A Grounded Theory Study of Decision-Making within Informal Work Environments

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor of Business Administration (DBA)

By

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Declaration of Originality

The researcher, Ibrahim M. Abdellah, declares that this thesis research study represents original work that has not been previously submitted in support of an application for degree or academic qualifications. All work pertaining to other authors used within this thesis are identified as such, with appropriate citations, references, and acknowledgment of the authors.

I would like to thank my supervisor, Dr. Andreas Meiszner for his guidance and support during my thesis studies.
Abstract

This thesis’s objective was to discover a new understanding regarding decision-making inefficiencies within the researcher’s informal work environment (UMR), and construct a framework for informed action. Using the broad research question, ‘What data-emergent theory can help explain the impediments to effective decision-making within UMR’s informal work environment?’ the researcher started by conducting a foundational literature review that brought to the forefront the complexities of an informal work environment and the lack of relevant decision-making frameworks. An informal work environment was found to be characterized by Communities of Practice, emergent social groups, and self-interest, which were often incompatible with rational decision-making frameworks. Using core grounded theory concepts, a methodological framework of data collection and analysis was developed that focused on data centrality and discovering a data-emergent theory grounded within the research field. A core category of selective perception emerged that explained and captured the core phenomenon of sustained barriers to decision-making and selective bias towards information due to the interpretative nature of the socially constructed environment.

At the core of the discovered theory is that individuals have a tendency to reject decisions within an informal environment based on external variables not directly related to the decisions. Theoretical conceptualizations put forth the variables of communication, trust, and resources, each which influenced and was influenced by selective perception. By constructing a theoretical model explained through 9 propositions, this thesis shows that decision-making efficiency is impacted by selective perception, communication effectiveness, the level of trust, and available resources, with a strong interrelation between each variable. By integrating the emergent theory and literature, short-term action strategies as well as long-term action and recommendations based on the notions of adaptability and proactivity were formulated. The concept of adaptability was applied and tested for relevance and effectiveness within the research field, with positive results. This was further extended through long-term recommendations, which focused on core areas of the emergent propositions, and emphasized proactivity through self-initiated and continuous changing.

This thesis concludes with a discussion on the implications for practice, research, and suggestions for future research.
## Abbreviations and Acronyms

<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>BSP</strong>: Basic Social Process</td>
<td>A Basic Social Process refers to a core or key category that explains an occurrence within a phenomenon and provides scope within a data set. It is unique to grounded theory methodology and is highly focused on processes that describe occurrences such as social activities ending with ‘-ing’ (Glaser, 1992), such as ‘perceiving’ or ‘adapting’.</td>
</tr>
<tr>
<td><strong>BSPP</strong>: Basic Social Psychological Process</td>
<td>Basic Social Psychological Processes are derivatives of Basic Social Processes, and are focused on individual behaviors as opposed to a wider social structure regarding a phenomenon within a data set (Glaser, 1978).</td>
</tr>
<tr>
<td><strong>BSSP</strong>: Basic Social Structural Process</td>
<td>Basic Social Structural Processes are derivatives of Basic Social Processes, and are focused on the wider social structure as opposed to individuals' behaviors regarding a phenomenon within a data set (Glaser, 1978).</td>
</tr>
<tr>
<td><strong>GTM</strong>: Grounded Theory Methodology</td>
<td>Grounded Theory Methodology is a research methodology used to derive a practical inductive understanding of a complex social phenomenon through the systematic analysis of data of implicit social and psychological experiences that require investigation to be made explicit (LaRossa, 2005).</td>
</tr>
<tr>
<td><strong>UMR</strong>: UMR Industries Inc.</td>
<td>UMR Industries is a medium-sized manufacturing organization headquartered in Cairo, Egypt. It serves as the research field where the data collection and empirical research for this thesis took place.</td>
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Dedication

To my wife and parents
for their continued support,
encouragement, and patience,
during my doctorate studies
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Chapter 1
Introduction

