execution of the initiative. The identification of the departmental strategy making and implementation process was of key importance to this research because it conveys how and where middle management’s connectivity took place. Appendix 13 offers further details and examples of the documentation data that include the type, the source, and the description of this data. Appendix 13 shows also the relevance of the document to this research. Appendix 14 provides a quantitative overview of documentation data.

The company’s human resources department identified the names of three key managers involved in the strategic initiative. I contacted them and after discussing with them the nature and purposes of this research they agreed to participate. From this initial contact, I got the names of two more managers and they agreed to take part as well. I started the first round of interviews with those 5 managers. From those interviews, and in a snowball sampling fashion, I was able to pinpoint more managers to contact for interviews either from the interview material or by directly asking the interviewees for suggestions on whom should I talk to next and why.

For the secondary sources of data, I contacted the human resources department and 5 middle managers. One of those five is the initiative’s project manager and the remaining

four are division heads in their respective departments. These four are senior middle managers and all of them are 2 levels below the CEO. The project manager is 3 levels below the CEO in the hierarchy but with extensive experience in project management (he held the position of Vice President of Administration and IT of the Project Management Institute in Jordan for two years). This middle manager led many previous network expansion initiatives in Umniah Telecom. The human resources department and the 5 MMs responded to the researcher's request for documents related to the company in general and to the strategic initiative in specific. I also got two business diaries from 2 other middle managers covering the period between January 2013 and October 2013. These two managers are unit heads within the Engineering department and both are 3 levels below the CEO. Additionally, I gathered information from other external sources including business publications, governmental reports and official statistics relevant to the telecommunication industry, press releases, and interviews for key managers of the company in specialised business publications. Web information, specifically from the company's website as well as its parent company's website, provided valuable information pertaining to both the strategic direction of Umniah Telecom and its network expansion plans. Also, web information on the main competitors of the company provided additional information and statistics on the competition and the telecommunication industry scene in Jordan. The inductive nature of the case study approach research meant there is a need to go back and forth between data collection and data analysis. Further elaboration on this iteration process is provided in the data analysis section. Next, I will present the data collection stages as they occurred.

#### **4.4.1 First Stage of Data Collection**

In this stage the objective was to understand the company in general, its strategic orientation, and its background. This stage constituted collecting data about the company's history, services, type of customers, and its strategic direction. Also, this first stage of data collection was for collecting data about the strategic initiative; its timeline, development, objectives, and how the initiative fitted into the overall strategy of the company. Finally, this stage aimed at collecting data about the basic roles of each manager in the initiative. The data from this stage is comprised of:

- 1) Documents about the company as well as the strategic initiative, such as the organisational chart, nature of the initiative, initiative's scope and timeline, the initiative's importance, its budget, and its distinctive phases.
- 2) Interviews with 5 middle managers who were involved in the development of the strategic initiative. These middle managers, three of which were 3 levels below the CEO and two were 2 levels below the CEO. These two managers had key roles in the project. One of the middle managers is the project manager for the initiative and 2 out of the remaining four lead primary responsibilities in organising and linking the operations of two major departments, namely the Marketing and the Engineering departments.
- 3) Additional documents about the strategic initiative including progression reports, location maps, project KPIs, project vendors, and each division's specific role in the initiative's cycle.
- 4) Observations in the form of taking stock of the surroundings, environment, communication patterns, and layout of the company.

#### **4.4.2 Second Stage of Data Collection**

After completing the first round of interviews I made a list of additional managers as candidates for conducting further interviews. The objective of these interviews was to obtain more and in-depth information on the development of the strategic initiative I already gained. Moreover, I needed further information on specific examples of the choices, decisions, and actions managers involved in the initiative undertook. I carried out a total of 10 additional interviews in this stage.

This second stage of data collection inquired about the connections between managers involved in the initiative. That is, how the relationships and interactions among them took place; the triggers, processes, and consequences of connections on the initiative and on its evolution. The data from this second stage is comprised of:

- 1) Further interviews with 3 more key middle managers in the strategic initiative. These MMs were identified based on the indications of the 5 middle managers from the first round interviews.

- 2) Second round interviews with two of the 5 middle managers mentioned earlier in the first stage of data collection.
- 3) Email correspondences between middle managers and their superior managers.
- 4) Email correspondences between middle managers and their direct reports.
- 5) Observations in the form of 2 half-day observing 2 middle managers on a typical workday.
- 6) Second interviews with 3 of the middle managers interviewed earlier in this second stage
- 7) Third interviews with 2 middle managers.
- 8) Observations of the nature of interactions and communication patterns between managers at work.

#### **4.4.3 Third Stage of Data Collection**

This stage of data collection followed conducting a preliminary data analysis on the data set. After I identified several themes from the literature as well as themes that emerged from the data I decided to gather more data to better understand how certain events occurred, why particular connections among managers formed and/or changed, and also to form linkages between those events and managerial connectivity. It was clear that some of the themes which emerged from the data deserved more attention to uncover their underpinnings. I contacted participants a third time and the data from this final data collection stage is comprised of:

- 1) Three telephone interviews with 2 top managers. Two of which were interviews with the Chief Marketing Officer and one telephone interview with the Director of Projects Office who was responsible for the initiative.
- 2) Follow up questions via email to all 13 middle managers as well as one top manager via telephone call. The questions covered two areas. The first question dealt with upward or downward activities the middle manager performed during the strategic initiative. These activities emerged largely during interviews and notes from business diaries. Questions about the second area inquired about their opinions and roles in responding to a specific new idea, which had been

championed by one specific middle manager, and how it affected the formal execution process and the workflow of all divisions and departments involved in the strategic initiative. Six middle managers and one top manager gave answers to the above two areas.

- 3) Request for additional email correspondence to cover dates and events that did not appear in the batch of email correspondences already provided to the researcher.

After this third stage it became evident there was no new or relevant information to be gathered from the participants' answers regarding connectivity, the phenomenon under study. There was no new significant data emerging for the theory building effort. Any new data contributed little to clarifying gaps about connectivity's presence or its consequences in the course of specific incidents where connectivity was observed. Consequently, no new significant codes emerged from the additional gathering of data, for that reason I seized data collection at this point deciding I reached data saturation. This decision came because any additional data I gathered was either irrelevant to the inquiry or had little to add to the understanding of how connectivity influenced the development of the initiative. The new data reached a point where no new insights are being observed (Assoc, 2014), and the ability to obtain additional new information has been attained making further coding no longer feasible (Guest, Bunce, & Johnson, 2006). Some examples about data that kept emerging which added little to the understanding of connectivity's influence included: data about work stress and the inability to meet deadlines that deterred middle managers from dealing with any other issues outwith the project(s) in hand. Another example is data regarding how most of the managers, top and middle, have been working together for a long time now and how the relationship between most of the managers extended to personal circles and arenas and was not restricted to working hours or business dealings.

#### **4.5 Qualitative Content Analysis**

The main aim of this research is to pin down the influence of middle managers' connectivity on their strategising and strategic choices. I pursue this by examining, through the lens of their connectivity, middle managers' interactions in this strategic initiative discussed earlier. Aiming to, eventually, apprehend the work dynamics of managerial connectivity and how such connectivity influences the strategic choices those middle managers undertake. In doing so, this dissertation aims at building theory on the



connectivity among middle managers in order to grasp a fine-grained understanding of the influence of connectivity on strategic choices. This theory building effort is carried out through identifying how a different level (high or low), type (active or latent) of connectivity, in varying times, or a combination between levels, types, and timing shape the nature of decisions taken by middle managers during the strategic initiative. Connectivity has the potential to shape such decisions by its influence on various necessary elements, such as idea generation and gathering support, which go into the strategising cycle. For instance, one manager's high connectivity with others would help in accessing an increased range of information needed when encountering a problem while constructing a strategy for an initiative. That manager would use the high connectivity to access or seek such information. He or she would take decisions utilising the connectivity level available at that particular time. If the same manager had low connectivity with others while facing the same situation, a different set of decisions might have been taken to overcome the problem at hand. Moreover, the low connectivity level with others might assist a manager in dealing with the requirements of a situation during a strategy building effort. An example of this would be a manager engaged in implementing a rapid decision for an urgent but familiar problem. He or she has adequate information about the problem and requires little information and support for clarifying or executing it. That manager would benefit from the low connectivity at that particular time. It will help her or him to focus on the execution of desired task with minimal interruptions. Furthermore, a combination of a particular level of connectivity with a precise type of it outlines a mechanism in which connectivity influences can be traced. Depicting such combination of connectivity elaborates understanding on what mechanisms form connectivity as well as on the outcomes of that mechanism on the strategic choice of managers. A middle manager's latent connectivity, for instance, might be uncovered through a situation which requires an action from his or her part. This hidden connectivity might reveal that manager's high connectivity level, which in turn proves beneficial to the demands of the situation or circumstance that unmasked that connectivity. Conversely, another middle manager's active connectivity would in fact be detrimental to the demands of a particular situation during the strategy making process. This might occur because the active connectivity was a signal that this manager is highly connected and thus approached by others for various requests. But as the nature of the incident taking place at the time required refinement or improvement, and not novelty, that middle manager was ineffective in dealing with that particular situation. This negatively affected his division's work and caused delays for other divisions.

All of these examples occurred during the lifetime of the strategic initiative, especially during phase 10 of it. These examples are noted and incorporated in the data analysis section. The examples helped furnishing a description of how mechanisms of connectivity can be channelled under different conditions and situations during the strategic initiative. An elaborated discussion on the above-mentioned situations and examples of connectivity's working mechanism will follow in the findings chapter of the thesis.

The theory building in this research also efforts to determine under what condition points do various connectivity levels and/or types work best. This is pursued by distinguishing which connectivity state is preferable at two interrelated scales. The first is concerned with what and when a connectivity level, i.e. high or low connectivity, is preferable at a specified time or stage of the strategy building exercise. The other with what connectivity type is needed depending on the nature of the strategic initiative. How does certain connectivity level, for example high connectivity, work better in early stages of a strategy for an innovative initiative in the company and not in a habitual one. Another dimension related to the previous two scales of connectivity determinants concerns the feasibility of a manager to switch from one type/level to another depending on the requirements of the strategising situation she or he is in. Unmasking these endeavours is attempted during a major strategic initiative's lifespan with the overall objective of drawing conclusions of managerial connectivity's influence on the strategy making and implementation process. The method chosen for data analysis is content analysis, and more precisely qualitative content analysis. Content analysis is "the longest established method of text analysis among the set of empirical methods of social investigation" (Titscher & Jenner, 2000 : 55). Qualitative content analysis allows for "understanding social reality in a subjective but scientific manner" (Zhang & Wildemuth, 2005 : 1). It is an analysis method for "the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon, 2005 : 1287). It is any qualitative data reduction and sensemaking process that handles qualitative material and seeks to identify core consistencies and meanings (Patton, 2002). These definitions of qualitative content analysis are consistent with the research objectives. The dissertation is investigating a phenomenon that is rooted in social behaviour and this research is an effort to identify meaning, rich description, and sensemaking about that phenomenon. Qualitative content analysis is a suitable for theory building, inductive analysis, and exploratory studies that aim at expanding knowledge around a certain phenomenon (Berg & Lune, 2004; Elo & Kyngäs, 2008; Kaid & Wadsworth, 1989; Zakaria, 2014). Further, it is a technique that researchers interested in organisation theory or strategic and policy

management could use to complement the use of documentary data. Also, content analysis is used in the business policy area where detailed descriptive data are taken from a single case study and reflected on, afterwards, to broader policy issues (Jauch, Osborn, & Martin, 1980 : 518)

Furthermore, when conducting any research there is a form of a hierarchy of the association between research's three main components; research philosophical position or paradigm, methodology, and its methods (Aliyu, Bello, Kasim, & Martin, 2014; Saunders, Lewis, & Thornhill, 2009). The epistemological and ontological assumptions of any research shape its methodological approaches. Methodological approaches, in turn, inform the choice of techniques and methods used in the investigation effort. The relationships between these three are not always deterministic but there is often a connection in which the method(s) choice of data analysis needs to be guided by the methodological position of a piece of research and its underlying epistemology and ontology assumptions. In the case of this research, using content analysis is compatible with the critical realist paradigm and with the inductive, case study based nature of inquiry of this research. Critical realists maintain that there is an objective reality and this reality exists independently of the observer's mind (Guba & Lincoln, 1994). They also acknowledge the roles of perception and cognition in reaching and understanding such reality (Bhaskar, 1978). I am using qualitative content analysis for analysing the data set to reach the perceptions of the reality underlying the particular phenomenon of study, which is connectivity. In so doing the aim is to get closer to the reality of the phenomenon but acknowledging this reality can never be fully comprehended under the critical realist assumptions (Bhaskar, 1978). The case study approach is common under critical realism (Easton, 2010). Using qualitative content analysis for an inductive, case study design is appropriate as the aim is to reach deep and rich descriptions (Elo & Kyngäs, 2008; Kohlbacher, 2006). This can be captured by focusing on a specific setting and gathering as much information about the phenomenon of interest in that setting and about the surroundings of such phenomenon (Bhaskar, 1978; Krippendorff, 1989).

Content analysis of participants' input from interviews delves into meanings and links of such meanings. This, in turn, aids to explore what connectivity is in a managerial context, what potential it has on processes of strategy building, the shape of its influence on strategic choice, and in which conditions or states connectivity works best. Analysis of documentation data will shed light on these aspects of connectivity and serve as verification and support for interviews data.

## 4.6 Data Reduction

Data reduction is part of the data analysis process where the selecting, focusing, simplifying, abstracting, and transforming of large chunks of data material take place. It entails organising data through varying practices like coding, writing summaries, and discarding irrelevant data (Miles & Huberman, 1994). There are various techniques and methods for organising and reducing data in order to prepare it for data analysis. Next, I will discuss what techniques I used in this research.

### 4.6.1. Themes From the Relevant Literature

Before coding the data, I prepared a set of a priori themes which I identified given their prominence in the literature following the criteria set by Yin (2003). For theory building purposes of an underexplored phenomenon, I kept the selection of these themes as narrow as possible to allow for themes from the data to emerge (Thomas, 2006). The themes I identified in advance are:

- 1) Levels and Types of connectivity:

**High, low, active, and/or latent connectivity**

- 2) Duality effect of connectivity:

**Where high/low connectivity with specific individual/group at certain time would mean low/high connectivity with another**

- 3) Middle managers' strategic involvement:

**The implications of upward as well as downward activities/roles of middle managers on strategic initiatives during the strategy making and implementation process**

The decision to select and keep these themes was guided by the research question and with the aim of keeping attention on the main construct, which is connectivity. Two themes that regularly appear in the connectivity literature were used. These two themes were broadly defined to allow concepts and ideas from the research data to flow and be added if needed. I chose middle managers strategic involvement as a third theme to capture the interest in both the middle level management perspective on strategy process and in strategy

processes as a whole. One broad theme was deemed enough to allow for related themes from the data to appear.

Finally, no a priori themes for strategic choice were added. The aim of this dissertation is to highlight the influence of connectivity on strategic choice, and more specifically on the influence of middle management's connectivity on their strategic choices. I approach strategic choice as an end result, not focusing on the cognitive processes or characteristics of individuals or groups that contributed to reaching such choices. The interest in the choices themselves is addressed through decisions taken and in what way connectivity influenced those decisions. For that end, no a priori theme to the strategic choice element is used.

#### **4.6.2 Coding**

Coding is a data reduction method that is regarded as the first step of the data analysis (Ehrenberg, 2000). It helps to move away from particular statements to more abstract interpretations of the interview data. Before coding I initially listened to each interview audio recording (listening only with no note taking). Then I read each transcript (reading only with no note taking). Then I listened to each audio while reading the transcripts. This time I wrote down notes and drew initial diagrams around concepts and ideas. After all that, I was sure I had immersed myself in the data enough for moving on to the next stage; which is coding the data. Now I was ready for capturing what is in the interviews data set and attaching labels (codes) to them in order to extract themes from data. The process of extracting themes from data is presented in the following section. However, the procedures of codes revising and re-coding that lead to those themes are discussed in this section due to the iterative nature of the qualitative content analysis method. Where, especially for an exploratory study, the code development checking of the a priori themes and the emerging data-driven themes takes place continuously (Saldaña, 2012).

Keeping the research question and the themes from the literature in mind I created a preliminary codebook or coding template with code definitions. The next step was proceeding to the interview transcripts to look for text that matches those code definitions. Conceptual labels are attached to almost every line in the interview transcript to capture what is said. These labels correspond closely to the interview context and when taken from the interviewee's own words, they are known as (in vivo) codes (Corbin & Strauss, 2008).

In inductive research, in vivo codes which are rooted in the participant's own language are a primary way for opening up the text (Corbin & Strauss, 2008). Some other types of codes in this stage include descriptive codes, that summarise the main topic in the coded text, process codes, which capture an action in the text that is closely attached to the research question (Saldaña, 2012 : 5), or simultaneous codes where multiple coding for the same passage or sequential passage of text takes place (Saldaña, 2012 : 17-18).

Open coding focuses primarily on the text to define concepts or categories, with the aim of identifying any aspects related to the research phenomena and to produce a list of themes that will help in addressing the research question. During this process I revised the codes as well as the codes template and/or removed them. Also, additional codes were created as new themes kept emerging from the data. As it is the case in open coding, I used descriptive labels and allowed as many as possible to unfold. While noting the repetitive words, repetitive phrases, and core topics as codes (examples of repetitive words and phrases appear in appendix 18), I also regarded the repeated words, phrases, and topics as basis for subsequent coding and later themes extraction. Appendix 15 provides an example for the open coding process while appendix 16 and appendix 17 respectively give examples of a coding template and a revised coding template.

After revising the codes, each transcript was re-read and re-coded to check if they capture the range of themes identified from both the literature and the data. This checking procedure took several repetitions until I was satisfied that the themes cover the data and no new themes need to be added. Once done with the descriptive analyses using open coding, I moved to what Miles and Huberman (1994) call the second cycle of coding, i.e. (pattern coding). Pattern coding involves working on the categories or concepts stemming from open coding stage so that they could be grouped into more meaningful and general patterns. This grouping is intended to add depth and structure to existing categories and concepts identified earlier from open coding. Pattern coding seeks to find relationships, conditions, and consequences among categories (Saldaña, 2012). Pattern coding is helpful in developing major themes from the data, in searching for explanations in the data, and in examining patterns of human interactions (Miles & Huberman, 1994). Pattern coding reassembles data that has been broken up into separate codes in open coding in order to pull together concepts that share the same or similar characteristics into more abstract categories, which can typically be interlinked and build the foundation for a theory or a storyline on a later stage (Saldaña, 2012). What is challenging in pattern coding is remaining descriptive and not forcing data into any main or central ideas or categories yet

(Dey, 2003). Some coded passages overlapped (sequential codes) as in the case when the concept or idea being coded entailed a process that directly involved more than one aspect of the research phenomena. To avoid such challenges and to remain focused on pattern coding process, I examined the data carefully by asking a number of key questions proposed in the qualitative content analysis literature (Charmaz, 2006; Dey, 2003; Saldaña, 2012) such as:

- What is happening here in this situation?
- What is trying to be conveyed in this situation?
- What are people trying to accomplish in this situation? What specific means are they using?
- Who is telling what is happening in this situation?
- What are the similarities and differences between this situation and other related situations?
- What do I see going on in this/these situation(s)? What am I learning from it/them?

#### **4.6.3 Themes From the Data**

Alongside the themes identified from the literature, data driven themes were specified as well. There are several techniques researchers can apply for extracting themes from within textual data (Ryan & Bernard, 2000; Sandelowski, 1995; Silverman, 2006). These techniques vary in their usages depending on the level of their difficulty, time frame, richness and depth of textual accounts, length of the narratives, and expertise of the researcher(s) (Ryan & Bernard, 2003). Using a combination of techniques is preferable as some techniques are better suited for preliminary theme identification and some others for later stages of content analysis (Ryan & Bernard, 2003).

Themes identification in early stages of content analysis and especially for exploratory studies can benefit from noting word repetitions and/or Key Words In Context (KWIC). Sorting the results of these two techniques produces categories and examples of word usages in text. Categories with similar or related meanings can then be grouped and themes can consequently be identified. Of course there are other techniques which are more sophisticated and suitable for later on stages of the content analysis. Examples of ones I used, and in accordance to Ryan and Bernard's (2003) suggestions, are searching for missing information (searching for themes that are missing and posing questions why they might be missing) and searching for connectors (words and phrases that indicate

relationships among things, relationships such as causal, comparisons, spatial orientation, and attributes).

Moreover, I used two extraction techniques that rely on physical manipulation of text (Bernard & Ryan, 2010; Ryan, 1999) to help in the themes discovery process. First one was by examining any text that is not already associated with a theme and recording it on a list. Next, reviewing these texts and making sure they do not belong under any of the identified themes. After that, a search for new themes that associate with this text would be evoked. Applying this technique forces the researcher(s) to re-evaluate their themes and look closely for any connections that might have been missed between them (Bernard & Ryan, 2010).

The second technique is called pawing, which is a technique for going through the text, underlining key phrases and ideas, and marking them up with different coloured highlighters (Bernard & Ryan, 2010; Sandelowski, 1995). In pawing technique, reading the text more than once is recommended because this gives a better opportunity for key ideas and phrases to be noted (Bogdan & Biklen, 1997). The objective of applying this technique in this dissertation was to get a feel for the text by handling the data multiple times in order to uncover the many elements that constitute how connectivity forms from the one hand, and the various consequence of connectivity under different incidents from the other hand. This technique can occur at either early stages of content analysis or a later one. After the initial pawing and marking of text, cutting and sorting technique comes as a more formal way of pawing through the text(s). The cutting and sorting involves identifying quotes or expressions that seem important and then arranging the quotes or expressions into similar piles of meanings that go together (Lincoln & Guba, 1985). The objective of pawing, similar to pattern coding grouping, is to group similar and related meanings together for theme identification. The final data driven themes after conducting the techniques of text coding, themes extracting, and themes grouping are:

- 1) Critical and unusual episodes:

**Special examples of certain events are highlighted. Events where the initiative progression was affected (whether positively or negatively) and how connectivity of managers influenced the occurrence or the inhibition of those events**

- 2) Nature of the communication processes involving middle managers:



**What is the shape and frequency of communication between: A - middle managers and B - middle managers and other management layers? How did this affect managers' connectivity?**

- 3) The nature of support, idea-sharing, and forms of participation between middle managers

**What examples of support, idea-sharing, and participation were visible among middle managers? What role did connectivity play in the shape of this support?**

- 4) Conflict and divergent of interests between middle managers

**What examples of conflict of interest between middle managers were noted? Did connectivity play a role in resolving/ending such conflict, and how?**

- 5) Decisions taken by middle managers:

**What major decisions did the middle manager take in response to episodes identified in point 1 above? How did s/he see those decisions through, how were they pursued?**

- 6) Middle manager's level of exposure to the initiative's overall evolvement (beyond his/her division or unit)

**Did middle managers have similar exposure to the full picture regarding the initiative's development? How (if so) did middle managers vary in this? Was such a broader view helpful or detrimental for the manager's strategic choices?**

- 7) Prior connectivity:

**Effect (if any) of middle managers' connectivity in the past on current connectivity**

#### **4.7 Data Analysis**

The data analysis process started first by coding the text for key topics, repeated phrases, and specific episodes that occurred during the strategic initiative. The coding was mainly concerned with reflecting respondents' connectivity and observing their strategic choices. Afterwards, there was an identification of themes that comes after searching for connections between concepts of the coded text. The final step in the analysis involved drawing inferences from the themes and examining them in light of the texts from the interview transcriptions, from the documentation data, from the emails, and from the observations gathered throughout the fieldwork as well. This was done to form a basis for articulating connectivity's influence on the strategic choices of the middle managers working on the strategic initiative. In short, the data analysis starts by showing how codes are selected and themes are identified. Then, drawing inferences of those themes, and finally, trying to make sense of the themes in light of the research question and the research aim. As indicated before, these set of steps beginning with coding and ending with interpretations of themes do not come as a linear process. Rather, the data analysis process is taking effect in all of those steps and in an iteration, recursive, and process-oriented manner (Locke, 1996). This iteration occurs to find out as much as possible about the phenomenon under study and to make sense of its implications. This iteration is especially common in an exploratory type of research (Kohlbacher, 2006).

Despite the lack of agreement on the systematic ways or definite rules to follow when analysing textual data, two of the most common key features or main attributes in any content analysis method are: the processes of generating concepts and the processes of abstraction.

In generating concepts, the aim is classifying words and/or phrases in the text(s) into smaller, easier to manage, categories (Burnard, 1996; Weber, 1990). To perform such classification, the unit of analysis for the text(s) needs to be assigned first. Selecting the unit of analysis is "one of the most basic decisions when using content analysis" (Graneheim & Lundman, 2004 : 106). Graneheim and Lundman (2004) demonstrate how that the unit of analysis can refer to a great variety of objects of a study. For example, it may refer to a person, a program, an organisation, a community, a state, or even a nation (Mertens, 1998; Patton, 1987). Graneheim and Lundman (2004) also mention how interviews or diaries have been considered as units of analysis for classifying words or phrases into categories (i.e. Downe - Wamboldt, 1992). Sometimes, only parts of the text that appear in interviews or diaries serve as the unit of analysis (Weber, 1990). However, having every word or phrase written in the transcript to be the unit of analysis is not

unusual in content analysis and has been used (i.e. Feeley & Gottlieb, 1997; Flaskerud & Rush, 1989). Graneheim and Lundman (2004) suggest that the most suitable unit of analysis in content analysis is whole interviews that are large enough to be considered a whole and small enough to be possible to keep in mind as a context for the meaning unit during the analysis process (Graneheim & Lundman, 2004 : 105). Following that suggestion, the unit of analysis for the primary data source chosen here in this dissertation is the whole interview. Alongside the selection of the unit of analysis, the researcher must also made a decision on “whether to analyse only the manifest content or the latent content as well” (Elo & Kyngäs, 2008 : 109). The aim of including latent content is to notice the silences, sighs, laughter, etc. and try to understand the meaning behind their occurrences (Elo & Kyngäs, 2008). I include latent content in the analysis, not just explicit content, in order to enhance the process of generating concepts and, as a result, in capturing as much information as possible (Hsieh & Shannon, 2005) about middle managers’ connectivity and its influence(s) on strategic choice. After delineating the unit of analysis, the process of extracting concepts from the textual data, i.e. coding, begins. As shown in a previous section of this chapter, the identification of initial concepts or categories of interview transcripts relied on the language used by the participants themselves, i.e. in vivo coding (Strauss and Corbin, 1998), then the relationships between and among these concepts facilitated in assembling them into a more abstract, higher-order themes through pattern coding (Corley & Gioia, 2004; Saldaña, 2012). The basic objective in the generating concepts process is developing higher order concepts in order to summarise and integrate more concrete levels of data.

The integration of the generated concepts is the initial step in abstraction. Abstraction process means formulating a general description of the research topic through generating sets of categories (Elo & Kyngäs, 2008). Abstraction in qualitative content analysis leads to “the generation of a substantive theory that can explain the phenomenon by yielding a set of priority categories that cover the data” (Cho & Lee, 2014 : 16).

The abstraction essentially begins by open coding which is performed in order to open up the theoretical possibilities in the data, not just describe or even interpret the data (Punch, 2013). Open coding clusters alike concepts that describe the research phenomena relevant to inquiry; how they transpire and how they occur. These concepts constitute what is frequently called in the analysis of qualitative data the first-order concepts (Corley & Gioia, 2004) or the subcategories (Robson, 1993) of the analysis process. These first-order concepts are combined into fewer, broader, and more abstract groupings which are known

as second-order themes (Corley & Gioia, 2004) or generic categories (Robson, 1993). Second-order themes or generic categories, in turn, are then raised into even a higher level of abstraction. These are called aggregate dimensions or main categories. (Corley & Gioia, 2004; Robson 1993). This last stage of abstraction is all about generating a core category or dimension that accounts for what is central in the data around which the theory of the research is built.

Once more, the ultimate purpose of abstraction process is to make comparisons between themes/categories and look for the relations and links between them to build up a conceptual system or a theory describing the research phenomenon (Dey, 2003; Krippendorff, 1989). For that reason, it is vital to remember that in the abstraction process the purpose behind grouping of related categories together is not simply to gather seemingly similar groups (Dey, 2003) but to provide means for describing the research phenomenon, to increase understanding of it, and to generate knowledge around it (Elo & Kyngäs, 2008). This grouping of concepts can take place for several occurrences until the researcher is satisfied with the meanings underlying his or her categories grouping. This grouping of concepts is the base for moving toward broader categories or aggregate dimensions which eventually lead to generating theoretical explanation and detailed depiction of the research constructs and propositions. As such, it merits careful attention and abundant verification from data for its rationale. This was done by keeping detailed descriptions of, and diligently managing, the data set such as interview transcripts, field notes, and documents, at the various stages they were collected and analysed. These detailed descriptions serve as “important provision[s] for promoting credibility” in qualitative research (Shenton, 2004 : 69). Also, scrutiny of the concepts generation as well as the abstraction processes from two peers and academics handed the researcher a fresh perspective and allowed the assumptions behind codes and the relationships between themes and categories to be challenged. Receiving such comments developed a greater explanation of the data analyses and reinforced its trustworthiness and credibility.

#### **4.7.1 Memos and Fieldnotes**

Writing memos is an important tactic for supporting the processes of open coding, pattern coding, developing categories, and for abstraction. Memoing is “the theorising write-up of ideas about codes and their relationships as they strike the analyst while coding” (Miles & Huberman, 1994 : 72). Memoing is a process of writing memos as the researcher develops

coding schemes. These memos help in identifying meanings of codes and in developing concepts or categories as the data analysis progresses. I kept memos in the form of summary sheets to provide a record of any initial thoughts and ideas, reflections on the codes assigned to interview transcriptions and other data sources, questions I highlighted when encountering gaps on the sequence of ideas or events, and finally as a record for how building connections between categories took place. Appendix 19 shows an example of Memoing for a coded excerpt of one of the interview transcripts.

Fieldnotes are qualitative notes recorded by researchers in the course of field research, during or after their observation of a specific phenomenon. The notes give meaning and aids in the understanding of the phenomenon under study (Canfield, 2011). Fieldnotes, also, are records that can be consulted afterwards for making inferences about codes and labels associated to data (Glaser, 1978). Keeping notes enables the researcher to reflect on a particular data set, such as interviews data, and integrate it with other sources of data for the overall analysis (Birks, Chapman, & Francis, 2008). I include an example of my fieldnotes in the form of a summary form for one of the interviews (face-to-face interview) with a middle manager in appendix 20.

#### **4.7.2 Email data Analysis**

Seven middle managers responded by providing email exchanges throughout the lifespan of the initiative (both phase 9 and 10 of it) at the researcher's request. Also, one senior middle manager provided email exchanges that covered one aspect related to the initiative; his division's strategy for implementation of the assigned work under phases 9 and 10. The exchanges were with his three units heads and although these exchanges (in which this senior MM was mainly the sender) covered one topic, they constituted useful depictions of this division's work during the initiative. The division is connected to many teams working on the ground (both its own teams and other divisions' teams) and it is responsible for setting plans for the Engineering department as a whole regarding the expansion of Umniah's network as well. This exchange in particular was important in distinguishing and clarifying major aspects of the "critical episodes" theme and the "decisions taken by MMs" theme. This was attained because it was possible to map MMs' actual responses according to their divisional strategy outlined in the emails and how the responses depended on their connectivity, especially as this divisional strategy included many managers and their respective teams.

The email exchanges ranged from one line responses to several pages in length. The email content ranged from simple and direct ones, such as requested and/or accepted meeting requests, to more complex ones covering unexpected issues. In some incidents emails moved away from the originating subject and were only remotely related to the originating topic. I used the following guidelines and criteria to analyse and make use of these large volumes of emails:

- A) Classifying emails that entailed several previous trailing messages with many people adding, correcting, or confirming pieces of information. The emails were categorised based on the original subject or issue they were sent for. Any additions or replies of any sort that had alterations or deviations of the workflow for the initiative were noted.
- B) Classifying the emails into four groups: from (sender), to (receiver), subject, and date.
- C) Classifying the emails based on occurring events. If there was an issue in the emails which did not appear during the interviews, I made a note to ask the managers involved about it. Alternatively, if the issue appeared during the interviews I matched the information in the email to the information in the interview to verify, evaluate, and make inferences about it. If I decided there was a need for more information I made a note to ask the managers involved about it and get more details and/or verifications.
- D) Although all the emails I received copies of where within the time frame of the strategic initiative, namely phase 9 and phase 10 of it, some emails contained information that was either irrelevant or distantly linked to the managers' role in the initiative. I did not discard these emails; rather I included them in the connectivity analysis if they pertained to the strategy making and implementation in the company (like, for example, emails where certain middle managers were copied in the correspondence exchange between procurement department and main vendors for the strategic project). I considered emails of this kind as part of the manager's connectivity profile or build-up and integrated them too within the inferences about middle managers' connectivity influence on strategic choice.
- E) Making a list of managers based on their connectivity via email correspondences, that is, email serving as a proxy for connectivity. This served as a one way for

ranking managers according to their connectivity from highest level to the lowest level of connectivity.

- F) Making a list of major events that involved most, if not all, of the middle managers. These events were essential episodes in the lifetime of the strategic initiative. They were ones that affected the process of executing the tasks and roles of all divisions and departments to a notable degree.
- G) Comparing the lists in C), D), and F) of this guideline to examine how as well as when different connectivity levels shaped the events' initiation and/or evolvement. After that, relating this comparison to the list in E) of this guideline in addition to middle managers' choices and decisions identified in the interviews for the event in question.

These guidelines (Zakaria, 2014) helped in determining data gaps, especially with relation to missing dates on particular topics covered in the email threads. These gaps were the basis for the additional emails request of data. This iterative process of obtaining more data revealed some points that had appeared vaguely in the interview transcripts, thus facilitating the verification and improved awareness of managers' connectivity during the strategic initiative. The verification as well as the enriched knowledge manifested in linking: A ) how and when a certain middle manager behaved at a particular event to B ) his or her connectivity at the time. This linkage gradually revealed the "why" aspect a manager decided, or was forced, to act as she/he did. The connectivity associated to that manager was a major factor in explaining such a decision or behaviour in a specified time during the strategic initiative. Moreover, some managers reacted differently under the same situation but during a different time of the initiative. The reason for that is the different level of connectivity the manager enjoyed at the time.

Even if the content of the emails was not always crucial, the email fields themselves (FROM / TO / DATE / SUBJECT) served the research objective of capturing connectivity. It helped in depicting the communication network and consequently the connections between organisational members working on the strategic initiative. I realised that following a specific issue no matter how detailed via emails between organisational members will not be entirely thorough or complete. There will always be the probability the conversation took another form other than through email. This occurred because some of the email exchanges were missing. As a result, the information about some particular

events or incidents was incomplete. When I encountered such a situation of incomplete information, I asked the concerned manager(s) about the incident and what has happened to tackle it. This was helpful in clarifying events especially if they were related to a consequence of connectivity that this research is interested in capturing. Sometimes the missing information was either remotely related to the interest and focus of this research (such as a reply from outside the company which was delaying a response or an action from a manager), or it concerned people from outside the Engineering or Marketing departments which the researcher did not get access to (such as a reply from the Legal department on how to proceed when a conflict arose between the company and a property owner over a signed contract for renting a location to be used as a network site). But as this email data was part of the secondary sources it is not the main source of insights. Nonetheless, the data and implications from this secondary source resulted in a better comprehension of the connections and the ways those connections between managers influenced choices.

The fulfilling of a middle manager's strategic role in the following example is apprehended through the results of grouping categories from interview data, data from business diaries, and observations on the one hand, with categories identified from examining email exchanges between middle managers on the other hand. This example represents connectivity's influence on the choices middle managers' took while effectuating upward influence roles with regard to a new idea being suggested by one middle manager and the consequences that followed from adopting that idea on the part of other middle managers. The analysis of data, notably email-content data, led to highlighting the choices those managers took and what was the role of their connectivity in them. Based on those choices, the example shows how the introduction of the new idea, as well as the efforts to abandon it, was influenced by managerial connectivity. Also, the example points how the strategy execution of the initiative progresses or suffers accordingly.

After identifying data that captures different types and levels of connectivity from within the emails, I placed that data in two lists, one with the names and roles of middle managers and the other with the dates corresponding to a certain event, issue, or decision a middle manager either took or participated in attaining (or sometimes deterring). Next, I described the events in which connectivity appears in the interview transcripts and make inferences between connectivity and the situation where connectivity appears. I rely on both the number and content of emails that represent an episode or a situation in uncovering connectivity. In so doing, I attempt to showcase how and to what extent connectivity of a



middle manager influenced his or her strategic choice. Moreover, I interpret what were the implications of those choices on the outcome and/or the direction of the events, such implications consequently add clarifications to the shape of connectivity's influence on the strategy making and implementation process.

An example of the lists illustrating how connectivity captured from email exchanges is provided below. Table 4 - 1 provides a breakdown for the number of emails for 3 middle managers during a specific incident. The incident is the introduction of a new idea by a middle manager for a new system. This system is proposed to better track the accomplishing of duties of various divisions and units in the Engineering department regarding the network expansion project. In table 4 - 2, the periods of how the lists extracted from email exchanges inform the tracing of the connectivity's influence during a specific situation during the initiative are presented. Although this specific situation appears again in the next chapter in more details and with more email-content examples, it is mentioned here to pin down the importance of the email analysis, as a vital component of the analyses process, in this thesis for capturing connectivity and observing its influence on middle managers' choice.

Incident or Event	MM 1	# of Emails		MM 2	# of Emails		MM3	# of Emails	
		All	Sent		All	Sent		All	Sent
New Tracking Process	Idea generator	24	16	Supporter	11	6	Opposer	13	10

**Table 4 - 1:** Critical Incident Capturing Connectivity in the Form of the Number of Emails for 3 Key MMs Engaged in the Incident

Incident or Event	Dates of Emails MM 1		Dates of Emails MM 2		Dates of Emails MM 3	
	All	Sent	All	Sent	All	Sent
New Tracking Process	Mar 2014 - Nov 2014	Mar, Apr, May, July, Oct, Nov - 2014	Mar 2014 - Nov 2014	Apr, June, July - 2014	Apr 2014 - Nov 2014	May, July, August, Sep, Oct, Nov - 2014

**Table 4 - 2:** Critical Incident Capturing Connectivity in the Form of a Timeline Based on the Email Exchanges of 3 Key MMs Engaged in the Incident

The two tables above show a condensed portrayal for a proposition by a middle manager to introduce a new tracking process. The portrayal is in the form of a timeline occurring over email exchange. The tables also display 3 middle managers' roles and/or reactions for the proposition, also extracted from email exchange data. All 3 MMs are key players in the strategic initiative. Two of them are division heads and one is the project manager for the initiative. The application of the new tracking process concerns all the divisions responsible for the implementation phase of the strategic initiative. This proposition will not affect the planning of the initiative but rather deals with aspects of ensuring its smooth operation and execution. Although the approval of the idea had to come from top management, the formulation of its details as well as the implementation of it was left to the discretion of middle managers in the Engineering department. Top management was involved in the early deliberations of the proposition. Once the idea got approved, top management stayed informed of any updates through the project manager who was the link between top and middle level managers in this strategic initiative.

During phase 9 of the expansion project, MM 1 approached the Chief Technology Officer with the idea to use a tracking sheet for monitoring progress of various divisions during the implementation of the network expansion plan. The rationale was that the old monitoring system was ineffective for the requirements of the current expansion plan due to the huge increase in the number of sites to be expanded. The number of sites for the following phase (phase 10) was projected to be even higher and some issues were already being reported in the current phase (phase 9). MM 1's responsibility in the strategic initiative is a pivotal one. His division is tasked with the overall supervision of the implementation process and to ensure the sites are ready to be commercialised. This middle manager needs to make sure that all the required equipment and software are in place, test the sites, and make the final announcement from the Engineering department to the project manager that the sites are ready to go on air, meaning that they are ready to be commercialised for clients. He is in a position to view the progress of all divisions responsible for implementing expansion plans. He stated to his senior manager that in order to avoid any delays there needs to be a new way to monitor progress or to have more team members in each division to cover the larger number of sites and the related tasks that entail such sites.

This middle manager sought support from senior management team during the concluding meeting of phase 9 and also in the Engineering department initiating meeting for phase 10. He also requested support from the project manager by asking him to present the many delays that occurred during phase 9 to the top management team. Detailing how many of

those delays were a direct consequence for the limitations in the current system used for controlling the initiative's progress. These tactics can be thought of as the formulation phase done by MM 1 for presenting his idea. The level of connectivity associated with him in this initiative made it possible to promote such idea. Also, requesting support from a key person in the development of the initiative was facilitated by that high level of connectivity of MM 1. This support from top management and other key people led to accepting the idea by other key members involved in the initiative.

MM 1 proposed the design of a tracking sheet to be used as the new monitoring process. He also sent a template of the design to top management, division heads, and project manager asking for feedback and recommendations for improving it. When the final design was set, he presented it in a meeting prior to the start of phase 10 of the expansion project. During phase 10, MM 1 was responsible for answering questions about this tracking sheet, providing examples on how to fill the categories, send reminders for any gaps or missed data, and lastly responsible for escalating any delays to division heads or even top management if the delay has a severe implication on the initiative. These set of activities starting from devising a design for this tracking process to reporting any delays to management can be envisioned as the implementation phase by this manager. Monitoring the execution of this novel idea was enabled by the high connectivity levels of this manager. The high connectivity opened a venue for it to gather more ideas from others on how to further refine its design, facilitated persuasion which generated from the acceptance and support the idea gained previously, and the additional support gained from accessing the queries and comments of team members using this tracking tool. The emails obtained from MM 1 identify how his idea emerged. The emails show how he promoted the idea to senior management, how he asked for endorsement from the project manager, how he sent replies on the way to fill the sheet properly, and how he addressed comments, notably from MM 3, that questioned the introduction of the new tracking sheet into the process. The escalation to higher management was not always evident in the emails. However, the following quotation from an interview with the project manager express that it took place.

“The Researcher: so how did the reemphasise on using the tracking sheet happen? I mean you send it to concerned people who missed filling it or updating it for example?”

“MM: what we have done actually we sent emails to all of the team members involved in this issue and after that we did it many times by

escalating that to Mr [Division Head 1], Mr [Division Head 2], and also Mr [Division Head 3]. We send them an email: please your team is not inserting the required data”

The middle manager who is also the project manager for the initiative supported the new idea introduced by MM 1. This support was evident in both the emails this manager sent and from his replies in the interview. The initial support this manager gave was perceived favourable by top management and paved the way for them to endorse the new idea. Additionally, MM 2 provided support through emails for the rest of the division heads on the new process for monitoring. Because of his position in the initiative’s structure, this manager was able to build up support and acceptance from others. This was possible because of the channels and connection paths with other key managers, i.e. high connectivity, and this occurred during the early start times of the proposition. Furthermore, the emails this middle manager sent during the later stages of this idea proposition, which can be viewed as the implementation stage of it, were not as frequent. Most of those emails were reminders for filling the tracking sheet. In fact, some of the emails MM 2 received asking questions about the tracking sheet were forwarded to MM 1. When asked why he thinks this occurred he replied:

“...where [MM 1] suggested some tracking sheet in order to, let's say, make the follow up of the progress much more easy which is let's say a great idea but actually sometimes you face that people do what they are really used to do. Whatever instruction[s] we put people usually will do what they used to”

In the network expansion project, members involved in the initiative were used to sending requests for information to either their direct superior or to the project manager responsible for the project. In phase 10 this continued to be the case and the tracking sheet was one of the subjects for information requests. MM 2, however, did not respond to the majority of these emails because he had little knowledge in the details of the new tracking sheet (he indicated he even had some troubles in filling them) and because top management explicitly mentioned that the responsibility of the tracking sheets lies on the part of MM 1 and his division. This deferral done by MM 2 can be interpreted in connectivity lens. He did not use his high connectivity level, which was visible to everyone in the initiative, but

rather turned it into a low connectivity state. It did not affect the development of the initiative because the requests for information were sent to the concerning person and in accordance with what has been agreed on and circulated. One possible way the high connectivity level might have obstructed the initiative progress would be if MM 2 responded with a wrong instruction or advice. During implementation of this idea from the part of MM 2, low connectivity was actually desirable and beneficial rather than high connectivity.

The middle manager who was against the new monitoring tool was not involved in the meeting with top management in which the idea was officially addressed. Nonetheless, he voiced his objection in the departmental meeting arguing that the new tracking sheet system is not necessary and the old techniques would suffice. Even after settling on the final design of the tracking sheet this manager tried to oppose its use. There are at least two foreseeable explanations for this behaviour. The first relates to the middle manager's position in the initiative. The second relates to his division's tasks and responsibilities. The former explanation regards the opposition of this middle manager as a result of his misunderstanding of the importance of a new tracking tool. He does not have enough access to the full representation of the Engineering department's cycle of implementation with regard to the expansion project. His position is somewhat at the later stages of the cycle and the dependency on other divisions' output is minimal. That might be the reason behind standing against a new monitoring process as the value of it seems unworthy. As for the latter explanation, it concerns the nature of the tasks and activities assigned to the middle manager's division. These tasks comprise mostly of final maintenance procedures of the sites before they are ready to go on air. This maintenance checks the readiness of all the equipment and ensures their final conformity to the required technical specifications. Another responsibility is conducting a frequency test on the sites to ensure the frequencies are compatible with the type of telecom technology planned for the site. Primarily, MM 3's major role is in orchestrating his division's work. His team members got the knowledge and skills to fix any hardware issues according to standards or manuals. Moreover, they got necessary skills for identifying malfunctions in the software but they need to report these faults back to the concerning division or sometimes to the team member in that division. A new tracking tool would mean extra work for this division. This work would need a form of new collaboration between the division's team members who perform various maintenance issues on the field and their senior engineers of the division. Those engineers in turn might need to report back to MM 3 before updating the tracking sheet. This means extra load on MM 3 who used to send emails with general descriptions about any

maintenance issues to the concerned division. That division then liaised with MM 3's division for a joint field visit to address the problem. These new arrangements with the introduction of the new monitoring process would disrupt the flow in this middle manager's division, hence his opposition. This was evident in the volume of emails he constantly sent trying to reverse the decision to use this tracking sheet tool. These emails were at first directed to other division heads and later on to the Chief Technology Officer requesting to exempt his division of following the new tool. One key reason in MM 3's reservations to this new idea is the fact that his division has the largest number of people. That means the amount of the tracking sheets to be filled by his division would be the highest. He needs to have a more in-depth checks and reporting guidelines about site maintenance. His high connectivity level with such large number of people did not serve to undo the endorsement of senior management nor the acceptance and support the idea gained. He was not suggesting an alternative solution, rather focusing on reversing a new trend by the use of his high connectivity. That effort did not work because the idea of the tracking sheet was in its implementation phase. This is a phase in which utilising high connectivity is ineffective and even detrimental to the event or incident a manager is facing.

What this example reveals, is that connectivity has an influence on the choices middle managers adopt and the consequent decisions they pursue. The elaboration on this example revolving around an introduction of a new system into the strategic initiative is deduced from examining the email patterns of the managers involved, insights from other MMs involved in the initiative, and the interviews conducted with the 3 MMs outlined in this incident.

#### **4.8 Critique of Content Analysis**

There are a number of limitations for using content analysis as a research technique for data analysis. Two of the most central ones are: The reliability of the analysis process, especially the coding scheme or template (Weber, 1990). The other concerns the replicability of research findings which rely on content analysis as an analysis technique (Elo & Kyngäs, 2008; Kolbe & Burnett, 1991). The relevance and meaningfulness of the interpretations of texts by the researcher(s) need to be carefully addressed, otherwise the reliability of research findings might be questioned (Kolbe & Burnett, 1991). Further, if themes and inference generated from themes are obtained from the very material from

which they are analysed, then replicating the research beyond its conducted data and context is considered problematic (Krippendorff, 1989).