1.0 Introduction

Decision-making is a never-ending perpetual human activity. Its importance is self-evident in how decisions can directly and drastically impact outcomes and behaviors. As such, it has garnered significant interest across a wide variety of different disciplines, such as psychology, consumer behavior, marketing, law, economics, and even medicine. The concept of decision-making can initially appear deceptively simple, as it is founded on certain principles of rationality, logic, and experience. It has attracted significant interest in the literature, as researchers present and propose a ‘breaking-down’ or reductionist approach to decision-making, where modeling of theories are developed, such as SWOT analysis (Yuksel & Dagdeviren, 2007), cost-benefit analysis (Eisenhauer, Heckman, & Vytlacil, 2015), and categorization (Shepherd, Williams, & Patzelt, 2015), all aimed at using explicit and known information to achieve efficient decisions that are of maximum effect. Such ‘models’ are contained, delimited, and sharply defined, as decision-making is approached in a linear manner focused on the notion of cause-and-effect (Tamir, et al. 2015; Vitoriano, et al. 2015). Most decision-making theories are therefore, problem-focused, as they arise in response to situational problems where previous decisions’ results can act as benchmarks for new decisions. Decision-making theories and models are aimed at providing decision-makers with the necessary tools and processes that would enable them to maximize decision output based on the input variables (Santos & Rosati, 2015). The use of such models can be highly effective and are popular on both a theoretical and practical level.
This thesis is an exploratory study that aims to discover a theoretical framework\(^1\) that explains the potential impact of an underlying core social and contextual phenomenon of informality on decision-making discourses within the researcher’s work environment, and to develop a potentially effective framework for resolution through informed action. This is achieved through the adoption and utilization of grounded theory principles in order to facilitate the emergence of relevant empirical data from the research field that relates directly to the contextual area being researched. The researcher’s work environment is characterized by the existence of notions of informality that closely reflect elements of an informal work environment\(^2\), including an unofficial and inconsistent communication structure and pattern, emergent social groups, and generally divergent aims and goals to those held by the formal organizational structure. An informal work environment emerges from within a formal organization to meet “the needs of the individuals with similar backgrounds, values, hobbies, interests, and physical proximity [and] experiences and feelings” (Swansburg & Swansburg, 2002, p.331). As an environment, it is considered unique as individuals with shared values and attitudes establish their own structural processes (Houpt, Gilkey, & Ehringhaus, 2015), and retain unique communication frameworks and mechanisms of control (Michelson & Mouly, 2002; Miller & Rice, 2013), that may deviate substantially from the organization’s formal structure in which it is based (Bower, 2003). While a formal organization operates upon an intentional and formal structure of identified processes and roles, an informal work environment is characterized by an emergent social and personal network of practices that are usually not officially recognized by the formal organizational structure (Heckscher, 2015). There is significant emphasis on personal attitudes, acceptance, emotions, flexibility, and spontaneity (Ingvaldsen, 2015). Most research on decision-making models and theories avoid making a distinction between the formal organization and the informal work environment, often viewing both areas as one, particularly within the context of a specific organizational theory. While this potentially increases a theory’s breadth, in addition to the fact that there can be

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\(^1\) The terms, theoretical framework, theoretical construct, emergent theory, and theory, are used interchangeably within this thesis. Section 1.3.3 details how this thesis defines a theory.

\(^2\) The terms ‘informal work environment’ and ‘informal environment’ are used interchangeably depending on the context of the text.
significant overlap between both formal and informal work environments, the underlying
dynamics of practicality between both types of organizational environments can differ
significantly. Diefenbach & Sillince (2011) highlight this distinction by noting that each
type of environment retains its own cultural, communication, and perception,
frameworks that can be drastically different.