One way to overcome the criticism regarding the reliability limitation is to keep a watchful iteration between theory and data while generating codes and themes. The researcher can achieve this iteration by always bearing in mind that the identification of codes and themes needs to come from both the text and literature which are relevant to answering the research question(s). The researcher should check the codes and themes continuously to make sure they reflect the constructs of the research (Stemler, 2001). Additionally, he or she ought to take measures for checking the relevance of themes to answering the research question throughout the analysis process (Krippendorff, 1989). To guard against concerns of reliability, I performed careful scrutiny while coding as well as re-coding processes throughout the analysis. This scrutiny was performed by the following practices which fit the requirements of a theory-building study through a qualitative content analysis method of data analysis. First, by constantly comparing theory and data when coding or generating themes from codes (Kohlbacher, 2006). This ensured the consistency between codes and themes extracted from the text by comparing them to theories from the literature. This comparison was done also for any emergent concepts or themes that appeared throughout the analysis process. Secondly, the research memos, notes, and summaries produced throughout the collection as well as analysis of data served as reference checks to consult and reflect on while producing themes (Glaser, 1978). Thirdly, consulting with two qualitative researchers, (one of them from the Business School at University of Glasgow and the other academic from a different school at another university), for checking the coding, emerging themes, field memos and notes, a sample of interview transcripts, and their relevance to the research's phenomena served as a review process of how close the codes, the extracted themes, and the abstraction process reflect the research constructs, especially connectivity, as well as the conclusions of the data analysis process. Fourthly, I developed an early familiarity with the culture of participating organisation(s) before the first data collection dialogues take place. This was achieved via consultation of appropriate documents about Umniah Telecom, its two competitors, the telecommunication industry in Jordan, and the nature of work of an Engineering and Marketing Departments in a telecommunication company during expansion projects. In doing so, I established initial basis for engagement with potential research participants (Erlandson, 1993). I learnt, broadly, about their work responsibilities, work context, and emailed them for introductory briefings about the research without encountering the dangers of being too immersed in the participants' or the culture under scrutiny that might affect the researcher's judgements

(Lincoln & Guba, 1985; Shenton, 2004). Finally, reliance on various codes and themes extraction approaches and techniques from the data set and not just one approach or technique (Ryan & Bernard, 2003).

As for replicability, two points to address it can be raised. First point relates to the notion that the current research is basically an inductive theory-building study aiming to enhance understanding of an under-studied phenomenon in a managerial/organisational setting. It is a qualitative study with a single case study research approach. These type of studies are concerned with theoretical generalisation rather than, as the case is in quantitative studies (i.e. Uhlenbruck, Hughes-Morgan, Hitt, Ferrier, & Brymer, 2016), probabilistic generalisations of findings to a population (Popay, Rogers, & Williams, 1998). For a case study, the goal is to expand and generalise theories (analytic generalization) and not to enumerate frequencies (Yin, 2003).

Second, and related, the epistemological and ontological stances of this thesis accords to the phenomenon observed, i.e. connectivity, and how to capture its influence in the workplace. Adhering to the principles of a critical realist means that an external reality exists but it is one that “changes over time and is shaped by social, cultural, ethnic, and gender values” (Squire, 2005 : 81). Critical realists hold that the external world is imperfectly and probabilistically apprehensible (Guba & Lincoln, 1994). Furthermore, realists assert that research should consistently look for deeper, unobserved, and unobservable reality in answering why a result or a phenomenon has been found or reached (Neuman, 1991). The linkage between these hallmarks of critical realism and replicability of research relate to the nature of this research’s investigation of connectivity. This investigation concerns a phenomenon in organisations which is a characteristic of interactions and communication between people. The investigation of connectivity takes place in various events, forms, and even amounts during the lifespan of a strategic initiative. Furthermore, connectivity’s direct consequences or influences are not easily detected because they are embodied in the fabric of relationships and also in the organisational systems and procedures. Hence, this research argues that studying connectivity requires tracing its underlying structures and unobservable events that cause other sets of observable events. These observable events, which constitute the consequences of connectivity, can be understood only if we understand the generative structures of the unobservable.

The previous notion about the link between epistemological and ontological underpinnings and replicability of research in this dissertation, leads to one of the research’s objectives.



This research objective states that by delivering a rich description of a phenomenon widely present and felt in nearly all organisational dealings, organisations can better understand this phenomenon's influence on the strategy formation process. This understanding has, in turn, the potential to be applied in steering other organisational processes toward better positions, configurations, or paths of what the organisations favour. This deeper understanding can occur even on the grounds of conducting this research on one organisation. This research proposes that knowledge of the concept of connectivity in the workplace of a single setting can make "replicable and valid references [not only] from data to their contexts" but also to other contexts (Krippendorff, 1989 : 403). This is so because the conception of connectivity forwarded by this research as channels for carrying flows of communication, ideas, support, and interactions at large ramifies, transcends, and can be spread to other contexts. The rationale behind this is that this conception is at the heart of social exchange and organisational relationship. Viewing connectivity in the manner which is described here helps in the search for structures and patterned regularities in the context and in making inferences on the basis of these regularities. Those inferences are transferable beyond the original context and/or data. So the ultimate aim is "to make logical generalizations to a theoretical understanding of a similar class of phenomena rather than probabilistic generalizations to a population" (Popay et al., 1998 : 348). This is done by treating connectivity like a resource that can influence organisational operations (Jafar & Canales, in press; Kolb, 2008). This investigation identifies such influence on a key activity in organisations, namely, the strategy making and implementation process, to show that a logical generalisation can be made of connectivity's influence on strategic choice and eventually on that process.

Despite criticism, content analysis has an established position in the literature as a data analysis method. It is flexible in terms of research design (Harwood & Garry, 2003) and it is a content-centred method (Krippendorff, 1989). It is not a simplistic technique which relies on computing words and phrases, or merely a counting game. Rather, it is concerned with meanings, intentions, consequences, and context (Downe - Wamboldt, 1992).

#### **4.9 Summary**

In content analysis, the researcher can give meaning to words, sentences, and paragraphs by coding the meaningful text into various themes (Weber, 1990). Then, he or she draws major themes or categories from this coding (Weber, 1990). These themes ought to be

conceptually powerful in understanding the data (Miles & Huberman, 1994). Themes can be decided upon before analysing the data and/or emerging themes can be created ad hoc (Ryan & Bernard, 2003). Because this current study aims at building theory around the concept of connectivity and its influence on strategic choice, relates to an under-developed research area, and is an exploratory study, a heavy emphasis is on ad hoc theme categorisations. This hands this research an advantage of being flexible in existing developed concepts from the related literature(s) with the emerging concepts from the empirical data (Krippendorff, 1989). Nevertheless, prior to empirical fieldwork and data collection, themes were also selected. These a priori themes were identified from theories and previous related studies in the literatures of connectivity, strategic choice, middle management perspective on strategy process, and lastly from the logical intersections between these three literatures, which capture the characteristics of connectivity.

The systematic extracting procedures of themes in this analysis were shown. Grouping the themes and drawing insights from them led to identification of patterns about the phenomenon and its working mechanism(s) during the strategy making and implementation process. In light of the research question, these patterns were used to describe where connectivity influenced the strategic choices of middle managers. Elaboration of the influence of connectivity appeared via analysis of emails content in certain situations or incidents during the strategic initiative. This discussion about connectivity's influence on middle managers' strategic choices functions as an example of connectivity's mechanism. It also constitutes, in parallel with the inferences of the data analyses, the foundation of the research findings which is the subject of the next chapter's material.

## **Chapter 5. Research Findings**

### **5.1 Abstract**

In this chapter, the main findings with regard to the research question of the dissertation are presented. These findings are the product of the data analyses and the theoretical elaboration of the current research. This chapter sets forth a mechanism for connectivity's work during the strategy making and implementation process in organisations. After explaining this mechanism in which connectivity operates, this chapter progresses to explaining the research findings. Finally, the chapter concludes by proposing a model to demonstrate how such mechanism of connectivity influences strategic choice.

## **5.2 Introduction**

Qualitative content analysis is a research method for analysing the content of a variety of data (Hsieh & Shannon, 2005). It is a research technique that “enables the reduction of phenomena or events into defined categories so as to better analyse and interpret them” (Harwood & Garry, 2003 : 479). Qualitative content analysis is a useful presentation of data for making valid inferences from data to their context (Krippendorff, 1980). Content analysis is a method which purposes to provide knowledge, new insights, a representation of facts, and a practical guide to action (Krippendorff, 1980).

All of the above views and definitions of content analysis showcase that the aim of content analysis method is to attain a condensed and broad description of the phenomenon under study. In qualitative content analysis, the outcomes of the data analysis processes are concepts or categories describing the phenomenon (Elo & Kyngäs, 2008). The purpose of those concepts or categories, in inductive inquiry, is to build up a model, a conceptual system, or a conceptual map (Berg & Lune, 2004; Hsieh & Shannon, 2005; Krippendorff, 1989) which offers answers to the research question(s). Linking the concepts together to arrive at such conceptual level materialises through inferences from analysed data (Harwood & Garry, 2003; Krippendorff, 1989). From there, and based on their logical relations, these inferences are then grouped together in order to provide an answer to the research question(s).

This attainment of a conceptual underpinning is considered one of the important steps by many of the scholars in qualitative content analysis (Elo & Kyngäs, 2008; Krippendorff, 1980). Such conceptual underpinning links the themes identified from the coding accounts or coding groups to the phenomenon the researcher wants to theorise and have knowledge about (Krippendorff, 1980). The dissertation’s conceptual underpinning and the theoretical model of this research appear at the end of this chapter.

## **5.3 Connectivity Mechanism and How it Functions**

This research started out to examine the influence of connectivity on strategic choice. The research efforts at building a theory on the results of connectivity between middle managers on the strategic choices they undertake. These choices are observed, and their implications are investigated, in the lens of middle managers’ connectivity during the

lifetime of a major strategic initiative taking place in a telecommunication company. All of the findings of this investigation reveal key aspects of the mechanism(s) by which connectivity forms strategic choice. The manifestation of such mechanism(s) is in how and when that formation of connectivity occurs. By following middle managers' choices throughout the strategic initiative and making inferences from the research data, various examples of connectivity's influence on middle managers' choices are revealed. The appearance of such examples of connectivity's effect made it possible to deduce in-depth portrayal of connectivity's working mechanism. This research predicts the mechanism of connectivity to be comprised of four interrelated aspects; the level of connectivity, the type of connectivity, the time or phase in which connectivity happens, and finally the presence of past connectivity.

Before moving on to the research findings pertinent to the thesis, it is important to note the following descriptions of the four abovementioned key aspects of connectivity. These aspects, or elements, relate specifically to the research's main phenomenon and to the thesis's central endeavour. This research proposes that these elements and their definitions suit the requirements of its exploratory mode of inquiry. Similarly, a description of what constitutes this research's measurement of managerial connectivity in addition to how this proposed measurement is reached are equally important components for exploring connectivity's influence on strategic choice. This measurement denoted as the "amount of connectivity" is also explained next. Such descriptions are appropriate for the argumentation regarding the research findings. The depiction of connectivity aspects/elements which follow next will pave the way for discussing the findings and drawing the set of research propositions out of them.

### **5.3.1 Connectivity Level**

This aspect of the conception of connectivity in this research expresses the range or extent of connectivity, which means whether the connectivity is high or low. Connectivity has a duality to it where one cannot have high and low connectivity with the same person/people at the same time. Nevertheless, one has the ability to switch from high into low connectivity, or vice versa, and employ, to an extent, a connectivity level as needed. Whether or not the employment of connectivity is a success is a function of an assortment of factors, i.e. which type of connectivity, the existence of previous connectivity, or the

timing of it, but the choice of utilising one level of connectivity, for example high connectivity, over another remains evident.

### **5.3.2 Connectivity Type**

This aspect of the conception of connectivity in this research categorises it into the following two types. One is active connectivity and the other is latent connectivity. Both categories refer to how one perceives the existence of connectivity of another person. The former type of connectivity describes the visible connectivity, such as a manager's position in the structure and her or his closeness to high power ranks or decision-making authorities. The latter refers to implicit connectivity. The connectivity in this latter type is a hidden one and often materialises when a manager performs a choice and acts on that choice's accomplishment. So only when it is practiced, this connectivity becomes apparent. From the data and observations of the dissertation, this type of connectivity is usually an unexpected one. It is worth mentioning that the manager with either the active or latent type of connectivity might actually not be aware of the degree or extent of connectivity he or she enjoys. The examples of unexpected acts by middle managers which appeared during the research investigation prompted the motivation as well as the justification of this aspect of connectivity.

### **5.3.3 Time Frame of Connectivity**

This aspect of the conception of connectivity in this research refers to which phase of the initiative the connectivity is captured in. Deducing connectivity's influence depends largely on the time frame that influence is actually happening. This aspect of connectivity could be at the level of the strategic initiative as a whole, namely formulation stage or implementation stage. It could also be on the level of a strategic incident concerning a strategy act taking place at any point during either of the two broad stages, formulation and implementation, of the initiative. For example, a middle manager's connectivity can be examined during the formulation phase of the broad departmental plans of the strategic initiative. That would be the time frame wherein the influence of connectivity on the part of that manager is explored. That manager's connectivity can also be examined throughout the implementation of a decision he or she is pursuing concerning a divisional plan.

Moreover, the sorting into formulation and implementation can be applied to specific strategic decisions, not just the strategic initiative as a whole. These specific strategic decisions can be dealing with particular incidents occurring on either of the broader phases of the initiative. For instance, a middle manager requesting new information to solve a problem facing his or her division can be conceptualised in terms of formulation of such request and the actual implementation task of the information seeking activity by that manager. These time frames help envision the influence of connectivity because connectivity works differently under formulation and implementation points of time.

### **5.3.4 Past Connectivity**

This aspect of the conception of connectivity in this research refers to any connectivity a middle manager had from before and engaged in utilising that previous connectivity. The connectivity would be in the form of previous connections and old channels of communications with others. This connectivity might have been successful in attaining favourable outcomes through it but this past connectivity can be a negative one too. Restoring such past connectivity might yield swift benefits. This can be the case if the old connections have a unique value that is currently missing in the connectivity paths for the manager. Also, past connectivity can be helpful when a need for as much support as possible presents itself. The inclusion of this aspect to the conceptualisation of connectivity emerged from interpretations of unexpected connectivity examples from the part of two middle managers. In one example, the outcome of reverting to a past connectivity had a major implication on the progress of the initiative as a whole. Analysing connectivity in these two examples showed how this aspect intertwines with the other proposed three aspects of connectivity. As a result, it is included as a separate finding and as an integral rather than marginal part in the theoretical model of this thesis.

In this research, the amount of connectivity is assessed by measures of the corresponding paths or channels of communication a middle manager obtains in a specified point of time. This assessment depends on features like A ) the number of direct reports of the middle manager, B ) his or her connections with other middle managers, C ) his or her connections with senior managers, D ) the number of emails addressing a particular event or incident, and finally E ) the researcher's deliberations with middle and top managers regarding each middle manager's position, role, and importance in the initiative. These features are illustrated as circles in Figure 5 - 1, where the area representing the nexus or the

intersection of the four circles denotes the amount of connectivity being observed. The size of each circle denotes each feature's weight in determining the amount of connectivity for this thesis.

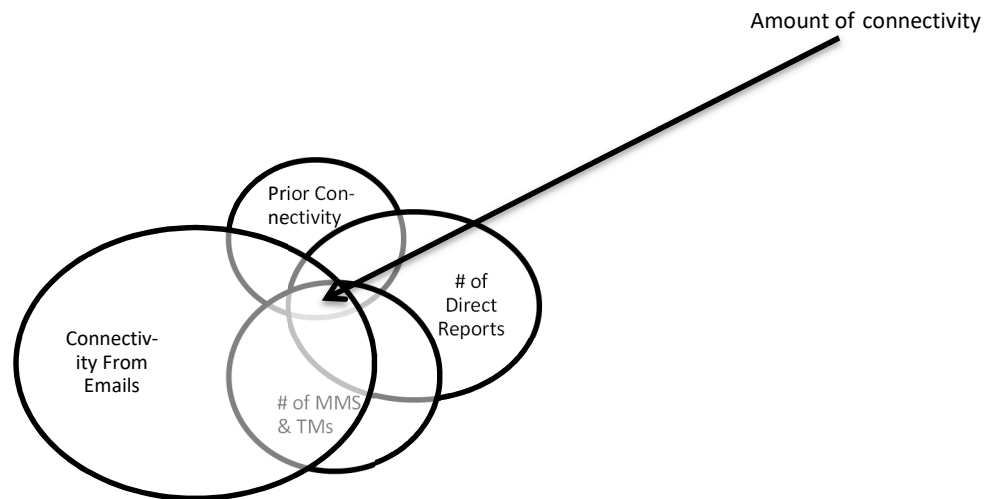


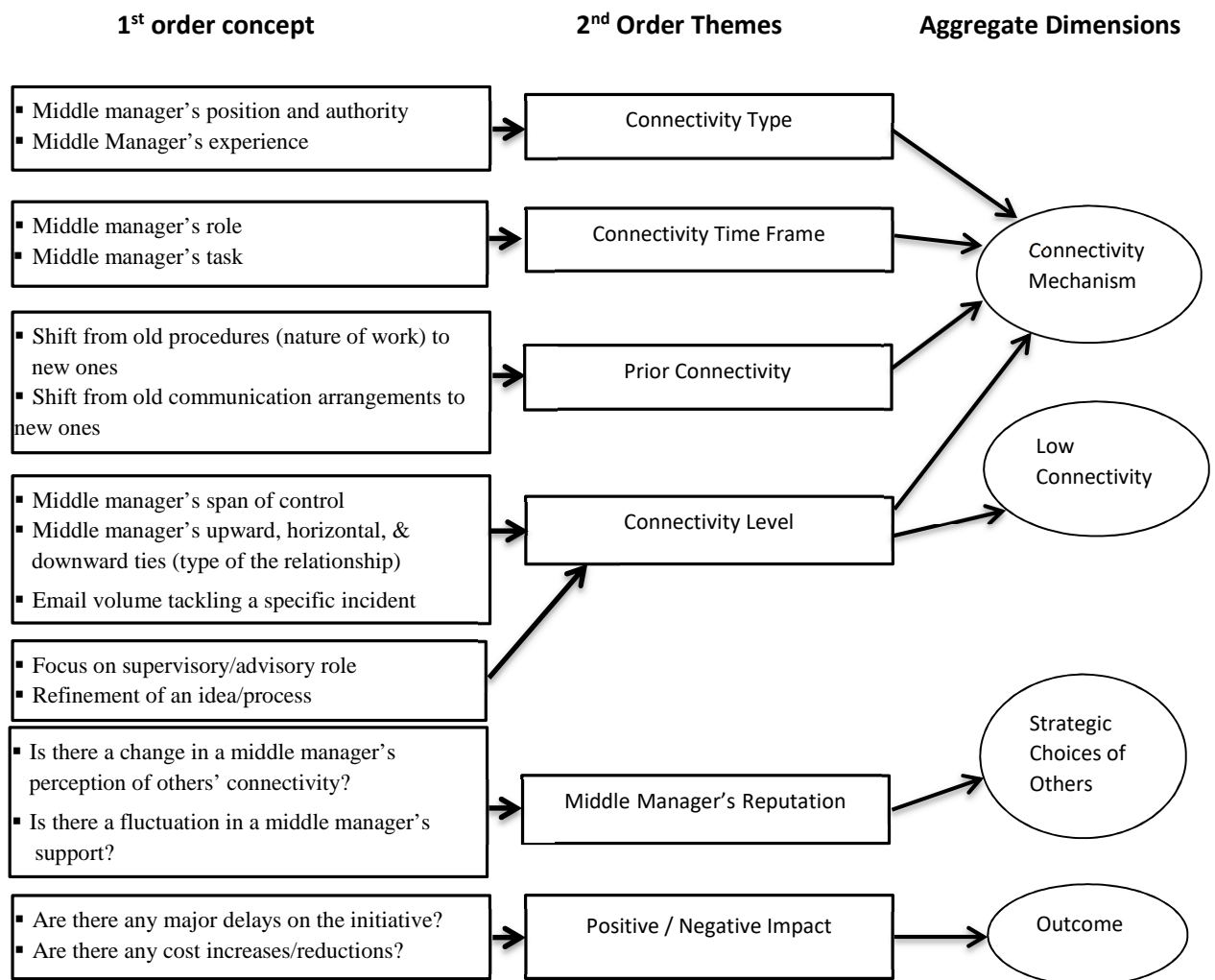
Figure 5 - 1: Features Used to Assess Connectivity's Amount

It is essential to remember that this assessment of a middle manager's connectivity is not intended to quantify his or her connectivity with a figure or as a number on a scale. This research is a qualitative research where the amount of connectivity is measured in terms of describing the level of connectivity as of high and low connectivity. The description of connectivity in such way, high and low, is combined with the other aspects of connectivity forwarded in this research; connectivity's type, its time frame, and its past occurrence. For this research, such combination lends a useful depiction of the mechanism in which connectivity appears during the life of the strategic initiative and hence, how connectivity's influence to be discovered or detected. As a result, connectivity's influence may be tracked and illuminated.

So far, an illustration of both the work mechanism of the main concept of this research and its measurement was furnished. In the findings presentation that follows, four data displays are put forward: the findings narrative itself, the progressive data structure, additional supporting data, and the theoretical model. The integration of these four data displays inform the exploratory aspect of this dissertation with regard to connectivity's influence and how this influence actually materialises. The findings narratives demonstrate examples and situations in which managers' connectivity is captured, how logically the sequences of events unfold with connectivity being the focus, and points out to connectivity's effects on the initiative's development. Figure 5 - 2 employs Corley and Gioia's (2004) first and



second order data structure approach where “concepts, themes, and dimensions, suggest concepts descriptions and explanations to the observed phenomena—attempting eventually to answer the important question: what’s going on here? theoretically” (Gioia, Corley, & Hamilton, 2013 : 20). Table 5 - 1 shows supporting data which are in the form of representative quotes from the research’s data set. The table outlines examples of connectivity’s working mechanism and connectivity’s influence on strategic choice during the lifetime of the initiative. Also, screenshots of email exchanges between managers are presented as another form of supporting data. These screenshots provide examples from the research’s data set on how the concepts, themes, and dimensions were captured and examined. Each screenshot will be linked to its corresponding concept, theme, or dimension along with a brief explanation to such linkage. Finally, the emergent model from the themes and aggregate dimensions is presented at the end of this chapter. The larger narrative of the dissertation’s phenomenon and the propositions answering its research question are shown in the model. Before moving to the research findings and their narratives, the data structure and supporting data (table & screenshots) are presented next.



**Figure 5 - 2: Data Structure**

Theme	Representative Quote
Connectivity Mechanism	
Connectivity Type	<p>"It is used for data collection about the sites. So, now they will identify the site type, what type of site we are to use. We will go to transmission and here Nigel<sup>1</sup> can give you more information on what data is received from transmission and also information on site construction, data from civil on site acquisition" (Senior MM - Division Head)</p> <p>"Yep. This is one of the, the lessons learned in this project and from many other projects actually. The centralised communication sometimes is really, let's say, is not the optimum way to run the project. What happens is, yes unfortunately what we have in our culture that they refer back to the project manager, we have that issue. We tried a lot in this project specifically, we did not succeed 100% to make the communication channel very clear. That once they need a technical support they can refer back directly to the.. whoever this type of technical support lies. But again we couldn't, you know, it was not optimum" (MM)</p>
Connectivity Time Frame	<p>"Well, if you are talking about the frequency as a number, during the implementation the communication with everyone actually is much more than in planning" (MM - The Initiative's Project Manager)</p> <p>"Mr Michael<sup>2</sup> is responsible for the backhauling so towards the end of it all [the initiative]<sup>3</sup>.yes, the interaction at the beginning [with him<sup>4</sup>] is only narrow. We only discuss the standards and these things but during the implementation period we start the communication frequently with MrMichael, it, the communication increases suddenly because they have to do actual work at each site" (MM - The Initiative's Project Mgr)</p> <p>"The communication at the beginning is much more important in order to know what exactly we need to do. Like to know the sites, where and what technical specification, what technology to use in the project. During the implementation if we missed one day we will delay let's say sites or something but during the beginning it is crucial to make sure we understand what they want " (MM - Division Head)</p> <p>"So, even after the sites are implemented we need to talk with radio planning and optimisation, with Mr Oliver<sup>5</sup> and Mr Marc<sup>6</sup>. So, I mean not just at the beginning of the project, no you need to interact with them throughout the whole life time of the project" (Senior MM - Division Head)</p> <p>"Ok, to just start with that, the Radio Network Department is in charge of the network planning and network design for Umniah, for the mobile network of Umniah. Basically we are in a way the owners of the network, we do the design, and we pass our design to the Deployment Department, Implementation Department. And then once the network is, built, they return it back so we can work on it to optimize it and maintain it, and maintain the performance of the network for the customers" (Senior MM - Division Head)</p>

**Table 5 - 1: Data Supporting Interpretations of Connectivity's Mechanism & Influence**

<sup>1</sup> Manager's pseudo name

<sup>2</sup> Manager's pseudo name

<sup>3</sup> [word] = correction/addition by the researcher

<sup>4</sup> [word] = correction/addition by the researcher

<sup>5</sup> Manager's pseudo name

<sup>6</sup> Manager's pseudo name

Past Connectivity	<p>“Michael<sup>7</sup> is the operation &amp; maintenance manager. He was my manager by the way, when I was in O&amp;M and he was managing me I was one of his supervisors. Actually Michael<sup>7</sup> was my manager from the period 2005 until 2010, five years” (MM - Division Head)</p> <p>“Sometimes I need to sit with Michael<sup>7</sup> to remind him, please Michael<sup>7</sup> we reached this step now, send your people to this site or that site to put it on air” (MM - Division Head)</p>
Connectivity Level	<p>“In fact we go directly to Nigel<sup>8</sup>. I consider Nigel as such because he is the project manager and I go to him for any issues or especially delays in the data” (Senior MM - Division Head)</p> <p>“Exactly. He can see the full picture. I try to, in the same time, to take it with the direct manager for the data that I need but we depend on Nigel<sup>8</sup> on collecting information about all and pushing teams to finish their tasks” (MM - Division Head)</p>
Strategic Choices of Others	
Manager’s Reputation	<p>“Ok, in fact when we have an issue, when we have a problem happening we talk verbally, verbally first. I am available; try to be there always for anyone in my team or my colleagues for any support or help needed. But most probably if we have ideas to implement we actually go for Nigel<sup>8</sup> and Nigel’s<sup>8</sup> team, we do it through Nigel<sup>8</sup>, yes ” (Senior MM - Division Head)</p> <p>“He has a great connection with all the Engineering Department. He goes to ,them directly he can talk to them without emails or phones even. And also if we [MM’s division] need something and the person doesnot respond he can go directly to his manager and to talk to him” (MM)</p>
Perception of Connectivity	<p>“Well, no, Nigel<sup>8</sup> was sleeping at [the<sup>9</sup>] office actually [laughing<sup>10</sup>]. Really, he was going home very late because he was managing ”everything about this project (MM - Division Head)</p> <p>“You know, Nigel<sup>8</sup>, the project owner, holds meetings, weekly meetings, ok. This is so he is aware about the inputs, outputs of each team and check where he needs to interfere. It is like an update and he presents the “what is next” plan. So these frequent meetings pinpoints any obstacles/bottlenecks or unclear issues, ok, and things move on” (MM - Division Head)</p>

**Table 5 - 1:** Data Supporting Interpretations of Connectivity’s Mechanism & Influence (**continued**)

<sup>7</sup> Manager’s pseudo name

<sup>8</sup> Manager’s pseudo name

<sup>9</sup> [word] = correction/addition by the researcher

<sup>10</sup> [word] = nonverbal sound; added by the researcher

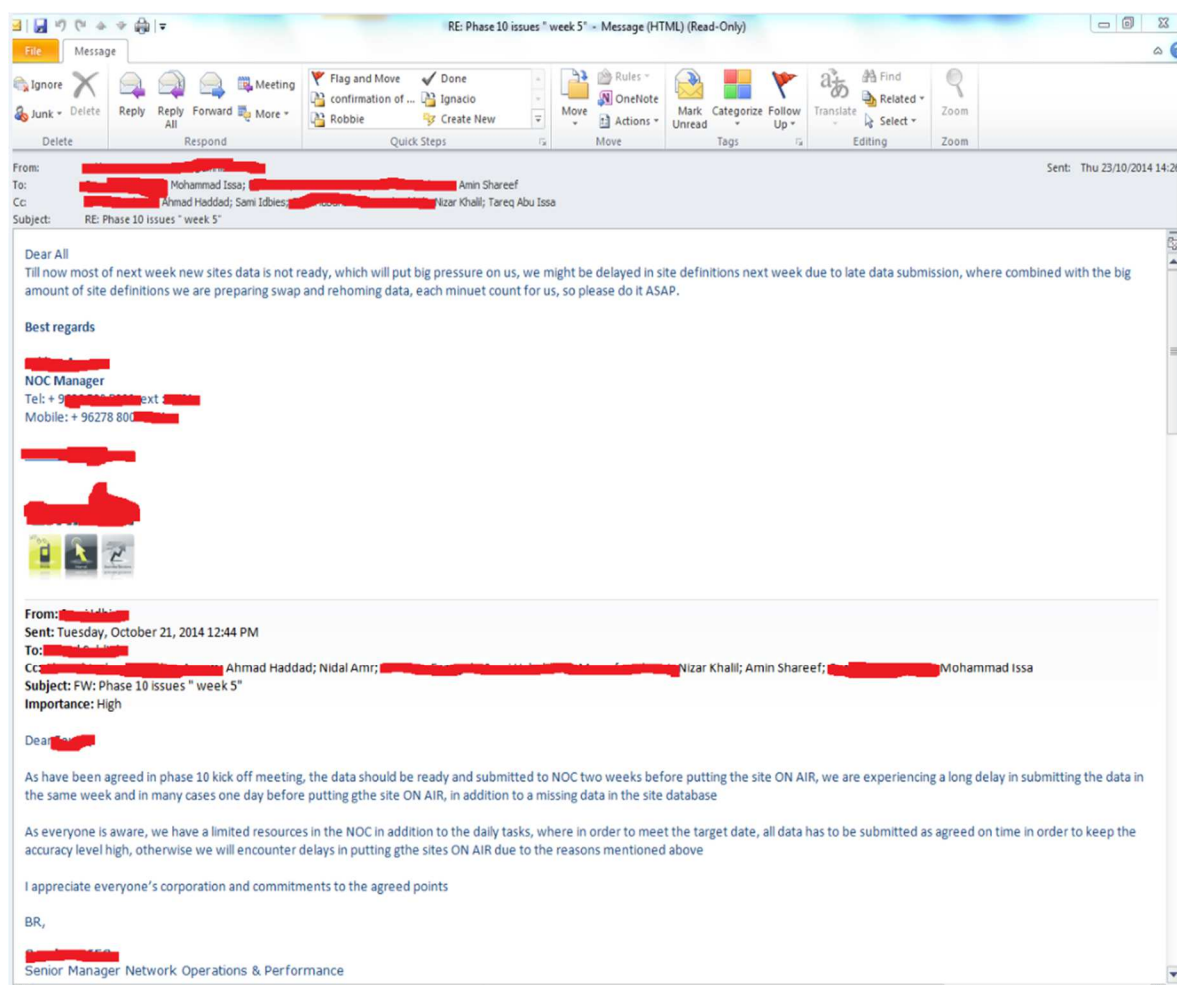
Outcome	
Incurred Costs (financial, time, etc...)	<p>“Delays sometimes occur because, you know, sometimes we don’t have clear separation between planning for projects and planning for operation. So many times for example you are asking from some manager’s team some IPs because you have a conflict in IP and you find out that the guy who is responsible for this information is involved in another operation which is running at the sametime so you need to wait for that guy for the data you need. So it is for the many emerging tasks for the same guy at same time” (MM - Division Head)</p> <p>“In fact we go directly to Nigel. I consider Nigel as such because he is the project manager and I go to him for any issues or especially delays in the data” (Senior MM - Division Head)</p> <p>“Sometimes our material gets delayed and we ask the vendor for them and when they are expected. Other times the service is late for a site by RF [Radio Frequency] team or some other unit before us. Even if we plan for our estimates before issuing the PO [purchase order] this happens” (MM - Division Head)</p>
Gains (financial, reduced operations time, etc...)	<p>“The yearly payment for microwave links was paid one time at the end of the year. After I asked around and made calculations I found that [we] can actually save 25000 - 30000 [in local currency<sup>11</sup>] if payment is divided in 2 every six months” (Middle Manager)</p> <p>“If there was someone who suggested better process, yes, if you are talking about the process yes there is Mr Sam<sup>12</sup>. He is a process oriented manager actually and he put many suggestion which is to be honest considerable and most of them we really put it on ground, we followed these processes” (MM - The Initiative’s Project Manager)</p>

**Table 5 - 1:** Data Supporting Interpretations of Connectivity’s Mechanism & Influence (**continued**)

<sup>11</sup> [ ] = added by the researcher. Equivalent to: £ 26800 - £ 32200

<sup>12</sup> Manager’s pseudo name

In figure 5 - 3 below there are two emails that convey how the change in the perception of connectivity affects the strategic choices of others.



**Figure 5 - 3:** Email Correspondence Linked to Connectivity Level, Manager's Reputation, Perception of Connectivity, and Strategic Choices of Others

In the first email a senior middle manager is requesting that a certain change in the work process (new tracking system) is being followed as agreed. Also, the consequences of not doing so on the initiative are emphasised. The second email is a further reminder from the middle manager behind the idea of the new process for the same issue.

When this middle manager was asked about this issue, he said that he requested support from the senior middle manager to push for the late and missing data needed. The delay would be costly to the phase in which the initiative was at and would particularly increase the work load on that manager's division. The following quote from one of the interviews with that manager expresses the above situation (A. Sam, personal communication, 5, April, 2015):

“... yes, it happened a lot. Whenever the missing data was from one unit or one division I would first speak to the person in charge of that but if I did not know him or if my team needed the data fast I would go to his or her manager. But, you know, if the data was very late or the missing data is from many units, many teams I would send the managers directly and at once. I clarify again where the missing slot is and request that the schedule is kept. If I do not get it and my team is stuck I would then go to my direct manager and tell him or on the phone or email him about it. He is the deputy CTO [Chief Technology Officer] and an email from him, of course, would make a difference”

The managers responded to the email from the senior middle manager and the number of missing data slots for that particular week was as follows in figure 5 - 4. The middle manager behind the tracking idea said that this issue occurred many times during the long lifespan of the initiative and that he often needed to send reminders and follow ups. He added that sometimes he required his own manager’s support.

**Week 5 issues:**

- Regarding RTR we have latency in sending data from all teams (most of the data received yesterday) and still there is some issues in the data such as "cabinet type for some 2G sites is still not clear".

Site Name	Vendor	Planned finish Date	Exact finish Date	Site Database							Comments
				BSS	RF	TX	IP	IMP	Civil	NOC	
Ajloun_Uni	ZTE	10/19/2014		done	done	done	done				
Mafrag_Industrial	ZTE	10/19/2014		done	done	done					IP : TX kindly change the vlan where the vlan is
Irbid_QubehCircle	ZTE	10/19/2014		done	done	done	done				
Ramtha Wasfi Tal	ZTE	10/19/2014		done	done	done	done				
Aqaba_Hawooz	Huawei	10/20/2014		done		done	done				
Princess_Sumaya_Uni	Huawei	Changed-Check week 4		done	done	done	done				
ShafaBadran_Alhajaj_Mousqe	Huawei	Changed-Check week 4		done	done	done	done				
Pr.FaisalHospital_Int	ZTE	Changed-Check week 4		done	done	done	done				
ZarqaCamp_Center	ZTE	Changed-Check week 4		done	done	done	done				
Rajeeb_Circle	Huawei	Changed-Check week 4		done	done	done	done				
Yadoudeh_North	Huawei	Changed-Check week 4		done	done	done	done				
Mafrag_Industrial	ZTE	Changed-Check week 4		done	done	done	done				
AirportJeramco	Huawei	10/21/2014		done	done	done					IP : TX kindly change the vlan where the vlan is
Madaba_German_Uni	Huawei	10/21/2014		done	done	done	done				
Naour_MadabaRD	Huawei	10/21/2014		done	done	done	done				
Qastal_Industrial_East	Huawei	10/21/2014		done	done	done	done				
ShafaBadran_ThhabihDist	Huawei	10/22/2014		done	done	done	done				
Daysinn_Amman_Hotel	Huawei	10/23/2014		done	done	done					IP : TX kindly check the vlan there is mismatch between traffic
IslamicScientific_UNI	Huawei	10/23/2014		done		done	done				
UmOthaina_Haramin	Huawei	Changed-Check week 4		done	Done	done	done				

**Figure 5 - 4: Week 5 / Phase 9 Missing Data from Engineering Units & Divisions**

In figures 5 - 5, 5 - 6, 5 - 7, and 5 - 8 below, the email exchanges showcase how the initiative's project manager is handed the overall authority of the initiative (Figures 5 - 5 & 5 - 6). Moreover, the perception of other middle managers about the project manager's connectivity plays a role in responding to emails/tasks from his part (figures 5 - 7 & 5 - 8).

**From:** Khaled Al Zraiqat  
**Sent:** Wednesday, February 27, 2013 5:20 PM  
**To:** Naser Abdulhadi; Mohammad Hamadneh; Mahmoud Omeir; [REDACTED]; GG-Engineering & IT-Network Operations & RF-RF; GG-Engineering & IT-Network Operations & RF-Network Operations; GG-Engineering & IT-Network Operations & RF-BSS; Bader Bani Mustafa; GG-Engineering & IT-Transmission & Network; GG-Engineering & IT-Core Network-NSS; GG-Engineering & IT-Network Operations & RF-Network Operations  
**Cc:** Ahmad Haddad; [REDACTED]  
**Subject:** RE: sites to be on air phase 9A

Dear  
The below mentioned site is planned to be on air on Wednesday 6/3/2013,

Site Code	Phase	Site Name	RTR	Mount type	Indoor/Outdoor/DBS/Micro/GC	Cabinet Model	Site type	2G /3G # of Sectors	Antenna type
MFQZ5196	Phase 9A	HashmiehMedCollege	1	MAST	Outdoor	ZTE 8900	2G&3G	3	XXP Tri sector
MFQZ5293	Phase 9A	HashmiehUniv_Deanship	1	MAST	Outdoor	ZTE 8900	2G&3G	3	XXP Trisector

BR

**From:** Khaled Al Zraiqat  
**Sent:** Friday, May 03, 2013 11:43 AM  
**To:** Mohammed AL Sa'adi; GG-Engineering & IT-Network Operations & RF-RF; GG-Engineering & IT-Network Operations & RF-Network Operations; GG-Engineering & IT-Network Operations & RF-BSS; GG-Engineering & IT-Transmission & Network; GG-Engineering & IT-Network Operations & RF-Network Operations  
**Cc:** Ahmad Haddad; [REDACTED]; Samir Saber  
**Subject:** RE: sites to be on air phase 9A

Dear All  
Please be noted that relocation of the old site\_Q\_A\_Airport to the new location Airport\_Uilities is fully done yesterday. The new location as mentioned below is planned to be on air on Sunday, and to be tested by RF team on Monday.

Site Code	Site Name	Indoor/Outdoor/DBS/Micro/GC	Cabinet Model	2G &3G # of Sectors	Antenna type
AMS 4811	Airport_Uilities	Indoor BTS	BTS3900	4	XXP

BR

**From:** [REDACTED]  
**Sent:** Wednesday, May 08, 2013 5:25 PM  
**To:** Khaled Al Zraiqat; Mohammed AL Sa'adi; GG-Engineering & IT-Network Operations & RF-RF; GG-Engineering & IT-Network Operations & RF-Network Operations; GG-Engineering & IT-Network Operations & RF-BSS; GG-Engineering & IT-Transmission & Network; GG-Engineering & IT-Network Operations & RF-Network Operations  
**Cc:** Ahmad Haddad; [REDACTED]; Samir Saber  
**Subject:** RE: sites to be on air phase 9A

Dear All:

Kindly note that the below site is planned to be on air next Sunday 12<sup>th</sup> of May.

Please note that this site is green cage with APM 30, to be considered in Alarms definition and site name.

Site Code	Site Name	Indoor/Outdoor/DBS/Micro/GC	Cabinet Model	2G # of Sectors	Antenna type
AMX4572	Sahab Dist	BTS3900 GC	BTS3900	4	XXP

Best Regards;

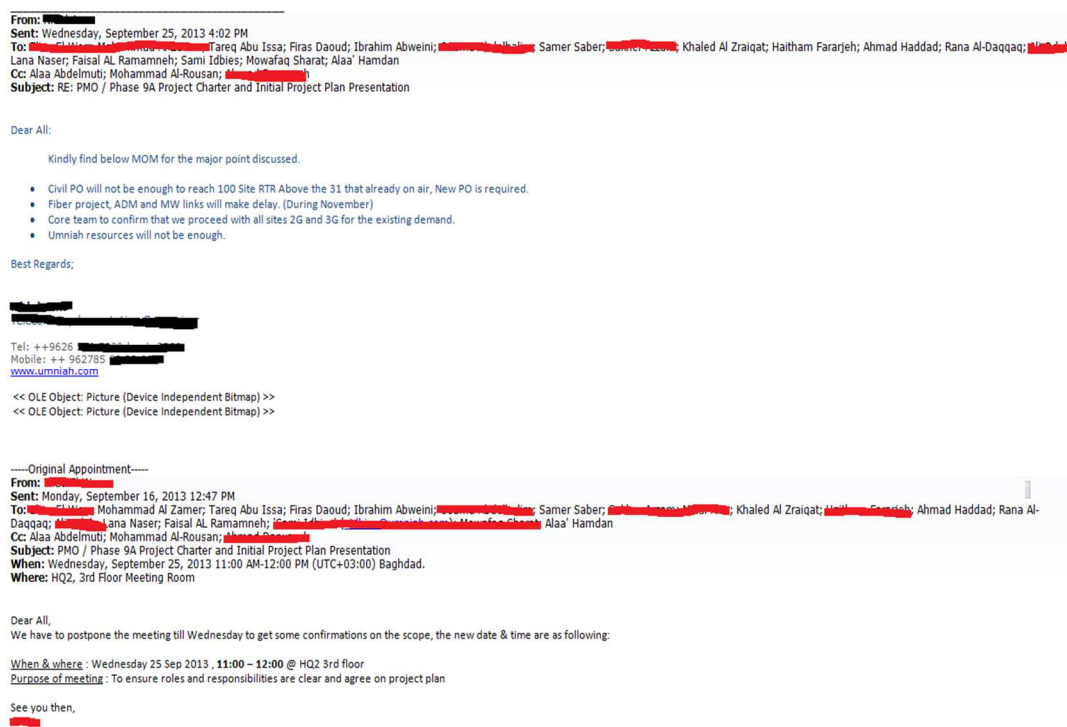
[REDACTED]  
Telecom implementation Supervisor

Tel: ++9626 [REDACTED]  
Mobile: ++ 962785 [REDACTED]  
[www.umniah.com](http://www.umniah.com)

**Figure 5 - 5:** Email Correspondences Linked to Connectivity Type, Connectivity Level, Connectivity Time Frame, and Manager's Reputation



The Engineering Department Director, who is also the Chief Technology Officer (CTO) of the company, was heavily copied in email correspondents at the beginning of phase 9 of the expansion project. This was the time where the general planning for the sites to be expanded was nearly finalised and the implementation of the plans was starting to get carried out. As the implementation stage progressed, the CTO was no longer copied in the emails concerning even broader issues of the implementation. Rather, the initiative's project manager took the role of sending key emails and he took the decision to copy in division/unit heads as he saw necessary. As figure 5 - 5 above shows, one of the CTO's earliest inclusions in the email correspondences was on February, 27, 2013 (the first email screenshot) and the last<sup>13</sup> email he was copied in was on May, 3, 2013 (the second email screenshot). The middle manager took over the role of sending key emails on May, 8, 2013 (the third email). This remained the case until the end of phase 9 for the Engineering Department of the expansion project which was on December, 17, 2013.



**Figure 5 - 6:** Email Correspondences Linked to Connectivity Type, Connectivity Level, and Manager's Reputation

In figure 5 - 6, there are two emails that represent -also- how the authority is handed to the initiative's project manager. The first one is from the highest ranking middle manager involved in the initiative. This middle manager is the head of project management office. He oversees this project and ensures its alignment with its objectives as well as with other

<sup>13</sup> He was still copied in various issues such as any problems with the vendors or weekly/monthly updates but as far as the implementation process is concerned the middle manager was the one in charge

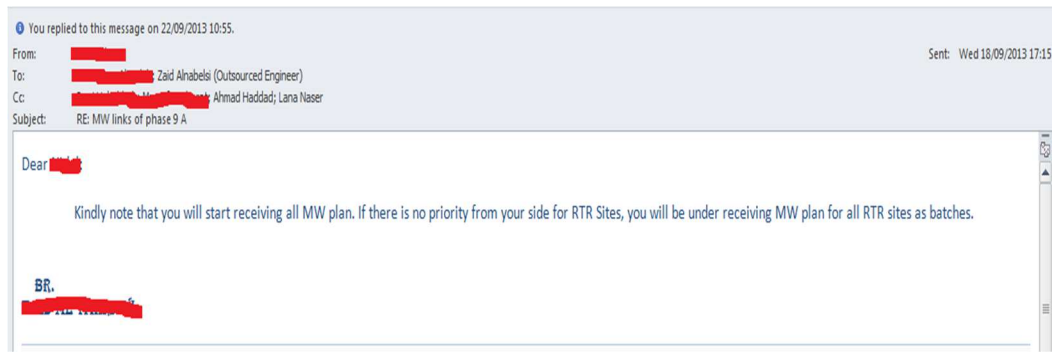


strategic projects taking place simultaneously. In the email dated September, 16, 2013 this high ranking middle manager is rescheduling a meeting intended to clarify future roles and responsibilities for key managers working on the project. From that point on, calling for such meetings and distributing the outcomes of those meetings was passed now to the initiative's project manager as shown in the email dated September, 25, 2013. This continued not just in phase 9 but also throughout phase 10 of the expansion project.

What figures 5 - 5 and 5 - 6 infer is the change in one middle manager's connectivity position. The two figures represent examples of how portions of the data set, i.e. email exchanges between managers involved in the initiative, helped in conceptualising connectivity's working mechanism.



**Figure 5 - 7:** Email Correspondences Linked to Connectivity Level, Perception of Others Connectivity, and Strategic Choices of Others



**From:** [Redacted]  
**Sent:** Sunday, September 22, 2013 12:56 PM  
**To:** [Redacted]; Zaid Alnabelsi (Outsourced Engineer); Naser Abdulhadi  
**Cc:** [Redacted]; Ahmad Haddad; Lana Naser; mwafaq (msharat@umniah.com); faisal ramamneh (framamneh@umniah.com); Mohammad Al-Rousan; Bader Bani Mustafa  
**Subject:** RE: MW links of phase 9 A

Dear [Redacted],

Kindly find below table which contains Full plan for MW link dismantling/Reinstallation as attached design shows:

- ∞ Huawei Will handle MW links Since dismantling MW link their responsibility.
- ∞ **once planned to dismantle tell Naser:** this comment is related to **Huawei (Salameh) / Umniah (Naser)** Arrangement.
- ∞ Attached designs for below sites.
- ∞ **Ok comment** means Huawei can handle MW link directly.

Source										Destination			
Link No.	Site A	Site B	Band	TYPE	Equipment	Antenna	Protection	Switched Off	used	Link No.	Purpose	Site A	Site B
1855	Musdar	L walbdeh	38	NEC	PASOLINK NEO 38G 18E1	0.6 0.6	1+1	Yes	1	4028	9A	Madaba_FaisalyehRD	Madaba Court
839	AlHusseini-Park	Khaida West	38	NEC	PASOLINK NEO 38G 4E1	0.3 0.3	1+1	Yes	1	4442	9A	Salt_Engineering_Housing	Naqb Adapour
3503	Abu Alanda	Abu Alanda Hizam inter	28	RTN	28G_XMC2_256Q_14M_89M	0.6 0.6	1+1		1	4451	9A	Irbid Baqa'a	Irbid Industrel
3973	Safeway TL	SpecialtyCircle	26	RTN	26G_XMC2_256Q_14M_89M	0.6 0.6	1+1		1	4465	9A	Irbid_Rawdah	Irbid Hay Al sharge
2131	Rasheed Souq	Rasheed	38	NEC	PASOLINK NEO 38G 4E1	0.3 0.3	1+1	Yes	1	4363	9A	ZarqaHay_Dubbat	Zarqa Nuzha Gharden

BR.  
[Redacted Signature]

**Figure 5 - 7:** Email Correspondences Linked to Connectivity Level, Perception of Others Connectivity, and Strategic Choices of Others (**continued**)

In figure 5 - 7, the initiative's project manager is asking for support from a middle manager for an urgent issue. The middle manager explains in his reply that the required task falls outside his duties in this initiative. But his direct manager as well as his senior manager (division head) did not reply in this regard although both of them are copied in the emails. In the end the middle manager executes what is needed from him. When asked about this incident this middle manager explained that he was aware of the urgency of the situation at hand (there was an outsourced engineer who was unable to complete the task), and although his own managers knew he would need to delay his own work (which is also within the requirements of the initiative) they did not mind him taking the time to complete it. He also said that he did not expect this from them and made him realise the importance of any request coming from the project manager so he finished the task in four days (the request came on September, 18 and he finished the task on September, 22 as shown in the

emails) although it usually would take longer. What this example shows, is the ability of a conceived connectivity to alter strategic choices from others. The next email exchanges convey example carrying a similar conclusion.