Grounding this research within an informal work environment allows an emergent
conceptualization to develop on how such environments may impact decision-making
discourses, where models can no longer be as effective given the contextual informality
and dominant implicitness of knowledge. The importance of this approach is that it
theorizes on areas where established decision-making models are lacking in
effectiveness due to an environment's informality, and where decisions depend on the
interplay of various subjective ideas and rhetoric. Using grounded theory principles
allows capturing a core social phenomenon on the dynamic interplay between decision-
making complexity and the informal work environment through a process of cyclic data
analysis and reflective observations, to create informed action (Akhavan, Jafari, &
Fathian, 2006).

This chapter provides the reader with a presentation of this thesis's research
background, research problem, objectives, and utilized methodology.

1.1 Why Research Decision-Making within an Informal Environment

The concept of decision-making has long been a major component of modern and
dynamic organizations with an extensive history of theory development and modeling
that began in the mid-20th century within the disciplines of economics and psychology
(Simon, 1979). Its foundation within organizations was laid by Simon (1947), who
argued that behaviors are best understood through decision-making processes.
Researchers and academics identified a need to better understand the underlying
psychological processes and behaviors that influence each other within organizational
environments. This drive was based on the belief that the human mind’s capacity was limited in relation to the size of problems where effective and objective solutions to those problems was required (Simon, 1957a), leading researchers to theorize on the evolving conditions within decision-making paradigms and conceptualizations. New paradigms and theories continue to be developed and refined today as researchers attempt to argue new philosophical viewpoints (Dunbar & Starbuck, 2006; McKelvey, 2006; Van de Ven, 2007).

Despite the fact that significant wealth of information regarding decision-making paradigms is available to organizations, there appears to be a general disconnect between those paradigms and the structural characteristics of an informal environment, particularly within the context of practical application (Clampitt, 2012). Although notions such as Communities of Practice and informal networks can help explain occurring phenomena within an informal environment, as well as its characterization as a concept, as discussed within Chapter 2, this thesis is focused on understanding how informal work phenomena impact decision-making discourses. The application of ‘common-sense’ and rational decision-making processes falter within informal environments due to the potential for conflict of interest and the ability of areas within an organization to impede the successful implementation of decisions viewed as unfavorable by segments of various stakeholders (Astley & Zajac, 1991). This is also supported by Scott & Davis (2015) and Clegg, Hardy, & Nord (1999), who argue that rational decision-making models are considered only selectively effective within certain organizational environments and contexts. This disconnect has also been experienced by the researcher working within an informal environmental context, where decision-making models and paradigms appear to be ineffective, as other potentially implicit and poorly understood variables appear to create barriers to their effective implementation.

As a long-term employee at UMR Industries Inc. (UMR), a medium-sized organization based in Cairo, Egypt, the researcher was intrigued by the existence of dysfunctional
and inefficient\textsuperscript{3} decision-making processes where decisions frequently failed to meet required goals. Such failures occurred despite significant efforts by UMR’s management to increase decision-making efficiency by utilizing formalized approaches such as creating codified decision-making sequences (models) and providing employees with frequent management training. The current decision-making approach is mechanistic in its application, with significant emphasis on standardization, routines, procedures, and rules. Its impact is cyclic in that the more decisions fail to increase in efficiency, the greater the emphasis on rules and regulations. The persistent inefficiencies usually lead to and culminate as collective frustration, redacted or poor decisions, and an overall sense of resignation to the status-quo as an ‘unsolvable’ problem. Decision inefficiencies eventually ceased to be a main focal point of attention within UMR, particularly given that mechanistic decision-making processes were considered rational, logical, and ‘make sense’, leading to the oversight and the lack of consideration of any other options.

During the researcher’s DBA studies, the notions of informal and formal organizational environments were discovered, which encouraged the researcher to reflect on whether UMR could retain elements of an informal work environment, and whether such informality could play a role in decision-making inefficiencies. Contrasting established theories and characteristics of informal environments, to UMR, such as grapevine communication, control mechanisms, and the internal emergence of groups, it became clear that UMR retained significant characteristics of what the literature views as an informal environment\textsuperscript{4}. While using the literature to further research the topic suggested a potential correlation between informal environments and the dynamics of decision-making, the lack of established and conclusive theories on such a correlation mandated that this could only be considered a postulation or speculation. The researcher developed a personal interest in understanding how and whether such informality could explain or mitigate the current decision-making inefficiencies and what solutions may

\textsuperscript{3} Decision-making within UMR is termed as ‘dysfunctional’ and ‘inefficient’ as a result of researcher experience and observation. Such a broad characterization is meant to be reflective of a current decision-making ‘problematic’ situation that is unclear and not fully understood.