**From:** [REDACTED]  
**Sent:** Tuesday, July 30, 2013 3:30 PM  
**To:** Naser Abdulhadi; GG-Engineering & IT-Radio Frequency; GG-Engineering & IT-Transmission & Network-Network O&M; GG-Engineering & IT-Transmission & Network-Telecom Implementation; GG-Engineering & IT-Network Ops. & Perform.-BSS; GG-Engineering & IT-Network Ops. & Perform.-Network Operations; Mahmoud Omeir  
**Cc:** Ahmad Haddad; [REDACTED]; Samer Saber; Khaled Al Zraiqat; GG-Engineering & IT-Transmission & Network  
**Subject:** RE: sites to be on air phase 9A

Dear All:

Please note that the below site is planned to be on air on Thursday 1<sup>st</sup> of august.

This site got limitation at the access and we kindly need the support from all to have it on air.

The site will be lunched 2G and 3G.

Site Code	Site Name	Indoor/Outdoor/DBS/Micro/GC	Cabinet Model	2G # of Sectors	Antenna type
	Abdoun_Bunzy	BTS3006C	BTS3006C	3	XXP

Best Regards;

[REDACTED]  
[REDACTED]

**From:** [REDACTED]  
**Sent:** Sunday, August 25, 2013 2:07 PM  
**To:** GG-Engineering & IT-Radio Frequency; GG-Engineering & IT-Transmission & Network-Network O&M; GG-Engineering & IT-Transmission & Network-Telecom Implementation; GG-Engineering & IT-Network Ops. & Perform.-BSS; GG-Engineering & IT-Network Ops. & Perform.-Network Operations; Mahmoud Omeir  
**Cc:** Ahmad Haddad; [REDACTED]; Samer Saber; Khaled Al Zraiqat; GG-Engineering & IT-Transmission & Network  
**Subject:** RE: sites to be on air phase 9A

Dear All:

Please find the below site that planned to be on air by Tuesday 27<sup>th</sup> Maximum keeping in mind that we have very limited access at the site and we appreciate the support from all. ( 2 G and 3G site)

Site Code	Site Name	Indoor/Outdoor/DBS/Micro/GC	Cabinet Model		
AQB3168	Aqaba_Palace	BTS3006	BTS3006		

Best Regards;

[REDACTED]  
[REDACTED]

Figure 5 - 8: Email Correspondences Linked to Connectivity Level, Perception of Others Connectivity, and Strategic Choices of Others

In figure 5 - 8, the initiative's project manager is again requesting help and support. The issue is in putting two sites on air which means they need to be ready for

commercialisation. The initiative's project manager sent emails to various units in the Engineering Department even if the sites were not on their assigned duties. The work included work on the ground (physical installation of hardware and equipment) and software programming of sites signals conducted from the offices of the engineers. When asked, the project manager said that such incidents recurred often during the initiative and especially in phase 10. He also added that this was because of the large number of sites to be worked on which meant that missing deadlines was common. He sent requests via email to teams asking for support in meeting the deadlines and copied in their managers in the email. This was seen, again, as an indication of this manager's high exposure and authority which in most cases resulted in getting the sort of support he needed (the two sites noted in the above email exchanges were ready in time although there was less than 48 hours between the email from that manager and the deadline for the site to be ready for streaming and commercialisation).

## **5.4 Research Findings**

The inferences generated from data to their respective context in the qualitative content analysis method comprise the conclusions of the research (Kohlbacher, 2006). These inferences or conclusions constitute the findings of the research effort that employs qualitative content analysis method (Krippendorff, 1989). They are the overall results or findings of the analysis process (Kohlbacher, 2006).

One major example on the inferences in this dissertation is that connectivity accounts for obstructing a manager from playing a particular role. Connectivity might also, on the contrary, account for facilitating a particular role. In both cases this results in taking a particular strategic choice rather than another. This is the premise of the first finding of this research, which argues that the resulting choice of the middle manager was carried out at different phases and under different connectivity levels and connectivity types during the strategy making and implementation process. This means that connectivity's influence depends on the conditions under which it occurs. The resulting choice of middle managers due to connectivity's influence is encapsulated in the form of a decision taken by a manager in the course of the strategic initiative being studied. This decision, or a set of related decisions, was influenced to a large extent by the manager's connectivity. In addition to at which phase of the strategic initiative the connectivity was happening, that

connectivity was also conveyed by the connectivity level, the connectivity type, and prior connectivity existence.

So, the first finding of this thesis is expressed by the following statement:

**1- Middle managers' connectivity can be beneficial or detrimental to the development of strategic initiative depending on the conditions under which connectivity occurs**

This finding of this research establishes that connectivity has the potential to either positively or negatively affect the development of a strategic initiative. This potential comes about by way of a certain mechanism of connectivity that includes four aspects. These aspects are: A ) the level of connectivity, B ) the type of connectivity, C ) the time in which connectivity is observed, and D ) the utilisation of past connectivity. The conditions under which those four occur establish the direction and the capacity of connectivity's influence on the initiative, whether positively or negatively. This influence of connectivity on initiatives takes place by influencing the choices of the managers running the operations of an initiative. These choices in turn shape the decisions these managers take during the strategic initiative. Whether connectivity halts or advances the progression of the initiative depends on the mechanism by which connectivity influenced middle managers' strategic choice.

Two examples concerning the work of two middle managers on the strategic initiative clarify connectivity's influence under such varying sets of circumstances. These two middle managers work in the same division and both of them are in charge of designing radio wave, radio frequencies, and potential locations schemes for the initiative. Their role is in the formulation phases of the project and they merely set the grounds for the next divisions' work. Aside from their connections inside the Engineering department, one of the two middle managers has connections with the Geo Marketing division. While the other manager has none.

The Geo Marketing division is basically the link between the Marketing department and the Engineering department in the company. That division is responsible for market analysis which employs geographic information to be used for planning of marketing activities. Based on their analysis, the Geo Marketing division sends requests of their needed market locations to be covered to the Radio Planning division. They send these requests to specific teams in the Radio Planning division according to a pre-determined allocation plan based on geographical areas. The Radio Planning division on its part works

on the list of locations to determine their appropriateness from an engineering point of view and sends it back to Geo Marketing division. This back and forth process between the two divisions continues until the final list is agreed on between them. In phase 10 of the expansion project, the number of locations requested by Geo Marketing and the scope of services they needed prolonged such iteration. Moreover, even after the final list was agreed upon, site location plans kept changing where many sites were added, discarded, or rearranged. This impacted the work of the Radio Planning division and also the duties of the divisions that followed afterwards. The middle manager with connections to the Geo Marketing division had a better access to these plan changes from the Geo Marketing division. This access was in terms of knowing the motives behind these changes and receiving hints of any proposed changes before they are officially announced and sent to that manager's division. The second middle manager did not have such an access and only received the changes once they were formally decided and sent to him. The implications of the higher connectivity of the first middle manager over the second manager were in the flexibility he gained over drafting his team's own design plans. The speed of receiving, as well as the range of, the information enabled this manager to rearrange his own unit's work. He was in a better position to anticipate and plan for any delays that might occur for succeeding divisions. Moreover, the connections of this middle manager with Geo Marketing allowed him to determine the validity of the information he obtained from them. This is because he worked in the Geo Marketing division for over a year<sup>14</sup>. He was able to understand the reasons behind the plan modifications which meant handing him an advantage in planning how to distribute his team's load with regard to their work on the initiative.

Although the second middle manager had more direct reports than the first, this aspect of connectivity was not instrumental in determining the connectivity level. The more information and/or support the second middle manager might had access to from his team members contributed less to the work load than the first middle manager's information from another division. The Information from the Geo Marketing division constituted input in the formulation phase for the Radio Planning core function in the initiative, while the information from inside the Radio Planning division fall under the implementation of the design plans coming from the Geo Marketing division. As a result, this latter type of information did not advance the task of the division in comparison to the former one. In these two examples, it is true that only one segment of the Radio Planning division

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<sup>14</sup> This MM worked in Geo-Marketing in phase 9 of the initiative

benefitted from the high connectivity of a particular middle manager. Nevertheless, this had payoffs on not just that middle manager's direct team but other divisions as well. The output of the Radio Planning team to the following divisions does not need to come out in the form of one unit of design plans. This means that the speed in designing plans from the first middle manager's team can be transferred to the divisions that follow.

Furthermore, by planning ahead for any anticipated changes coming from the Geo Marketing division, the first middle manager's team faced less disruption and confusion from the subsequent divisions because this team did not alter their plans as frequently as the second middle manager's team did. This gave the former team extra resources, especially with respect to time, to focus on their part of the initiative's work in terms of completion on time and enhanced quality.

Observations of recurring processes of connectivity's working mechanism which govern the middle managers' interactions during their strategy making and implementation lead to the following proposition:

**Proposition 1: Middle managers' connectivity is the product of four aspects which govern its working mechanism. These aspects are the level of connectivity, its type, the stage it occurs in, and its past presence**

Another important inference of this research is that the enabling as well as hindering element in connectivity's influence on a middle manager's strategic choice triggered a set of strategic choices for other middle managers involved in the initiative. One way to perceive this inference is treating one manager's connectivity influence as an extension on another manager's strategic choice. This finding argues that connectivity has the potential to be an explaining factor for the outcomes of strategic decisions of other. Tracing back middle managers' decisions to their initiating sources, and examining the connectivity conditions under which the manager was in while taking a certain decision helped forming an understanding of the competing choices and the resulting decisions these choices would ensue. Unfolding such mechanism of connectivity's influence adds nuances on some management research strands such as power struggles, participation forms, and strategic roles of the strategy making literature.

So, this finding can be expressed by the following statement:

**2- Middle managers' connectivity influence on their strategic choice triggers a set of strategic choices for other middle managers**

The premise of the second finding of the thesis is that connectivity's influence extends to the strategic choices of others. This is a logical interpretation which simply asserts that an action will cause a reaction. When a middle manager makes a choice and follows through that choice with a decision, other middle managers will respond in turn with decisions that confirm with the choices they make as well. The connectivity's role in influencing the original choice of one middle manager extends to influence the subsequent choices of other middle managers. Viewing connectivity as an "explaining factor" for the outcomes of strategic decisions of others is what this finding concludes from observing and tracing back the triggers behind middle managers' choices. In strategy making and implementation process, finding the direct link between a strategic action and reaction is problematic. This is especially so in strategic initiatives which spread for considerably a long period of time and involve complex and intertwined decisions. Detecting the effects of connectivity's influence helps in uncovering the link between this action-reaction notion. This in turn helps in understanding the patterns of competing choices, power structures, and participatory forms during the strategy making and implementation process.

Some of the middle managers in this study had rather different reactions to similar situations. For example, endorsing an idea or a suggestion coming from a middle manager but resisting other middle managers' ideas or suggestions or merely acting indifferent about them. Those ideas or suggestions took place almost at the same time during the initiative, had similar implications for any new work requirements of the middle manager's job or the division he or she leads, and were put forward by colleagues whom the middle manager worked with for considerably a long time. The differences in the connectivity of the initiator of the idea were noteworthy on the middle managers' responses. When the connectivity of the middle manager advocating a change was seen as high, some middle managers assumed choices that were different from the ones when the connectivity of the middle manager advocating changes was perceived low. Arguably, the nature of the idea itself lays a major role in the choices assumed by the middle manager, so do the consequences that middle manager expects from supporting or opposing an idea. Nonetheless, two reasons inform this finding which states that the originator's connectivity affects the choices of other managers. One, the finding was noticeable between middle managers who are division heads on the one hand and between middle managers and members of their own respective divisions from the other hand. It can be inferred from the frequent instances that there seems to be a pattern where the connectivity of a manager indeed shapes the responses of others. Further, the nature of an idea along with the



consequences a middle manager expects from that idea seemed to have little bearing on accepting or rejecting them. Some ideas were somewhat similar in their intent, in their orientation, and in the way they were presented. Merely, the ideas were aimed at improvements of the division's performance in terms of the speed of decisions' execution and clearer internal communication. What counted more in approving those ideas was how high the division head, along with his/her team members, perceived the idea generator's connectivity.

The second reason surfaced when some middle managers responded differently at different times to the same proposition by a middle manager. The following example illustrates this incident. This occurred when a middle manager suggested a new form for tracking the progress of the strategic initiative. Under this new system, each division's output would be recorded with specifications relating to what type of tasks were conducted, by whom, and when was the task concluded. This is different from the old approach where documentation about each division's task was somewhat lacking and done only by fragmented emails. Often, these emails were sent by one of the members of the division to any person in the division whose task was up next. In the interviews, the division heads said they were usually copied in these emails and most of the time they were able to follow up on any delays with one or more of their team members. The old system started to make disruptions to the development of the strategic initiative in phases 9 and 10 due to the rise in the number of sites to be serviced. These disruptions consequently led to an increase in the amount of workload on all divisions. Some middle managers supported the new idea of tasks tracking at the early stages of its inclusion into the operations only to oppose it or at least falling short in complying with its procedures at later stages. One way to interpret this variation has to do with the perceived connectivity of the manager behind the idea on the part of those middle managers. The middle managers who supported the idea saw that the idea initiator's connectivity was high. When that connectivity seemed to be dropping, however, the level of support started to decline and sometimes the idea itself to be opposed.

The perception of that middle manager's high connectivity was moulded by top management's back up for the idea of tracking the progression of the initiative. This occurred at the early stages of the new idea's introduction. The middle managers saw top management's backing of the idea as a proof of the high connectivity that manager enjoyed with top management, as a result they supported the idea. The middle managers gradually began to withdraw their support though. This is evident in the emails questioning the

applicability of the new proposed system for tracking progress and requesting exemptions from applying it. At this stage, top management's role in overseeing the efficacy of the new tracking system was handed over to both the middle manager behind the new idea and to a lesser extent to the initiative's project manager. These two middle managers had to answer questions about the new system and respond to comments challenging its usefulness. Middle managers saw that the connectivity of the middle manager was now low; he did not attain top management exposure, the project manager started forwarding queries about the new system to him to deal with rather than actively be involved in the conversations, and the requests for reverting back to the old system began to emerge. These signals of low connectivity were behind the new choices middle managers took with regard to the new system, i.e. ignoring and/or challenging it.

Indeed, more nuances related for pursuing the new choices by those middle managers restates the relationship between the connectivity level and strategic choice. Some of the managers' work was affected more than others by the new system. After discovering the additional burden on their division these managers started to oppose implementing it. The high connectivity of the idea's originator that served as the reason for supporting it was no longer visible. The now seemingly low connectivity of that middle manager motivated other middle managers to act unfavourably to it in order to avoid the new burdens the new idea introduced. The middle managers who were less affected by the new idea viewed the low connectivity as a justification for withdrawing their endorsement for it. For these middle managers, the lack of a direct formal control from top management coupled with the lost motivation for endorsing a highly connected manager informed those middle managers' choices. Perhaps realising an opportunity for a quid pro in the future seems no longer viable contributed to such decision. What can be inferred from investigating these middle managers' choices is the influence of connectivity on them. When the connectivity level of a particular manager changed so did their reaction which switched from supporting the idea when that connectivity was perceived as high to contesting it when the connectivity was seen as low.

Delving into more details associated with this example further explains this research finding that connectivity is a determinant for others' strategic choices. These additional details manifested in the middle manager's own responses to the opposition he was facing to the execution of his idea. The middle manager attempted to restore the support for it by: A ) sending further emails as reminders to use the tracking system B ) sending further emails as answers to comments and queries, C ) sending emails demonstrating examples

for what are the consequences of failing to update the tracking sheets on the deadlines agreed on by the whole Engineering department, D ) informal talks with middle managers acting as division heads to push their teams to (re)use the tracking system, and E ) escalating any remaining delays to senior management. In this example, this middle manager eventually managed to regain the needed support. He succeeded in avoiding delays and confusion between divisions as the new system was now the mechanism for getting updates about each division's progress. If the team members were unaware of the details of the task at hand, it will mean missing information concerning issues like any corrections to site location, corrections to site technology or infrastructure, whether the task is completed, etc. People working on the initiative would not be able to move on to the next task or know what corrections need handling which can cause delays and added costs. This turnaround was integral for the middle manager because he is part of the committee tasked with the designing of the process workflow for the whole new sites planning and commissioning at the Engineering department. He was seen as the responsible person behind the new idea and integrating it into the design of the process workflow of the network expansion project. Moreover, this middle manager's division is the last division in the workflow sequence of the strategic initiative, so any delays will have major consequences on his division. The division is in charge of making the final programming of the sites according to the expansion plans and ensuring the sites are ready to go on air. The middle manager's division constitutes the last link in the Engineering department before the expansion project is handed over to the Marketing department for commercialisation.

The tactics this middle manager employed to persuade others to fill in the tracking sheets of the new system made his connectivity levels high again. The result was regaining middle managers' support for the idea once more. This middle manager was obviously alert to the obstruction efforts to his idea. When asked in one of the interviews what his strategy was to overcome the situation he found himself in, his reply was he focused on sending emails clarifying the issue raised by people, explaining in those emails how important it was to update the tracking sheets. In addition, he also made sure to contact the division heads and also the project manager to reiterate the importance of the tracking sheet system, to understand their source of concern about the new system, and to remind them of the meetings at both the departmental and the organisational level in which the new system was agreed on. The following quotation for this manager from one of the interviews explains the approach he undertook. This was his answer for a question about

what he did when his idea seemed to halt and other division heads started to stop using the tracking sheet system.

“... you know, these are like internal issues [norms<sup>15</sup>], you don’t, you try not to send emails because the relations, preserving the relation, you know, yes, the relations... smooth the work, transactions, and information. So [we?<sup>16</sup>] try as much as possible to resolve things to by phone calls and face-to-face”

Further, the middle manager resorted to formal authority when all of the other tactics did not produce results. He sent emails to team members who were slow to update their corresponding sections of the tracking sheet while copying their senior managers. He mentions that he prefers not to copy senior management unless he is forced to because this sometimes leads to alienations between managers. The following quotation represents this view.

“... so for me it is “Middle Manager 1<sup>17</sup>” is preparing something for “Middle Manager 2<sup>18</sup>” and then “Middle Manager 2” is providing me with necessary data to NOC [Network Operation Centre Division<sup>19</sup>]. Now, you know, escalation is not mentioned here. This is the task itself, so you know, once we have pending tasks I can use the phone to call the supervisors or maybe the manager to push for sending the data. If things are taking ...<sup>20</sup> so long, you know, and we are in a critical situation then we send an email copying their senior managers”

These tactics by the middle manager were effective. All divisions started filling in their respective data in the tracking sheets. The high connectivity of the middle manager was a result of the tactics he used and the chief reason behind middle managers’ endorsing the new system a second time. As the tracking sheets on the new system are visible to all division members involved in the initiative, the rise in the middle manager’s connectivity was felt by many. Seeing that their direct managers are using the system all over again signalled it was a priority anew. This resulted in more exposure for the middle manager’s idea and denoting his (re)growing connectivity.

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<sup>15</sup> [word] = correction/addition by the researcher

<sup>16</sup> [ word?] = uncertain transcription

<sup>17</sup> “ ” = MMs’ name

<sup>18</sup> “ ” = MMs’ name

<sup>19</sup> [ ] = division’s name

<sup>20</sup> ... = long pause

Interpreting the new tracking system example through the lens of connectivity reveals the cyclic nature of connectivity's influence on other persons' strategic choices and on their resulting decisions. High and low connectivity levels of a specific manager triggered a set of choices by others. These choices were deduced from the answers given by middle managers. They were asked about the reactions of their colleagues during the introduction through execution of a new system. This new system had a sizeable implication on the work processes of each division. The new tracking system was received favourably at the beginning but the support for it fell and problems for it started to appear afterwards. This fluctuation, the current research finding asserts, is traced to the low connectivity level associated with the middle manager behind the new system that followed a high connectivity level of him. After a series of moves performed successfully by this middle manager, the support for his idea was restored. These moves by the middle manager increased his connectivity level, serving as a catalyst for the support a second time. Other reasons for the middle managers' fluctuating reactions appear to logically entwine with the connectivity level perceived by them toward the originator of the idea that led to the new tracking system.

The discussion of the conditions surrounding the example of the middle manager introducing the new idea supported by the quotations illustrate that connectivity influences not just one's strategic choices but also other managers' choices. Tracing back connectivity of a middle manager reveals the process by which that connectivity influenced other managers' decisions. This view point can be underlined in the following proposition:

**Proposition 2: Middle manager's connectivity influence transcends to reach the strategic choices of others**

A third finding or inference of this research concerns the low levels of connectivity for a middle manager. The research assesses how low levels of connectivity can indeed be useful for the development of the strategic initiative. Under certain conditions, the less connectivity level of a middle manager aided in the smooth transition of his or her work and duties.

Therefore, the third finding in this research states that:

**3- Low levels of middle managers' connectivity can be useful for the development of the strategic initiative**

This finding critiques that low levels of connectivity can be beneficial for the development of a strategic initiative. Put differently, not all situations during a strategic initiative thrive under high connectivity levels. Conversely, some of them require low connectivity levels to reap advantageous results. The discussion of this finding entails elaboration on two episodes during the strategic initiative. From those two examples, the conditions under which low connectivity contributed positively are then highlighted.

The first of these examples concerns a middle manager who had a low connectivity level during the strategic initiative. This middle manager was responsible for designing what is called microwave data. In telecommunication and mobile industries, microwave data refers to the communication system that uses a beam of radio waves in a specified microwave frequency range. These microwave frequency ranges are used to transmit video, audio, or other sorts of data between two locations. This microwave data design informs the implementation teams about the hardware, the software, the locations, and the physical equipment required to build the sites according to the specifications of the transmission planning<sup>21</sup>. This microwave design is situated to serve as a link between various divisions in the workflow sequence of the strategic initiative (Nigel, personal communication, 5, March, 2015). That is, this design needs to be compatible with the Radio Frequency division's overall planning on the one hand and the implementation and the maintenance of these design plans on the sites on the other hand. The radio frequency planning ensues at the beginning of the initiative and is done by the Radio Frequency division. While the implementation and maintenance of the microwave data planning take effect during the later stages of the initiative. The implementation and maintenance tasks are done by Civil Engineering and the Operation and Maintenance divisions respectively.

According to this middle manager, the microwave data design planning makes sure that the data is transmitted in wavelengths that are in accordance with the initiative's radio frequency plan. This is achieved, he adds, by determining which technology to be used and by selecting the proper geographical locations in which those wavelengths will travel. Microwave data cannot pass easily around hills or mountains for example. Also, they need to have frequencies compatible with the telecommunication technology of the site to be constructed. Moreover, microwave frequency gives the microwave band a very large information-carrying capacity; the microwave band has a bandwidth 30 times that of all the

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<sup>21</sup> Transmission planning consists of two major components. One is the IP data design and the other is the Microwave data design. This latter design falls under the direct responsibility of this MM.

rest of the radio spectrum below it. As a result, microwave data design is seen as a viable component in the strategic initiative as a whole.

Although the arrangements between Radio Planning, Civil Engineering, the Operation and Maintenance divisions from one side, and this middle manager from the other side are supervised through the project manager of the initiative, the prime responsibility of initiating all the radio frequency plans, including microwave frequencies, rests within this middle manager's job. This is so because he is the person in charge of making the requests for the usage permissions of particular radio frequencies. These requests are then sent to the finance department in order to be then sent to the Telecommunications Regulatory Commission, which is a governmental body acting as the telecommunication industry's regulator. At a particular point, this middle manager's low connectivity helped in saving the initiative's budget a considerable amount of money. He discovered that the company was paying the fees for the authorisation needed to use the radio frequencies for each batch of the frequencies separately. This resulted in paying administrative fees and other associated fees with each request. Also, he found out that the company was paying for the usage of the required frequencies for a year in advance. After he made contacts with the Telecommunications Regulatory Commission, he learnt that the same amount of fees would be required if the company paid up to six months' worth of required radio frequencies in advance rather than for 12 months. This new information came to the attention of this middle manager because previously the issuing of these requests to use radio frequencies and the payment arrangements were all done by the financial department. He asked for a copy of the request template to be able to send it for an urgent matter one day, and gradually the task of sending these letters became his responsibility. The middle manager reports that when the chief financial officer's secretary quit the company, this task was handed over to him and became entirely part of his job. This simple yet important new information decreased the costs and freed up financial resources for the initiative. Low connectivity level surrounding this middle manager while conducting this task coupled with the phase in which it occurred led to this research's finding that low connectivity is indeed useful in some instances. Low connectivity here is determined by the fact that this middle manager has the lowest number of engineers reporting to him. Furthermore, the implementation stage under which the issuing of the requests to the governmental agency was in did not require the benefits of a high connectivity situation. The plans for the radio frequencies were already set. As a result, there was no need for deliberating a revision neither to those plans nor to the locations of the sites because the frequencies have not been authorised or tested yet. Consequently, there did not seem a need for new information or a

need for support and acceptance from others for this manager to modify the content of the requests.

The nature of the task required refinement of an existing idea, procedure, or process (March, 1991) in order to extend and further utilise that idea, procedure, or process. This would have been hard to attain if that middle manager was in a high connectivity situation. This was clear in the middle manager's decision to request the authorisation of radio frequencies for six months rather than 12 months. If he was highly connected to others while performing this task, and, if this task demanded experiences, collaborations, or output from others to be successfully executed then the chances for a conflict would probably be present. Each team in the Radio Frequency and Radio Planning divisions would push for 12 months to avoid the possibility of competitors requesting the frequencies before them. This would impede the gains this middle manager realised.

The second example concerns a middle manager who was the head of the project management office in the company. This middle manager was in charge of monitoring all projects in the company and advising upper management on the overall projects health (E. Norman, personal communication, 2, May, 2015). In the strategic initiative studied in the thesis, he is considered the highest ranking middle manager and his main role was overseeing the network expansion project and insuring the project is running in accordance with its Key Performance Indicators (KPIs). Although his visibility and access to the rest of the managers below him was high, the nature of his involvement in the initiative was encapsulated by low connectivity. Whenever middle managers contacted him on obstacles or suggestions for the initiative he directed them back to the project manager. This manager reported several incidents on the relatively long life of the initiative where he was contacted for support or consultation regarding an idea. He further mentioned that requests to reverse a precise decision or procedure were frequent. When asked why these various requests were addressed to him and how they were handled he said:

“As the head of project management office my job is to generally observe and supervise what is going on. I think that in phase 10 the ambiguity was high. We were dealing with a lot of sites for the first time and we were handling new technology too. This mandated new ways to perform duties and responsibilities but, as agreed before, I insisted that everything to be sent through the project manager. He was the one to be addressed and then if it is out of his capacity to act on the issue he can discuss it with me. I would say it has to do with our lean structure as well; people easily approached you especially in such big projects for approval, advice, or whatever. I did not have the details to answer each and every thing though”



Naturally, this answer is plausible to how project management are run. By focusing on the low connectivity dimension of this manager, it is drawn that distancing himself was an important step for the initiative. This can be identified through two levels, one level specific to the initiative and a more general one for the other level. As for the specific level, the strategic initiative benefited from the low connectivity of this middle manager because his high connectivity while dealing with any concerns elevated to him might actually hamper the initiative. His knowledge about the particulars of the initiative is minimal compared to the project manager's. His involvement might trigger mistakes which cause delays and send mixed signals about the hierarchy and managerial authority that was agreed on. The forwarding of emails to the project manager and the explicit request to address him as a first point of contact were examples illustrating such incident. The second scale in which low connectivity played a positive role is a general one. It denotes to the middle manager's basic responsibility of ensuring the smooth operations of all major projects in the company. The low connectivity lends an opportunity for him to concentrate on handling any contact breaches, liquidated damages, or conflict resolution among projects which ultimately have payoffs on all of the strategic initiatives.

The conception of connectivity in the literature as a proxy for the strength of the connection between people tends to consider the more of it, the better. This is true whether the connectivity is a form of a direct relationship between individuals and/or groups or an indirect one where someone uses devices or connecting tools to make an interaction. Although the pitfalls of too-much-connectivity are recognised, the viewpoint is the higher or more connectivity is desirable and the consequences that follow from this are to be better managed. Nevertheless, the previous finding argues that in analysing interactions between people in organisations amid a strategy building effort, higher connectivity should not always be strived for. Further, a low connectivity level will serve the requirements of the strategy process in its implementation stage better than a high one. This notion of viewing connectivity's duality, i.e. high versus low connectivity, in a way that acknowledges how low levels of connectivity can actually produce a number of important results leads to the following proposition:

**Proposition 3: Middle managers' low connectivity level is beneficial during the implementation stages of the strategic initiative**

The final finding of this research concerns the effect of prior connectivity of a middle manager on his or her current connectivity. There is certainly a relationship between connectivity levels of the past on current connectivity of a manager. To explore the governing mechanisms of this relationship, this research observed situations where some strategic choices were successful despite the incongruence of the connectivity level with the phase of the strategic incident. Middle managers with low connectivity levels managed to take choices in situations requiring high connectivity. They did not create new connections per se though, they used past connectivity to help them execute a task or make a decision to their favour.

So, this finding can be captured in the following statement:

#### **4- Middle managers' prior connectivity affects their present connectivity**

This finding uncovered a new mechanism in which connectivity operates. Rather than regarding past connectivity as obsolete or of low importance for the connectivity of current events, it is to be incorporated along with the level, type, and time of connectivity to grasp connectivity's mechanism when influencing strategic choice in the present time. This final finding of the research argues for a relationship between prior connectivity and present connectivity. The presence of connectivity with someone or a group in the past affects the current state of connectivity, which in turn paves the way for making specific strategic choices. What is meant by past connectivity here is the channels, conduits, and the relations a manager attained in a previous time to be used in the present time. Also, this past connectivity is one that took place long enough before it is required in a later stage. Usually, it is a state of connectivity where the interaction between people in it is no longer repeated in the same capacity or volume it was in the past.

In the following example, a middle manager was able to evoke the previous connectivity he had with other middle managers to serve the requirements of an incident he was facing. It is an example where this middle manager's strategic choice was successful despite the incongruence of his connectivity level with the phase of the strategic incident he was in. The middle manager had a low connectivity level, yet managed to take choices in a situation requiring high connectivity to be successful. The middle manager is the head of a division in the Engineering department that is responsible for Transmission Data Planning. He has the lowest number of direct reports when compared to all of the other middle managers in the department. He is also on the same level of the majority of the other middle managers working on the strategic initiative, i.e. he does not have different formal connections with top management than from them.

During phase 10 of the expansion project, he was faced with a lot of modifications to his transmission plans. This was because of the constant alterations in the radio frequency plans during this phase. What these alterations meant for this manager and his relatively small team is the constant delays and disruptions for their work. Many requests were sent to the radio planning teams to send the finalised plans along with the final requirements for the sites to be serviced. But due to the new technologies implemented in this phase coupled with the massive number of sites more delays kept happening than anticipated.

The implementation teams were pushing this middle manager's division to send the transmission plans so they can keep their deadlines. Furthermore, the Operation and Maintenance division was pushing for transmission designs of some old sites that were scheduled to be swapped from an old technology into a new telecom technology<sup>22</sup>. This swapping was part of the expansion project as well but there was no need to build a new tower, rather to change the technology of it so it provides a new service using a new range of radio transmission. What this manager did was he reverted to his old connections in the Operation and Maintenance division where he was a former member in. He managed to convince them to go ahead with maintenance work on the old sites until the old design plans are swapped into new ones. According to this middle manager, this was not an easy task because it deviated from the normal work practices of the Operation and Maintenance division. However, he was successful in gathering enough support from the teams who would execute these activities and the division head agreed to this temporary arrangement. Also, he used the support he gathered from that division to convince the implementation team's senior manager to begin installing the infrastructure for the new sites and wait for the design planning for transmission data. This was also a new way of executing the work because the implementation teams were accustomed to finishing one site, or a series of close by sites, entirely before moving on to another location. This arrangement was possible by the assistance of the Operation and Maintenance division. They agreed to help the implementation teams in the process of checking needed materials for each site and in coordinating the implementation teams work load. Both of these tasks are outside the responsibilities of the Operation and Maintenance division.

This middle manager succeeded in introducing new ideas regarding the processes of getting work done during the initiative. As a former engineer in the Operation and Maintenance division, his knowledge of the operations of that division smoothed the suggestions of these ideas. Also, he gathered enough support and acceptance to back up the

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<sup>22</sup> Swapping from 2G to 3G mobile technology standard

ideas and in a relatively short period of time. These choices and resulting decisions require high level of connectivity which the middle manager seemed to lack. Nonetheless, he fruitfully evoked his previous connectivity level into situations which benefitted from such high connectivity.

When one of the direct reports of this middle manager was asked what was done by the division with regard to the delayed data, and how the division worked itself out of this problem the manager's answer was the following (Z. Sarah, personal communication, 15, March, 2015):

“I can assure you that [Middle Manager], he have [has] a great connection with all the Engineering department. He can get data like that [flicking fingers], fast, fast. He goes to them directly, he can talk to them without emails or phones even. Please give us the data, ...,now we are late but please bear with us, and.. and also if we [middle manager's division<sup>23</sup>] need something and the person does not respond my manager can go directly to his manager and to talk to him”

The above example expresses how the prior levels of connectivity affect current connectivity, which in turn affects the strategic choice of managers. The details of that middle manager's situation point out the importance of considering, as well as using, past connectivity in shaping connectivity's mechanism and its influence on strategy making process. This idea of incorporating past connectivity in constructing strategic choices can be illustrated in the following proposition:

**Proposition 4: Middle managers' high connectivity levels in the past can be utilised positively for moulding present connectivity levels**

## **5.5 Toward a Model of Connectivity's Influence**

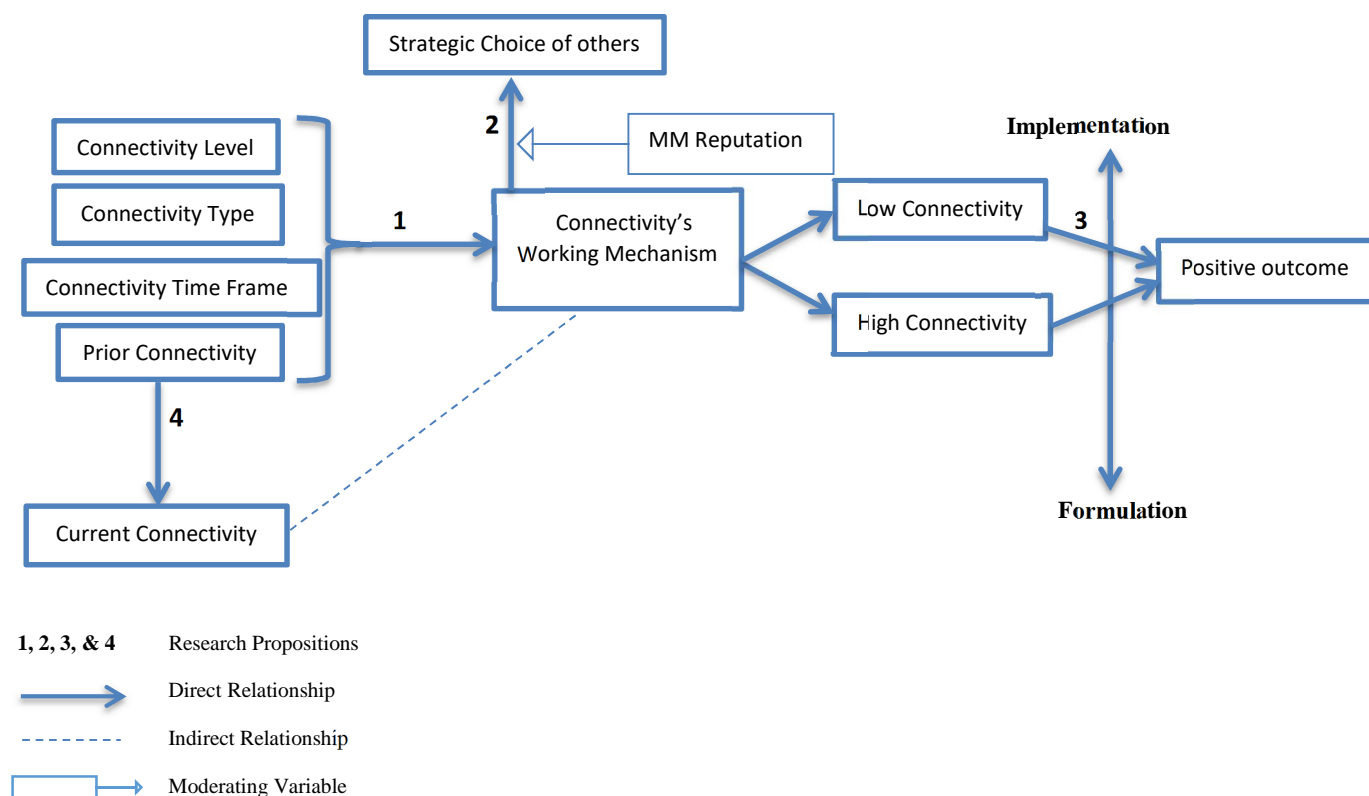
In closing of this chapter a theoretical model for the conceptualisation of the research findings and research propositions is presented in figure 5 - 9. The theoretical model incorporates the elements discussed in the previously proposed mechanism of connectivity and the proposed influence of connectivity on strategic choice. Furthermore, the model captures how the data analysis led to the research findings and propositions. The model also predicts how these elements institute the mechanism for connectivity's influence on

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<sup>23</sup> Transmission Division

the strategic initiative's output during the formulation as well as the implementation phase of the initiative(s).

The model asserts that connectivity's between managers during strategy making in the working place is the product of the integration of four aspects (proposition 1). These



**Figure 5 - 9: Research's Theoretical Model**

aspects are: connectivity level (assigning if connectivity for a manager is high or low in a particular time) and in this research that level is assessed through features described in figure 5 - 1, connectivity type (is the connectivity active and visible or latent and hidden), connectivity time frame (in which phase of the initiative (formulation or implementation) the connectivity of a manager is captured in), and prior or past connectivity (the existence of connectivity a middle manager had from before and engaged in utilising that previous connectivity in a current situation).

The model also predicts that a manager's working mechanism of connectivity influences the strategic choice of other managers (proposition 2). This connectivity influence comes about through the managers' perceptions of a manager's connectivity at a certain time of the strategy making and implementation process. Such formed perceptions articulate the

reputation a certain manager possesses in terms of high or low connectivity. The model proposes that this perceived high or low connectivity dictates managers' responses and choices during the strategy building effort.

Moreover, the model demonstrates that low levels of connectivity for a manager can indeed be beneficial under certain episodes or incidents during the strategic initiative's lifespan. These benefits or positive outcomes from low connectivity materialise in the implementation phase of the initiative (proposition 3) rather than the formulation phase. Additionally, the model shows that prior connectivity of a manager influences his or her current connectivity (proposition 4). This current connectivity, in turn, is incorporated in the connectivity's working mechanism of a manager. In the model, this relationship between current connectivity and connectivity's mechanism is indicated by a dotted line. This is to show that unless the past connectivity of a manager is employed during a certain time and for a specific incident then it is not part of the mechanism in which connectivity influences strategic choice associated with that corresponding time or incident.

Finally, the model maintains that high connectivity in the formulation phase of strategy process induces positive outcomes for the initiative. There are many instances in this dissertation in which the contribution of a manager's high connectivity for gaining support, idea influxes, and re-establishing power and connections are evident. Such examples occurred at the early planning stages of the initiative as well as during a situation where a solution or a need for creative remedy presented itself. This is compatible with the literature on connectivity which already ascertains the positive relation between high levels of connectivity and positive outcomes. Illustrating this relationship in the field of strategic management was one of the aims of this research.

## **Chapter 6. Discussion and Research Conclusions**

### **6.1 Abstract**

In this chapter, the main findings with regard to the research question of the dissertation are briefly summarised and then discussed. The discussion of the findings provides an interpretation of the findings. This interpretation is explained in light of both the analyses applied to the data and how the findings relate to the literatures covered in this thesis. Moreover, the strengths and limitations of this discussion of findings are noted. This chapter concludes with a set of conclusions and recommendations for future research in each of the areas of connectivity research in management studies, strategy process research in general, and middle management perspective on strategy process research in specific.

## **6.2 Introduction**

The overall aim of this thesis is to examine the influence of managerial connectivity on strategic choice. This managerial connectivity is investigated in a telecommunication company and it covered the lifespan of a major strategic initiative in the firm. The research concentration is on the connectivity of the middle managers in the company during the strategy formulation and implementation processes of the initiative.

This research's gap was in bringing the two concepts of connectivity and strategic choice together. The gap aimed at exploring middle managers' connectivity influence in their strategic choice during strategy making and implementation processes. The research question to address this gap is:

What is the influence of connectivity between middle managers in strategic choice?

The remainder of this discussion chapter is organised in the following way. In the first section, a quick review of the research findings is presented. Then, a discussion of the findings is offered. This discussion entails how the findings relate to the extant literature. Next, the strengths and limitations of the thesis are noted. Finally, the chapter offers some recommendations for further research.

## **6.3 Summary of Research Findings**

This dissertation's findings are summarised below:

- 1) Middle managers' connectivity can be beneficial or detrimental to the development of strategic initiative depending on the conditions under which connectivity occurs.
- 2) Middle managers' connectivity influence on their strategic choice triggers a set of strategic choices of other middle managers.
- 3) Low levels of middle managers' connectivity can be useful for the development of the strategic initiative.
- 4) Middle managers' prior connectivity affects their present connectivity.



## 6.4 Research Findings and the Extant Literature

This discussion chapter presents how the research findings relate to the covered literature. The discussion entails answers to the key authors mentioned in the literature review in light of research findings. The research findings centre on detecting and clarifying the influences of connectivity on strategic choices of middle managers. Further, research findings revealed the consequences of these connectivity influences on the development of strategic initiatives. The influence of connectivity is depicted by the potential of connectivity to be an enabler or inhibitor of the strategy making and implementation processes. This enabling or inhibiting element is investigated by connectivity's influence on middle managers' strategic choice during strategy formation of a key strategic initiative. Connectivity has such an influence because it is considered a function of the relationships between organisational members, which shapes a roadmap for communication, for exchanging various resources, and engaging in collaborative effort during a strategy making and implementation process.

Kolb (2008) called for integrating connectivity into social sciences research. He furnished his reasons for why connectivity is a plausible concept to be studied by highlighting connectivity's features that ensue in the everyday interactions between people (Kolb, 2008). This research responds to that call and extends the utilisation of the concept of connectivity into the workplace. Previous studies that enclose connectivity into the management research focus heavily on the technical side of the conceptualisation of connectivity forwarded by Kolb (2008). For example, there has been research about how dispersed teams communicate among each other (Breidbach et al., 2013), how using smartphone relate to employee engagement during work (MacCormick et al., 2012) or how using them relate to notions of work-life balance (Dery et al., 2014). Those are some of the examples of studies that merely incorporate connectivity's technical side, i.e. the use of smart devices to connect with others and get work done faster, into managerial settings. Research on connectivity and its implication on managerial processes with a focus on the personal side of connectivity conceptualisation are rare. This research conceptualises connectivity as the conduits in which information and other resources flow inside the firms. These channels affect the various processes of the organisations where interactions and relationships between people emerge. This research is exploring the influence of connectivity on the strategy making and implementation processes on the level of strategic initiatives. This is done by investigating middle managers' connectivity in a theory

building exercise. The aim is to uncover the mechanism by which connectivity influences the strategic choices of middle managers during a strategic initiative. Furthermore, with only some exceptions that touch upon the concept of connectivity (i.e., Carmeli & Spreitzer, 2009) its presence in organisational studies is rare. This research extends the use of connectivity into managerial studies and specifically into strategic management research. This type of research and with this particular conceptualisation of connectivity has not been attempted to the best of the researcher's knowledge.

Middle management's perspective on strategy process identified the shape of middle managers' involvement in strategy building, the strategic roles of middle managers, sensemaking and enactment of their roles, and contributions of middle managers to unit and firm performance (Balogun & Johnson, 2004; Dasgupta, 2015; Dutton & Ashford, 1993; Floyd & Wooldridge, 1992b, 1996, 1997; Rouleau & Balogun, 2011; Schmid et al., 2010; Wooldridge & Floyd, 1990; Wooldridge et al., 2008). Understanding middle managers' roles in the strategy making process and their contribution in it require detailing "how" managers perform strategic roles (Whittington, 1988). There is a need to further comprehend the way they perform their responsibilities and what are the determinants of middle managers' choices while carrying out those responsibilities. This research is an effort to accomplish these aspirations in the middle management perspective on strategy process.

Losada (1999) studied the performance dynamics of business teams. He found patterns that distinguish high from low performers by analysing team interactions. Losada stated that connectivity resulting from these dynamics consisted of dimensions that were identified during team members' talks. For Losada and colleagues high performing teams had high connectivity levels and an expansive emotional space, which in turn created broader learning opportunities, new idea offering, and freer information sharing (Losada, 1999; Losada & Heaphy, 2004). Low performing teams, in contrast, had low connectivity levels or restrictive emotional space, which repressed ideas sharing, risk taking, and decreased learning opportunities.

Of importance is the theoretical distinction this research offers on the difference between the channel and the content that runs across the channel when using the concept of connectivity. In previous studies connectivity's impact has been described in the health and well-being and psychology literatures (Carmeli et al., 2009; Fredrickson, 1998; Radey & Figley, 2007). These studies looked into the consequences of having connectivity, such as trust, learning, and cooperation and its effects on individuals and groups. More

specifically, connectivity was approached as a measure of the quality of the relationships between people and how to enhance this quality. This quality of the relationships was measured and also explained by the positivity to negativity ratio (Losada, 1999, Fredrickson and Losada, 2005). One key claim in Losada's (1999) study is that higher performance tends to be associated with higher connectivity. Meaning that having more cross correlations which lead to a higher positivity ratio, would be productive in any strategy making meeting. Further, a conclusion that followed from those studies was that increasing this ratio reaps more benefits from connectivity. The broaden-and-build theory of positive emotions (Fredrickson, 2004) is one of the extensively cited models to that end. This thesis differs on how it approaches connectivity because it views connectivity as a set of roads emerging from the relationships occurring between people and not only in terms of the consequences connectivity generate. While not disregarding Losada (1999) or Fredrickson's (2004) results, this research attempted to explore the different conditions in which connectivity has different effects. This was achieved by exploring the positive and negative effects that connectivity has as well as the conditions under which these effects take place. The argument in this research was that more connectivity may not always be productive. This was successfully demonstrated by examples of episodes and incidents where middle managers were in a high connectivity level but that did not yield positive returns on the strategic initiative. As a result, and contrary to Losada (1999) and Frederickson and Losada (2005), this thesis found that connectivity does not always have a positive effect on strategic choice. The thesis depicted the mechanisms and processes of connectivity as well as its outcomes and consequences. As a consequence, this proposal added nuances to the notion that the more connectivity there is the better (Frederickson and Losada, 2005; Frederickson 2004).

Put differently, the notion of the more connectivity between people the better and the only issue is in managing that increased connectedness is not always accurate. More connectivity of middle managers in some situations had negative effects on the strategic choices they took which in turn harmed the strategic initiative.

Further, in their study Lechner and Floyd (2012) concluded that group influence activities are a significant factor in acquiring resources for the initiatives of exploratory nature and in their impact on the organisation's core capabilities. This thesis adds to their work by identifying how these mechanisms of connectivity can be channelled. This is achieved by the identification of the role of connectivity in building interdependencies under different conditions during a strategic initiative. Only a few studies examined the relationship

between influence activities and the development of strategies where strategic initiatives are the unit of analysis (Lechner & Floyd, 2012). This research contributes to better understanding such a relationship and in so doing helps better explain how strategic initiatives develop in the lens of managers' connectivity during it.

## **6.5 Research Strengths and Limitations**

### **6.5.1 Limitations**

This research suffered from a number of limitations. These can be summarised in the following. One, by following a case study method on one major strategic initiative, the research probably missed on making comparisons of connectivity's influence on middle managers choice during other initiative types. The connectivity's mechanism might have been clearer if a second initiative was investigated for example. In the studies of strategic initiatives, two distinct types of learning exist, i.e. exploratory vs. exploitative strategic initiatives. Hence, a strategic initiative of exploitative nature, for instance, might have added nuanced when compared to the one under investigation in this thesis. This limits the research's capacity to generalise its findings, but this sort of generalisation is not the research's intention. One of the key aims of this dissertation is to elaborate theory on a new concept in a new setting, i.e. to expand and generalise theory and generate analytical generalization.

Two, complete email correspondences for the strategic initiative were not obtained. This is understandably hard to obtain in such a strategic initiative that encompasses many divisions and a lot of middle managers. Nevertheless, having more emails would have added some details on the mechanism in which connectivity ensued. But email correspondences formed only one component of how the connectivity's work mechanism was conceptualised. Further, most of the missing emails from some managers were compensated for by other sources of data, such as second interviews with some respondents who did not agree to provide email exchanges, business journals, and questions to managers involved in issues where emails were lacking. This data helped in shedding light on information gaps regarding a manager's connectivity, i.e. who did he or she send or receive emails from during an identified time.