\textsuperscript{4} Appendix A presents a tabulated analysis of UMR’s informal environment using the framework of informal organizations as presented by Chitale, Mohanty, & Dubey (2012, p.232).
exist. Hence, the topic emerged as a potential area of research for this thesis and formed the basis of the abstract wonderment, which was used to initiate this research, as discussed in Chapter 4. Given UMR’s problematic situation and the benefits of its understanding and resolution, there is practical value in researching decision-making within an informal work environment, which can contribute to a greater understanding of the variables and notions that cause those barriers and how they can mitigated.

In addition to the practical relevance, the absence in contemporary literature of research draws a direct understanding of the impact of informal work environment on decision-making discourses, which is discussed in greater detail in Chapter 2, provides theoretical and research value. Most literature devoted to this area such as Blau & Scott (1962), Farris (1979), Lindblom (1959), and Weber (1947) are traditional research that does not take into consideration recent theoretical developments within organizational theory, and therefore, their theories may no longer be fully applicable or as effective today given the dynamic changes in business environments over the past decades. Furthermore, contemporary literature on areas of decision-making avoid making a distinction between formal and informal environments, as highlighted in the foundational literature review in the next chapter, creating an opportunity for this research to capitalize on this gap, and develop a contextual understanding of how decision-making takes place within a modern informal work environment that is relevant theoretically and practically.

1.11 The Nature of Decision-Making Inefficiencies within UMR

This thesis is grounded within a contextual situation relating to UMR’s informal work environment where inefficiencies in decision-making exist. This section serves two goals: i. clarify and present the types of decisions that are of interest to this thesis: ii. define what this thesis considers as ‘inefficiencies’ in decision-making.
It is possible to segment decision-making within UMR into two broad categories: strategic and routine\textsuperscript{5}. Strategic decisions are considered those that at their core, are long-term decisions, and are fundamentally concerned with strategic areas such as market competitiveness, expansion into new markets, policy matters, new product development, budgeting, product design, research & development, and market positioning. They are generally non-repetitive and are taken after the consideration of various alternatives. In the researcher’s experience, strategic decisions are usually considered immune to the organization’s informal environmental elements, and are strongly ingrained within UMR’s formal structure, where they are rationalistically assessed, approached, and implemented, by management.

This thesis’s interest is solely focused on routine decision-making, which are decisions that retain certain identifiable but critical characteristics:

i. Retain a relatively short implementation and turnaround time, which may be as short as a few hours to as long as only a few days.

ii. They do not require consensus, and can be spontaneous. They are usually made without a full background fact analysis, as they are not deemed to require a significant investment of time or effort.

iii. They are central to the daily operations of the organization, but not to the organization on a strategic level.

iv. They are numerous and varied, and can differ throughout a typical workday.

v. They have no set form or shape and are considered reactive to conditions and situations that emerge throughout a typical workday or workweek.

Generally, routine decisions occur frequently and individually, can be deemed ‘non-critical’ decisions, although collectively can impact the overall success of the organization. They include areas such as quality control, communication with suppliers or customers, and delivery and dispatching. Their inefficiency is most evident in missed

\textsuperscript{5} Decisions, decision-making, and routine decision-making are used interchangeably within this thesis, depending on the text’s context.
deadlines, poor preparation, dispatching incorrect or incomplete orders, and significant backtracking. Based on the researcher’s experience, this has contributed to a general sense of organizational inefficiency reflected in higher than expected resource expenditure and delays in meeting required production and delivery deadlines, which to customers, appears to be a lack of effective management. Table 1.1 presents a series of examples of typical routine decisions that can occur on a daily basis.