Finally, incorporating the views of more top management and first line managers would have contributed to an in depth understanding of connectivity levels, types, and past connectivity. Such additional data would make room for in depth inferences about connectivity, yet it would have made it cumbersome as well. The focus in this research, though, was on middle managers' connectivity and how that connectivity influences strategic choice. Comparing influences of connectivity between multiple layers, for example, was not intended for the current research.

### **6.5.2 Strengths**

The strengths of this research, and its contribution to knowledge in strategic management field, can be summarised in the following points. Firstly, the introduction of the connectivity literature into the middle management perspective on strategy process and the strategic management literatures. As mentioned elsewhere in this chapter, connectivity's presence in management studies is scarce and considered lacking. This thesis contributes to Kolb's (2008) call for the inclusion of the concept of connectivity in various social sciences research.

Secondly, delineating how connectivity may not always be productive. The notion that higher connectivity always equals better results is inaccurate, at least in a managerial context. It follows from this conclusion that low connectivity for a middle manager is desirable in particular conditions and not always considered as a connectivity state to be avoided.

Thirdly, adding to the micro-foundations research view in strategy process research. Approaching strategy process literature with a "focus that begins with the individual manager advances the potential to link micro- and macro- level outcomes (Schmid et al., 2010 : 142). By considering each individual manager's varying degrees on connectivity, management can better explain wider organisational processes. The challenges in the strategy making and implementation process from a middle management perspective can be met by identifying connectivity presence of a manager and its influence on other managers' strategic choice. Also, the spread of a manager's connectivity influence to the whole strategy formation process can be recognised too. This current research provides some empirical evidences for the micro-foundations level view toward those ends.

Finally, illustrating how connectivity's mechanisms are those of level, type, time, and prior state of connectivity. This is at the core of the theory building effort of this thesis and constitutes one of the research's strengths.

## **6.6 Conclusions, Managerial Implications, and Future Avenues for Research**

### **6.6.1 Conclusions**

This thesis sought to highlight the concept of connectivity and bring it to the fore. In doing so, it showed connectivity's influence on the strategy making and implementation process. The research's prime focus is on the connections between organisational members, namely middle managers, and the resulting effects of such connections at the level of strategic initiatives.

The concentration in this research is on middle managers' connectivity. A group of middle managers can be effective in developing strategic initiatives by getting the required resources and support when connectivity is present. That is when channels or paths between those middle managers and their interactions are open. The presence of connectivity between middle managers might contribute to having an internal environment which is suited for executing firm's strategies. Such internal environments help the organisations in adapting to their external environments and achieving a strategic fit (Vos, 2002). Through its role in keeping an internal environment fit, connectivity supports a generic strategising view of a continuous organisational adaptation process (Rasche, 2007) in order to better cope with the demands and requirements of the external environment (Child, 1997).

The central conclusion of this thesis is that strategy work is relational. It depends on the collaboration of many people. This is not a new insight in the strategy process literature, but the purpose of this research was in showing that connectivity between people matters as a key element of disseminating the collaboration. Middle managers' role in strategy making and implementation processes is bounded by many aspects. There is a bounded rationality to their work, there are time limitations, and power variations that lead to struggles on scarce resources, etc. As a result, middle managers cannot contribute successfully to strategy formation on their own; their conducts of the strategy processes are ultimately relational.

The fluidity of this relational element has an outcome on the strategy making and implementation process. This outcome emerges in a number of features such as the frequency of the relationship, the intensity of it, the timing of the relationship, and the varying perception by others of the relationship's existence. The collective combinations of these features constitute a manager's connectivity. The circumstances in which that connectivity is moulded determine the way, direction, and range such connectivity is accepted. Put differently, the circumstances shaping connectivity establish a manager's (connectivity) reputation. This in turn sets the stretch limits of that connectivity on strategic choice.

### **6.6.2 Managerial Implications**

The first managerial implication for the above conclusion is in initially appreciating, perceiving, and communicating the importance of connectivity as a resource in their organisation, and not just as a secondary, intuitive, result of interactions. Such change in the mind-set of management regarding connectivity can aid the organisations in reaping the benefits of considering connectivity and its influence on strategy building activities.

Second, management ought to implement a "connectivity strategy" in their strategy formation processes. Management should invest in activities that build an accurate perception of middle managers' connectivity. Steps that management can take into this direction include: 1- Noting formal and/or informal settings of relationships during the strategy lifespan. 2- Observing when, and why, a manager behaves differently in similar situations during projects. For example, when deadlines for key phases or processes are near, creative ideas or actions are introduced and pursued, or when obstacles are faced and consensus on confronting them is lacking. Management can observe, in such situations, who is taking charge, and how. These two steps will help in identifying people who champion ideas and take initiative in resolving problems. Also, it will help whether or not the various behaviours of managers are attributed to their connectivity. 3- Mapping the network of people according to their connectivity during strategy projects. The objective here is to use managers' connectivity in the direction and timing, as proposed by this research, appropriate for the situation at hand as well as in future instances. 4- A final step is communicating to middle and frontline managers why certain decisions were endorsed or why some managers' idea were given priority and others not during a strategic project. That is, communicating why connectivity is a key determinant in running the strategy.

Adhering to such a connectivity strategy would be by recognising the times when connectivity states are beneficial, by balancing the acts of allowing information sharing versus acts of preventing information overload, and by integrating those times and the people behind those positive payoffs in the strategy making process. The findings and details of connectivity's presence and influence in this thesis may serve as a guideline for managerial implications in terms of both detecting and applying a connectivity strategy. For example, the support and endorsement one middle manager received, lost, and regained for his new idea speaks of the importance of recognising, as well as integrating, connectivity of middle managers in anticipating progress of strategies and in planning for future ones. Managers can pick up on signals similar to the incident of this middle manager to ensure a smoother execution of a strategy.

Another example is in the use of one middle manager of his previous connectivity to tackle a problem his unit was facing. Management can plan for their strategies in a way that outlines previous connectivity a manager enjoys by using that to bundle and/or adjust relationships or resources to the requirements of a strategy and in favour of its objectives.

Third, and finally, middle managers can learn from the dissertation's findings and the examples of the middle managers what constitutes their connectivity, when it is best during the lifetime of a strategy project to use their connectivity, and how can they channel the influence of their connectivity toward the realisation of their strategic choices, their ideas, and the objectives of their respective units.

### **6.6.3 Future Research**

Future research should attempt to test the propositions put forth in this thesis for making validations of them. This will allow for gaining further insights on the influence of connectivity on strategic choice. Additionally, and in particular, longitudinal studies could address the effect of prior connectivity's on future connectivity. Perhaps such studies can take into consideration the personal characteristics of group members and investigating if such characteristics play any role in shaping the connectivity level, connectivity type, and past connectivity between managers during different phases of an initiative's lifetime.

Furthermore, inspecting connectivity's influence on the development of a portfolio of strategic initiatives within the organisation can lead to better appreciation of connectivity's working mechanism. Introducing connectivity's mechanism as put forward in this research



into strategic initiative portfolios theorisation might add to the understanding of middle managers' strategic choices when engaged in more than one initiative. Also, exploring connectivity's influence on two or more strategic initiatives among competing organisations and even across industries can yield similar benefits. By understanding how connectivity between management layers contributes to the performance of strategic initiatives in one firm compared to another, management can assess the strategic importance of integrating connectivity operating mechanism into its strategy building exercises, and plan these strategising efforts accordingly.

The conceptualisation of connectivity forwarded in this dissertation may contribute to better resolving the trade-offs between exploratory and exploitative initiatives. The most successful firms learn to reconcile the trade-offs between exploratory and exploitation activities (O'Reilly & Tushman, 2013). These trade-offs exist because of the inherent tensions that arise between the acts of the two initiatives. According to Chang and Hughes (2011) such tensions occur because of the conflicting task demands between the two (Raisch & Birkinshaw, 2008) as well as their competing structure patterns and design requirements (March, 1991; Tushman & O'Reilly, 1996).

One way to achieve this is by having dual or parallel structures in the organisation. This allows firms to avoid conflicts between exploration and exploitation activities. Such conflicts can be confronted by housing the two activities within separate units or departments (Duncan, 1976; O'Reilly & Tushman, 2004). The integration of the four aspects of connectivity projected in this research can facilitate the employment of exploration and exploitation activities. As a result, reaching the balance between the different types of learning by bringing new knowledge and competencies to some units of the organisation, while utilizing already developed knowledge in others. Put differently, connectivity can have an influence on how to restructure the organisation in a way that brings the benefits of exploration as well as exploitation initiatives. This is attained by focusing on the needs and processes of each initiative type to succeed.

Moreover, future studies may want to look into how concepts such as participation, support, acceptance, persuasion, and consensus in the organisation relate to the conception of connectivity. Organisational change is a product of the interlocks between those concepts and their mechanics. The change will ultimately take place through connections between people. Understanding such connections and the conditions where they occur will help in a better understand strategy process and strategic change.

Furthermore, connectivity can play a part in understanding of strategic management field from the viewpoint of dynamic capabilities. Dynamic capabilities can be thought of as “organisational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die” (Teece et al., 1997). Connectivity can be an enabling factor in achieving those new resource configurations Teece and colleagues (1997) mentioned, thereby contributing to better alignment with organisation’s environment. In this sense, connectivity could be regarded as a dynamic capability facilitator. Furthermore, reconfiguring of existing resources via replication or recombination efforts of existing resources can be aided by the presence of connectivity. These efforts rely on specific routines to leverage existing resources, especially knowledge-based ones throughout the organisation (Eisenhardt & Martin, 2000).

Another avenue for future research is in considering external connectivity. This thesis focused on internal managerial connectivity, particularly between middle managers. Connectivity forwarded in this research can also be applied outside the boundaries of the organisation. Relationships among groups within a firm and between a firm and those in its environment are key for success in today’s inter-connected world. “[S]ome of the most successful and innovative companies systematically seek out external partners for sourcing ideas, for commercialisation, and for expansion into adjacent businesses and new segments” (Chakravorti, 2007 : 114). Starbucks, Google, and Proctor & Gamble -to name a few- rely on outside connections for their partnerships, content, and collaborations, organisations’ adopting a connectivity mind-set in their strategy making and implementation processes ought to do the same with regard to fostering relationships in order to gain a competitive edge.

A final avenue for future research could be in examining the drawbacks of high connectivity on a manager’s future performance. The current research did not highlight this aspect but it was an inherent facet in the ongoing discussion and in the high connectivity examples. A highly connected manager’s performance might be approached in light of his or her inability to cope with the mounting pressures and continuous distractions. Issues like burnout, work-life balance, and lack of clear boundaries while undertaking simultaneous work tasks are pressing areas of organisation studies and worthy of investigation.

## **6.7 Summary**

This chapter discusses the findings of this research in relation to the extant literature. The aim of this discussion chapter is to introduce the readers to a phenomenon in a new context, to inform them about the findings of the investigation about the phenomenon, and to explain how the phenomenon could be understood newly in light of the research findings.

Connectivity enables learning. Connectivity also expands the space for conversation and, as a result, increases the potential for finding solutions and taking action. This is so because high connectivity means that managers in the organisations are open to each other and to exchanging new ideas. Learning occurs from the wider exposure one gets with others while interacting in particular situations. By getting familiar with the approaches others took to follow through certain ideas and choices, managers can benefit from the process of sharing such experiences and eventually enhance their overall learning.

High levels of connectivity are not always effective or useful as the research findings demonstrated. Low connectivity can as well be beneficial for the strategy making and implementation process under certain assumptions. The demands of a certain situation might not require the inflow of new ideas or even the support of a larger group of people. Here, the low connectivity is considered as a basic factor in explaining a manager's success in dealing with the requirements of a problem or event.

Interactions and communication patterns among organisational members need a more notable presence in the strategic management literature to better understand the strategy process. We need to comprehend how managers can develop conditions for connectivity's influence to work in favour of their strategies and their organisational objectives. In light of their connectivity, establishing structures and routines for middle management's responsibilities, roles, and engagement in the strategy making and implementation process would yield advantageous outcomes.

This current research is not assuming the introduction of connectivity as an all-round solution for all strategic change or strategic adaptation conundrums. Defined in this research as channels from which interactions occur, connectivity is seen as both present and essential in all communication patterns and forms. The aim of the thesis is in extending connectivity's implication to assess strategic initiatives development and the overall understanding of middle management's involvement in the strategy making and implementation process. This aim is pursued by building a theory that focuses on how and when connectivity influences the choices and decisions of participants in their strategy-

building practices. Middle managers differ in their capabilities to perform strategic roles; part of this differing is due to their varying connectivity. Connectivity is an organisational resource (Kolb, 2008) that shapes many elements necessary for interactions between people to occur. Awareness of this resource as well as knowledge about when to use it are two important aspects for strategies to evolve, but this varies from one person to another and from one situation to the next. Distinct connectivity patterns, or connectivity profiles, for middle managers fit the requirements of certain strategic choices. Examples of emerging connectivity patterns, in this dissertation, that suited a role in which a middle manager needed to play showcase the linkage between connectivity and a consequent strategic decision which ultimately affects strategies development.

Research on connectivity in management studies and particularly in strategic management would stand on two simple and interrelated premises. One is the conception of organisations as merely collections of individuals forming social systems (Bunge, 1996). The other is the view of strategy as a path toward achieving a broad end, a path which is thought of, executed, and amended by people via countless emerging exchanges (Mintzberg, 1978). The focus of the discussion on connectivity presented in this chapter and its influence on strategy formation aids in fulfilling such stance. Managerial connectivity suits as an illuminating element in strategy making and deserves attention. Connectivity's influence provides answers to how strategic choices are made and these choices, in turn, influence the strategy work in organisations and its direction.



## Consent Form

Title of Project:

**Influence of Managerial Connectivity on Strategic Choice - The Role of Middle Managers**

Name of Researcher: **Haitham Ahmad Jafar**

1. I confirm that I read and understood the Plain Language Statement for the above study and that I had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
3. I consent to the audio-taping of the interview for analysis purposes.
4. I understand that refusal to participate or non-participation in this research will have no effect on my employment.
5. I am aware that my name and personal information will be referred to by pseudonym names in any publications arising from the research.

I agree / do not agree (delete as applicable) to take part in the above study.

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature



## Consent Form

Title of Project:

**Influence of Managerial Connectivity on Strategic Choice - The Role  
of Middle Managers**

Name of Researcher: **Haitham Ahmad Jafar**

1. I confirm that I read and understood the Plain Language Statement for the above study and that I had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
3. I consent to the audio-taping of the telephone interview for analysis purposes.
4. I understand that refusal to participate or non-participation in this research will have no effect on my employment.
5. I am aware that my name and personal information will be referred to by pseudonym names in any publications arising from the research.

I agree / do not agree (delete as applicable) to take part in the above study.

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

### Appendix 2: Consent Form (Telephone Interview)

**Ethics Committee for Non-Clinical Research Involving Human Subjects**

Staff Research Ethics Application ☐

Postgraduate Student Research Ethics Application ☒

**Application Details**

Application Number: 400140078

Applicant's Name: H A A R Jafar

Project Title: Impact of Managerial Connectivity on Strategic Choice - The Role of Middle Managers

**Application Status** **Approved**

Start Date of Approval (d.m.yr) 1 January 2015

(blank if Changes Required/ Rejected)

End Date of Approval of Research Project (d.m.yr) 13 Sept 2015

Only if the applicant has been given **approval** can they proceed with their data collection with effect from the date of approval.

**Recommendations (where Changes are Required)**

- **Where changes are required all applicants must respond** in the relevant boxes to the recommendations of the Committee and upload this as the **Resubmission Document** online to explain the changes you have made to the application. All resubmitted application documents should then be uploaded.
- **(If application is Rejected a full new application must be submitted via the online system. Where recommendations are provided, they should be responded to and this document uploaded as part of the new application. A new reference number will be generated.**

(Shaded areas will expand as text is added)

**MAJOR RECOMMENDATION OF THE COMMITTEE**

**APPLICANT RESPONSE TO MAJOR RECOMMENDATIONS**

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**MINOR RECOMMENDATION OF THE COMMITTEE**

**APPLICANT RESPONSE TO MINOR RECOMMENDATIONS**

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**Appendix 3: Ethics Application Approval Form**

REVIEWER COMMENTSAPPLICANT RESPONSE TO REVIEWER COMMENTS

(OTHER THAN SPECIFIC RECOMMENDATIONS)

<p>The application is well-written and the applicants safeguard against potential risks. Two specific comments:</p> <p>a) Given that the research will take place in another country, the supervisor(s) has to make sure that regular contact is kept to monitor the student's study</p> <p>b) The supervisor has to be careful in his/her text (some syntax errors in his/her entry of his/her appraisal of the project's possible challenges)</p>	
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Please retain this notification for future reference. If you have any queries please do not hesitate to contact Terri Hume, Ethics Administrator.

End of Notification.

### Appendix 3: Ethics Application Approval Form (continued)



## **Influence of Managerial Connectivity on Strategic Choice - The Role of Middle Managers**

### **Plain Language Statement**

*You are being invited to take part in a research study. Before you decide, kindly take the time to read the enclosed information and decide whether you would like to take part in the study or not. It is important for you to understand why the research is being done and what it will involve. Feel free to discuss it further with the researcher or any other party. If there are any questions you might have regarding the research or about your participation in it please do not hesitate in contacting me for clarifications. Thank you for your time in reading this.*

### **Researcher details**

Haitham Jafar is a PhD student at the Adam Smith Business School of the University of Glasgow. The following study is part of his doctoral thesis in the area of management studies. This thesis is supervised by Dr Ignacio Canales and Professor Robert Paton.

### **What is the purpose of the study?**

The study aims to develop an understanding of the concept of connectivity, meaning how relationships between people form, and what implications might connectivity have on strategy making in organisations. The study wishes to shed light into the relationship between connectivity and various organisational issues such as: communication, participation, idea creation, persuasion, and consensus on one hand and the impact of such relationships on how organisations form their strategies on the other hand.

### **Why have I been chosen?**

You have been selected because you are part of the organisation being chosen as the context of this research.

The researcher believes that you will be able to positively contribute to the study due to your position as well as role in the organisation.

### **Do I have to take part?**

Participating in this research is entirely voluntary. There are no obligations to take part in the study and you may decline participation or withdraw at any time during the process. Your decline or withdrawal can be done without having to give a reason. Your participation in the study will in no way impact your relationship with the researcher, your colleagues, your subordinates, or your employer.

### **What will happen if I take part?**

If you decide to take part, you will be contacted by the researcher to decide an appropriate time for you to be interviewed. You will be asked a set of questions by the researcher and your responses will be audio taped (only with your consent). You may choose not to answer some of the questions. The interviews are expected to last between 60 to 90 minutes.

**Will my taking part in this study be kept confidential?**

All information will be collected solely for the needs of the study and will be treated confidentially. Your responses will remain confidential and your anonymity will be maintained by the researcher. Once the project has been completed and the data not required any further, it will be destroyed securely and completely.

**What will happen to the results of the research study?**

The study will be part of a doctoral thesis produced at the end of a research period. Parts of the thesis document may be published in academic journals as well as communicated to interested practitioners or academics during conferences. Your anonymity will be maintained and will not be identified in any of these reports/publications.

**Who has reviewed the study?**

The study proposal was reviewed by experienced academics from the College of Social Sciences Research Ethics Committee at the University of Glasgow.

**Contacts for Further Information**

Thank you once again for taking the time to read this information. Should you have any further questions, please email Haitham Jafar at [h.jafar.1@research.gla.ac.uk](mailto:h.jafar.1@research.gla.ac.uk) or his supervisors:

**Dr Ignacio Canales** [Canales.Ignacio@glasgow.ac.uk](mailto:Canales.Ignacio@glasgow.ac.uk)

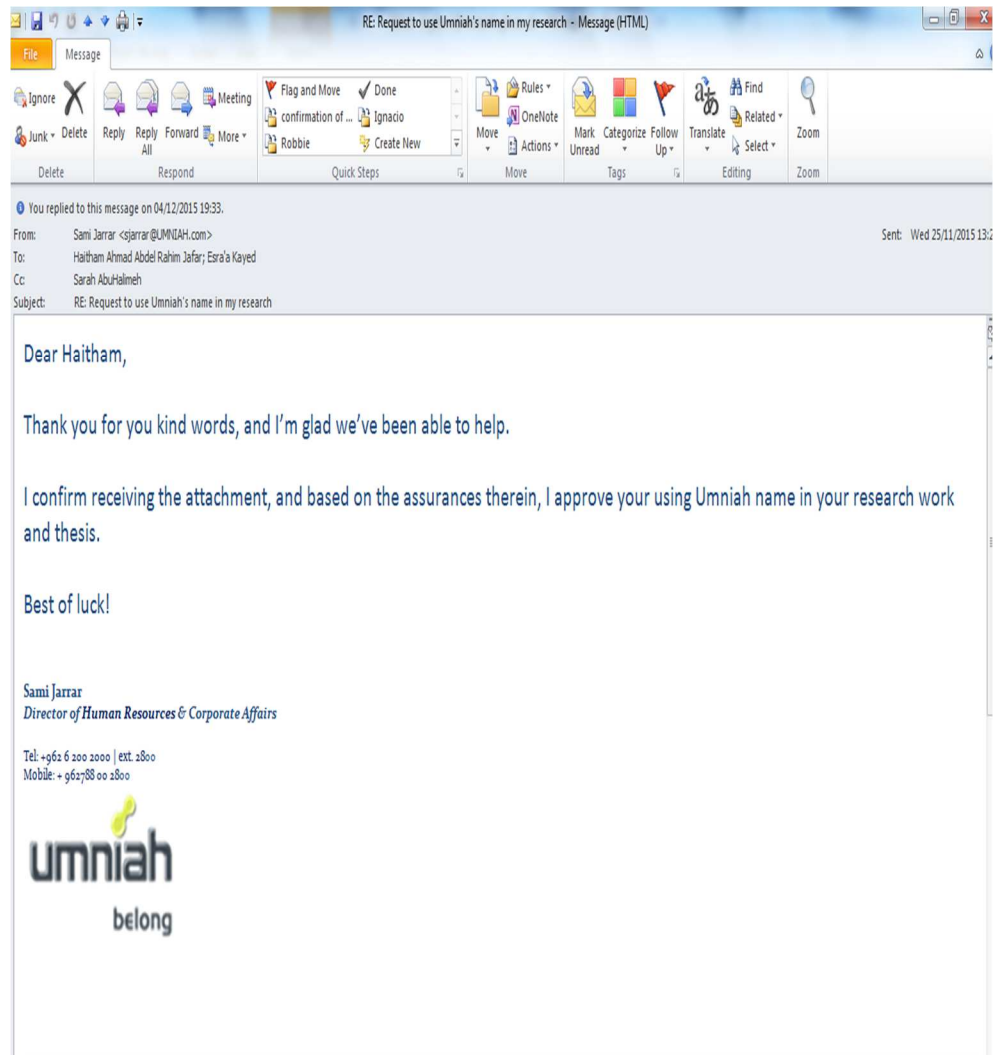
**Professor Robert Paton** [Robert.Paton@glasgow.ac.uk](mailto:Robert.Paton@glasgow.ac.uk)

**If you have any concerns regarding the conduct of the research project, please contact the College of Social Sciences Ethics Officer by contacting Dr Muir Houston**  
[muir.houston@glasgow.ac.uk](mailto:muir.houston@glasgow.ac.uk)

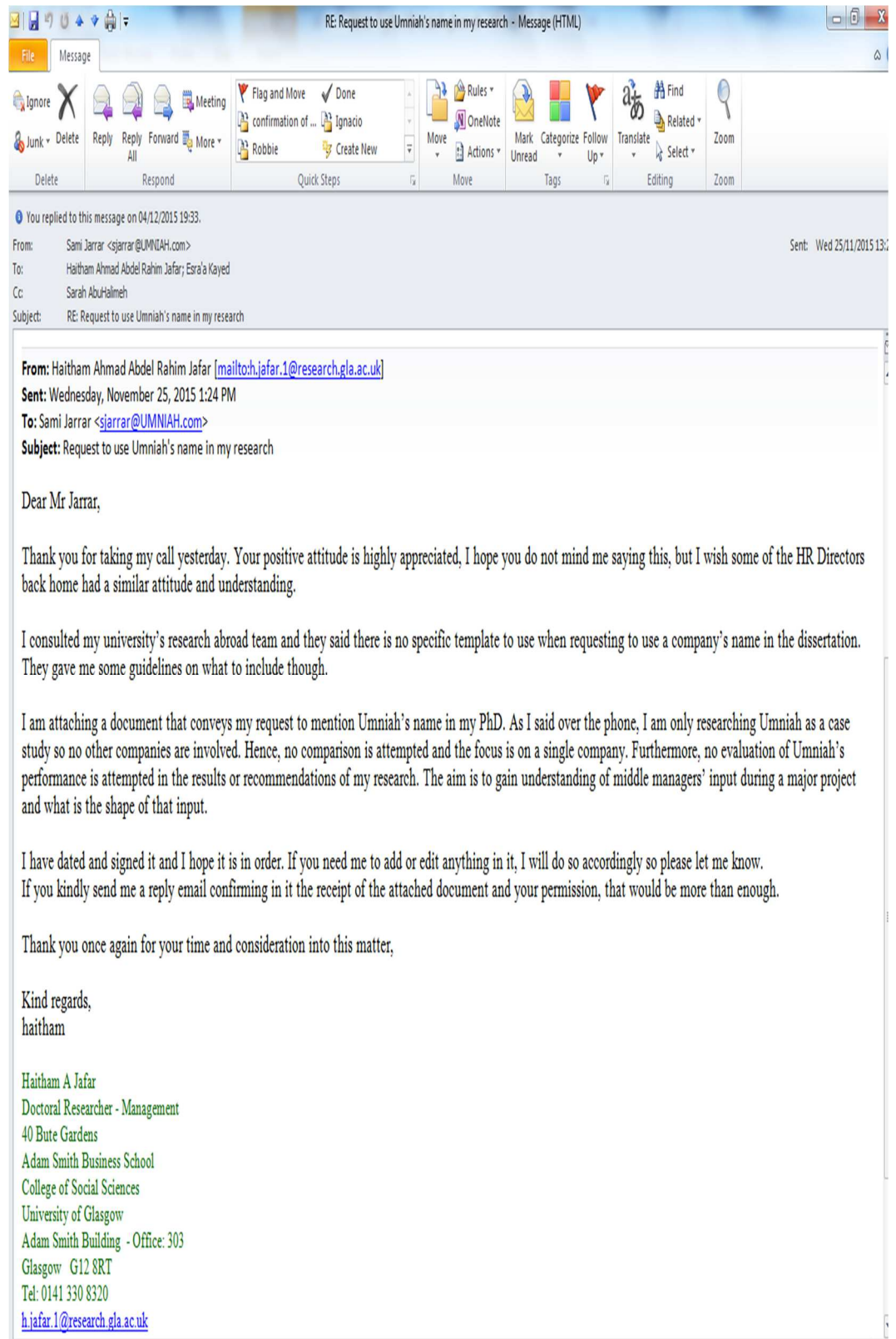
The researcher,

Haitham Jafar

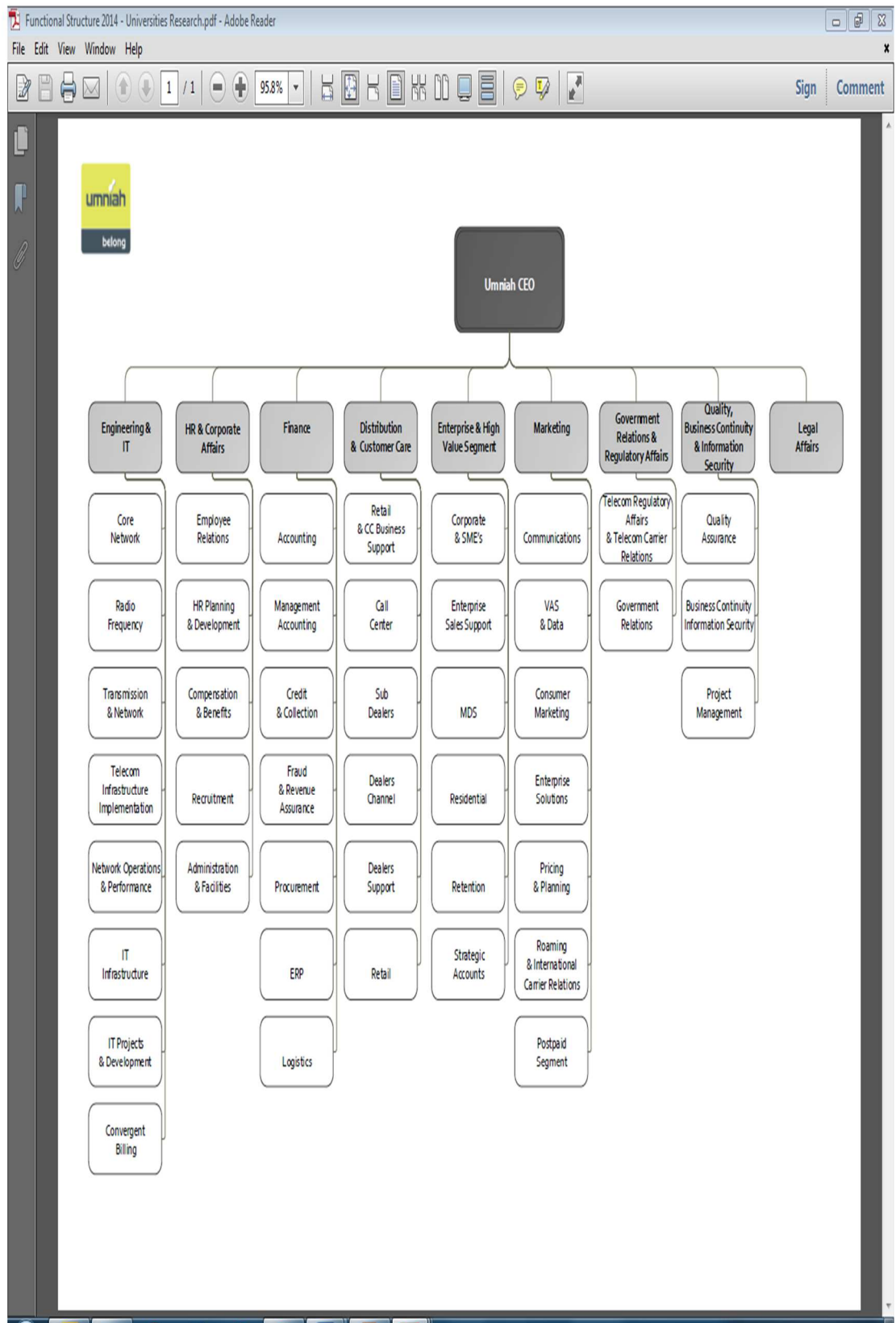
**Appendix 4: Participant Information**



**Appendix 5:** Approval to Include Umniah Telecommunication and Mobile Company's Explicit Name in the Thesis



**Appendix 6:** Request to Use Umniah Telecommunication and Mobile Company's Explicit Name in the Thesis



**Appendix 7:** Umniah Telecommunication and Mobile Company's Organisation Chart

Question	Objective
What are the strategic projects the organisation undertook in the past ...?	1- To get a list of the strategic initiatives 2- To select initiatives that fit the requirements of the research 3- To get a perspective of initiatives' overall outcomes  This helps the researcher to establish understanding of the basic features of the organisation's business and its strategy
How would you describe the performance of those projects?	
Would you say that those projects were in line with the organisation's strategy? Why (not)?	1- To assess how related the initiative is to the organisation's overall strategy 2- To establish what sort of involvement top management had
Was there any specific project(s) you endorsed/disagreed to? Why? What was your role in such project(s)?	
Who were the people responsible for carrying out the project?	1- Establishing the network of actors responsible for given strategic initiatives 2- Establish members' basic roles in the initiatives  This helps the researcher to identify network boundaries revolving around initiative life cycle. This is important in investigating connectivity between members of such network.
Why were they selected / assigned?	
Was the team, or the team leader, of any of these projects reporting directly to you?	
How do you communicate strategies to others?	
Who would you say is the most/least experienced member of your staff?	
Who would you say is the most/least knowledgeable about the organisation's culture? (how to get things done in the organisation/department/unit)	
Questions? Comments?	

**Appendix 8: Outline of Semi-Structured Interview Guide - Top Manager**

Question	Objective
What projects were you involved in during the past ...?	Identify roles in given initiative(s)
What was your role in the projects?	
How do you communicate strategies to the other members of your team?	
Within your team, who do you ask for ?information about new ideas? Why	Establish the network of actors responsible for a given initiative
Within your team, who do you ask for guidance and help? Why?	
In your team or within the whole organisation, who do you turn to for support on a business idea? Why?	
During the project X, can you describe a situation or incident where important information was not delivered accurately	
During the project X, can you describe a situation or incident where important information was not delivered quickly	
During the project X, can you describe a situation or incident where your team seemed unable to understand one another	
During the project X, can you describe a situation or incident where	
Questions? Comments?	

**Appendix 9:** Outline of Semi-Structured Interview Guide - Middle Manager

<b>Interviews</b> - Fifteen managers were interviewed (2 top managers and 13 middle managers), some managers (total of six) were interviewed more than once.				
<div> <div>Participants</div> <div>Core Topics</div> </div>	TM	MM	Total	Remarks
Strategic Initiative Development	2	13	15	1- Interviews with TMs were telephone interviews 2- Interviews with MMs were face to face 3- All interviews were semi-structured interviews
Middle Manager Role	2	11	13	
Connections	1	9	10	

TM: Top Manager.

MM: Middle Manager.

### Appendix 10: Interviews Overview



Participant Position	1st Int.	2nd Int.	3rd Int.	Emails	Documents	Remarks
	Duration	Duration	Duration			
MM – 3 levels below CEO	Yes	Yes	No	Yes	Yes	
	1 hour	45 minutes	-----			
TM – “Chief Marketing Officer”	Yes	Yes	No	No	No	Telephone Interview
	1 hour	40 minutes	-----			
MM – 3 levels below CEO	Yes	No	No	Yes	No	
	40 minutes	-----	-----			

TM: Top Manager. MM: Middle Manager.

### Appendix 11: Examples of Data Set Details

Observations				
Nature of Observation	Participant(s) Position	Duration	Reasons / Rationale	Remarks
Observing a typical workday	MM - 4 levels below CEO	3 hours	This manager had only 1 line manager below him. Also, he is in the smallest division (as per number of employees; 3) responsible for part of the implementation of the initiative	Heavy emphasis on emails & telephone. Direct conversation with his immediate manager (desks near each other). Lots of tasks delayed. Lack of delegation potential (no one to delegate to)
Observing a typical workday	MM - 3 levels below CEO	4 hours	This manager had the largest division as) per number of employees; 35) responsible for part of the implementation of the initiative	Continuous interruptions. Delegation limited to one person (most senior engineer). Emails not replied until the last hour of the working day (checked regularly though)
Informal gathering outside the offices	Four MMs - all of them 3 levels below CEO	20 - 25 minutes	A meeting was cancelled (which the researcher was invited to attend) and a group of managers stepped outside for a break	Meeting was cancelled as a member of TM announced his resignation. This was unexpected. Feelings of resentment for the way the resignation is handled (carelessness) were noticeable. All 4 managers agreed the company needs to better clarify + communicate the reasons behind this resignation for the rest

MM: Middle Manager

#### Appendix 12: Examples of Observations

Documentation Data				
N	Type	Source	Description	Relevance
1	Company Document	Project Manager	Sites Locations for the Initiative	1- Identifying managers responsible for early stages and overall planning of the initiative
2	Company Document	Project Manager / Projects Management Office	Initiative Progression Summaries	1- Departmental strategy 2- Relating important dates to identified key events
3	Public Document	Company Website / Parent Company Website	Background Information / Annual Reports 2011,12,&13 / Strategic Orientation / Expansion Plans	1- Background information 2- Expansion plans and devoted resources to such plans
4	Company Document	Human Resources	Organisational/Departmental Charts	1- Establishing reporting relationships
5	Public Document	Local/Other Business Media	Business News Articles / Sector Analysis Articles / Executives Interviews	1- Background information about the company and its market 2- Information about its service offerings
6	Internal Correspondences	Managers Interviewed	Email Exchanges Between Key Middle Managers (among themselves + their own direct teams) During the Network Expansion Project	1- As a proxy for connectivity 2- Verification to interviews data (roles of managers in the initiative, stages of initiative's development, and particulars of connections)

7	Company Document	5 MMs	Minutes of Meetings (between different divisions & with main vendors)	1- As a proxy for connectivity
8	Public Document	Industry Regulator Body	Reports / Statistics	1- Information (reports & statistics) on the company, its competitors, and the industry

MM: Middle Manager.

### **Appendix 13: Documentation Data Overview**

<b>Documentation Data*</b>			
<b>Source</b>	<b>Before fieldwork</b>	<b>After fieldwork</b>	<b>Total</b>
Web Pages (Including Company's and Parent Company's pages)	12	21	33
News Articles "local"	6	31	37
News Articles "other"	2	5	7
Public Reports & Statistics	1	3	4
Business Diaries	0	2	2
Internal Documents			
Minutes of Meetings	0	5	
Organisation Charts	1	2	
Progression Plans	0	8	
Site Location Plans	1	12	
Subtotal	2	27	29
Total	23	89	112

**\* Only the Most Pertaining Documents Are Shown**

#### **Appendix 14: Quantitative Details of Documentation Data**

<b>Code</b>	<b>Associated Concepts</b>	<b>Coding Type</b>
Project, Phase 9, phase 10	Radio Planning, Sites Location Planning	In vivo
Project owner	Project Manager, [Name of] Project Manager	In vivo
Communication	Email(s), Meeting(s), Phone Calls, Weekly Meetings, Pop-up Meetings	In vivo / Simultaneous
Network Operation Centre (NOC)	Oversight, Involvement in all Stages	In vivo / Simultaneous
Understanding the Commitment	Whole Team Requirement, Engagement, Buy [People] in, Agreement	In vivo / Process / Simultaneous
Sites	Locations, Radio Planning, Changes, Swap/Swapping locations	In vivo / Simultaneous

**Appendix 15:** Examples of Open Coding for the Interviews

Code	Definition	Rules for assigning	Exclusions	Examples	Notes
Project	Network expansion project	Each time any background information, rationale for, or obstacles encountered about the project are mentioned in the text	If the project refers to some other project with no relation to the network expansion project	“Expansion of the network is one of the most focused points of our strategy, we are in a very competitive environment in [...] regarding the coverage, regarding the traffic regarding anything related to the network itself and how will we gain profit from our network so any expansion in the network definitely come purely under our strategic priority”	If other projects occurring simultaneously with the network project then they are noted (to see if connectivity is affected)
Sites	Locations and areas for the expansion project	Each time location name and type of work related to the expansion in that location is mentioned in the text		1) “Sometimes in some specific projects for example changing sites names, improving processing for putting sites on air” 2) “We are mainly responsible about commissioning new sites as a software and doing necessary configurations for any new sites coming to the service. We make sure that sites have no issues”	

**Appendix 16:** Examples of Codes in Coding Template

Code	Definition	Rules for assigning	Exclusions	Examples	Notes
Project, <u>phase 9</u> , <u>phase 10</u>	Network expansion project <u>or any of its phases, especially phases 9 &amp; 10</u>	Each time any background information, rationale for, or obstacles encountered about the project/phases are mentioned in the text	The project refers to some other project with no relation to the network expansion project	1) “Expansion of the network is one of the most focused points of our strategy, we are in a very competitive environment in [...] regarding the coverage, regarding the traffic regarding anything related to the network itself and how will we gain profit from our network so any expansion in the network definitely come purely under our strategic priority” 2) -----	If other projects occurring simultaneously with the network project then they are noted (to see if connectivity is (affected)
Sites	Locations and areas for the expansion project	Each time location name and type of work related to the expansion in that location is mentioned in the text		1) “Sometimes in some specific projects for example changing sites names, improving processing for putting sites on air” 2) “We are mainly responsible about commissioning new sites as a software and doing necessary configurations for any new sites coming to the service. We make sure that sites have no issues”	
<u>Formulation</u>	<u>Planning of the project</u>	<u>Each time activities related to devising plans for the project rather than implementing the plans are mentioned in the text</u>	<u>Planning for day-to-day tasks within each division</u>	“ <u>My role in this was to determine where the swap area will be so it corresponds with the number of the new sites we planned for. This was new to us because of the new technology and the massive number of sites in this phase. I needed to coordinate with the project manager in advance, before the implementation and all, how are we going to do this</u> ”	<u>If during implementation a certain event required new ways of executing a plan which affected the workflow of other divisions this was considered as a formulation activity (i.e. revising and/or setting a plan to deal with a critical event)</u>

**Appendix 17:** Examples of Revised\* Codes in Coding Template

\* Revisions underlined





# Memoing Summary Form

5-4-2015

ME: Fifth of April 2015. A second interview with Mr [REDACTED]. Thank you Mr [REDACTED] for taking the time for a second interview, I appreciate it. I just wanted to show you this (a flow chart produced by the researcher is presented) and check with you if my understanding for how the expansion project went is correct or not. So, this is the start of it and this is how it goes ..wanted to see if there was a feedback once the project is finished and how is that communicated

MM: yes, actually I believe it is somehow correct but let's comment on these, on this chart

ME: yes please, thank you

MM: we always start by both departments: marketing which is exactly geomarketing and radio frequency, which is completely correct. Once the, say, the decision is taken in order to go for the project. Our strategic committee which we name it CRB or SLT approves it. Once it is approved all other division[s] start the work regarding this project so at the point that the project is approved we have also out of engineering we have procurement department who negotiate[s] with the vendor.

ME: ok, for getting the supplies and material ..

MM: yes, the equipment and all. So, assuming the part of procurement completely done, regarding the main vendor, regarding the local suppliers if needed. At that point once we [engineering] have the main contract, we start with other subcontracts as well to fill in the gaps about the main contract. And we start work on ground actually, starting work on ground will make all these division[s] work somehow in parallel aaaaaa let's say infrastructure and implementation you mean it civil and telecom so yes completely, once it is approved civil starts the construction, telecom implementation start the preparation before the equipment reaches Jordan, this is without going in detail, the flow of equipment in Jordan, telecom installation, BSS, transmission, sites installed and getting ready to be on air, commissioning starting, once commissioning, zero alarm, RF again in the loop to do the testing of the sites to check if the sites are tested regarding the vendor, if the vendor has tested them [the sites] or not. They are responsible even if the vendor has tested the sites... they [RF] are responsible to check for SSV which is the signal site verification. They are making sure the report of the test is correct and without nothing [anything] wrong in the site. After this point we officially put the site on air this process follow each site

impl ??

label

ME: Is the test done by transmission different than the test done by RF? Is there more than one testing for the site before declaring it on air?

MM: no, actually I am talking about testing done by the RF

ME: aha, so after they have done the planning they do testing for it as well?

MM: yes, they choose a location, acquisition acquire it, civil construct it, we install it, it is ready to go on air, the vendor test[s] it, they [RF] check the test of the vendor to make sure it is done. This is the project we are talking about. In some projects the vendor does not do the testing, it is not his responsibility. It depends on the contract

ME: So here is where it starts and these are the following phases and here [pointing to the flow chart] is a... the maintenance, if something goes wrong, if the sites needs some work... correct?

MM: network operation centre in Umniah they got two roles actually: one is to do maintenance of the site after the sites goes on air. Once we launch it, once we announce it on air it is out of our responsibility [implementation team] it is operation and maintenance responsibility. But in this flow chart it is correct we need it [O&M] here, it is they do something crucial to put the site on air; they do the physical connection between the sites and the (???) [unfathomable acronym] if it is 2G, between the site and the RNC [Radio Network Controller] if it is 3G, this is what we name it technically they do the backhauling [the second role]

label

2nd role

2 labels

## Appendix 19: Memoing Summary Form: Face-To-Face Interview

5-4-2015 AN

ME: Fifth of April 2015. A second interview with Mr [redacted]. Thank you Mr [redacted] for taking the time for a second interview, I appreciate it. I just wanted to show you this (a flow chart produced by the researcher is presented) and check with you if my understanding for how the expansion project went is correct or not. So, this is the start of it and this is how it goes ..wanted to see if there was a feedback once the project is finished and how is that communicated

MM: yes, actually I believe it is somehow correct but let's comment on these, on this chart

ME: yes please, thank you *simultaneously??*

MM: we always start by *both departments*: marketing which is exactly *geomarketing* and radio frequency, which is completely correct. Once the, say, the *decision is taken* in order to go for the project. Our *strategic committee* which we name it CRB or SLT approves it. Once it is approved all other division[s] start the work *regarding this project* so at the point that the project is approved we have also out of engineering we have *procurement department who negotiate[s] with the vendor*. ME: ok, for getting the supplies and material..

MM: yes, the equipment and all. So, assuming the part of procurement completely done, regarding the main vendor, regarding the local suppliers if needed. At that point once we [engineering] have the main contract, we start with other subcontracts as well to fill in the gaps about the main contract. And we start work on ground actually, *starting work on ground will make all these division[s] work somehow in parallel* aaaaaa let's say infrastructure and implementation you mean it civil and telecom so yes completely, once it is approved civil starts the construction, telecom implementation start the preparation before the equipment reaches Jordan, this is without going in detail, the flow of equipment in Jordan, telecom installation, BSS, transmission, sites installed and getting ready to be on air, commissioning starting, once commissioning, zero alarm, RF again in the loop to do the testing of the sites to check if the sites are tested regarding the vendor, if the vendor has tested them [the sites] or not. They are responsible even if the vendor has tested the sites... they [RF] are responsible to check for SSV which is the signal site verification. They are making sure the report of the test is correct and without nothing [anything] wrong in the site. After this point we officially put the site on air this process follow *each site* *label* → In phase 10 the *of sites was much larger*

ME: Is the test done by transmission different than the test done by RF? Is there more than one testing for the site before declaring it on air?

MM: no, actually I am talking about testing done by the RF

ME: aha, so after they have done the planning they do testing for it as well?

MM: yes, they choose a location, acquisition acquire it, civil construct it, we install it, it is ready to go on air, the vendor test[s] it, they [RF] check the test of the vendor to make sure it is done. This is the project we are talking about. In some projects the vendor does not do the testing, it is not his responsibility. It depends on the contract

ME: So here is where it starts and these are the following phases and here [pointing to the flow chart] is a... the maintenance, if something goes wrong, if the sites needs some work... correct?

MM: network operation centre in Umniah they got two roles actually: one is to do maintenance of the site after the sites goes on air. Once we launch it, once we announce it on air it is out of our responsibility [implementation team] it is *operation and maintenance responsibility*. But in this flow chart it is correct we need it [O&M] here, it is they do something crucial to put the site on air; they do the physical connection between the sites and the (???) *[unfathomable acronym]* if it is 2G, between the site and the RNC [Radio Network Controller] if it is 3G, this is what we name it technically they do the backhauling [the second role]

*more MMs to interview?*

*Ask [redacted] if he was responsible or one of his 3 back-office supervisors*

*2nd role*

*2 labels*

*but [redacted]'s job or the PM remains. It is his team (impl. task) but how is his role as a PM continued??*

## Appendix 19: Memoing Summary Form: Face-To-Face Interview (continued)



## Contact Summary Form

**Contact Type:** Unstructured interview

**Site:** HQ of Umniah Telecom Co.

**Date:** 8 March 2015

**Participant(s):** Middle Manager - 3 levels below CEO

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**What were the main issues or themes that struck you about this interview?**

- 1- The manager was keen to ask about my interpretations/thoughts of the previous interviews I had with him.
- 2- The manager is knowledgeable about network theory (from an academic point of view) and its applications on management studies
- 3- The manager is aware of time pressures and man power shortages in various other units than his own. He is giving specific examples and dates on what has happened in a certain unit because of that although the outcome of that unit did not disrupt [directly] his own. \* this is in accordance to data from other interviews from those units

**Which aspect/variable of the research question did the participant refer to most centrally?**

- 1- High connectivity (always preferable) - own example (check with own unit/team?) / examples of others (needs checking with those others)
- 2- Low connectivity (avoid always) - own examples (check with his team/unit?) \* but who?
- 3- Strategic choice: upward influence role
- 4- Active role in strategy building within department

**Were there any new speculations, questions, or hunches about the interview data?**

- 1- The breadth of this manager's responsibility in the initiative - too much? If not, why given such wide tasks? (as he mentioned lack of resources in his unit and the struggle to balance operations with projects..)?
- 2- The tactics offered to overcome busy and changing schedules and addressing of issues.. did others do the same/similar? Was there an exchange of "ideas"/tactics?

**Appendix 20:** Contact Summary Form: Face-To-Face Interview

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