<table>
<thead>
<tr>
<th>Area of Concern</th>
<th>Focus</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>Deciding how to repackage a product</td>
<td>Packaging done incorrectly, resulting in damage to products</td>
</tr>
<tr>
<td>Communication</td>
<td>Deciding how to communicate with new suppliers</td>
<td>Suppliers receiving inconsistent messages from individuals within UMR</td>
</tr>
<tr>
<td>Dispatching and Delivery</td>
<td>Deciding whom, and how, to arrange for a mechanical lift in order to load delivery vehicles</td>
<td>Indecisiveness resulting in delay in loading delivery vehicles</td>
</tr>
</tbody>
</table>

Table 1.1 Examples of Routine Decision-Making Inefficiencies within UMR

This thesis views decision-making inefficiencies as decisions that have failed to meet the required and expected level of results, which were deemed to be a deviation from a certain standard of expected efficiency. Examples of such inefficiencies are also presented in Table 1.1, and highlight a gap between a decision’s expected end-result and the actual or realized end-result. While the literature highlights that a certain degree of inefficiencies can be considered normal and acceptable within an organization (Trivedi, 2002), a high frequency or degree of inefficiencies generally denotes an underlying problem or issue (Miles, et al. 1978). As previously discussed in Section 1.1 and subsequently discussed throughout this thesis, the nature of the problem remains vague and poorly understood, particularly regarding its causes and reasons for persistence. A clear reasoning or cause-and-effect has not been identified by UMR, as the problem continues to linger. Grounded theory principles are adopted in order to explicate empirical data directly from the social environment in which the inefficiencies

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6 These types of decisions were identified prior to the commencement of this research by the researcher, as well as confirmed within empirical data gathered in interviews and observations as discussed in Chapters 4 and 5.
exist, and to discover a theoretical framework that can help explain the problem whilst considering the potential role of the informal work environment in which it is ingrained.

This thesis’s data collection field involved a total of six departments\(^7\) where most routine decisions occur. These departments, namely four manufacturing departments, Procurement and Supplier Relations Department, and the Sales and Delivery Department, were selected by the researcher through purposeful sampling based on three criterion:

i. Based on the nature of work operations within those departments, decision-making is a dynamic process, has a short turnaround time, occur frequently, and rapidly, providing an opportunity for this research to capitalize on capturing decision-making inefficiencies.

ii. They retain elements of informality and are considered as informal work environments. The criteria used for assessing informality, as discussed in Chapter 2, include grapevine communication, high emphasis on socially based interactions, a lack of formal leadership, and an ingrained focus on department member satisfaction as opposed to organizational efficiency and profitability.

iii. They retain a sufficient number of employees from whom data could be collected through interviews and observations.

Although it is possible to observe informal elements within UMR’s other departments, their decision-making frameworks are significantly more rigid with little dynamism. They are concerned and focused on strategic decision-making on a broader level, hence, pertinent decisions do not occur on a daily basis. Therefore, the researcher believes they would lack sufficient data to contribute to this research’s objectives, and including them within the wider data collection framework may introduce irrelevant variables that would add little to no research value.

\(^7\) Discussed further in Section 4.2 within Chapter 4.
1.2 The Research Problem: Decision-Making Inefficiencies within an Informal Work Environment

As a research methodology, grounded theory discourages a researcher from identifying problem specifics that may create a framework of 'presumptuousness' or a priori deduction towards understanding an organizational problem prior to the completion of the research’s data collection and analysis stage. Rather, the focus is on the identification of a broad area of interest or concern that assists a researcher in avoiding a predetermined or biased thinking process towards a problem area that may not yet be fully understood through a process of induction (Corley, 2015). Instead of speculating to the specific causes or dynamics of inefficient decision-making within UMR’s informal work environment as discussed in Section 1.1, grounded theory’s focus on an exploratory framework negates the need for a premature specific research problem makes it an appropriate approach to adopt. This approach is clarified by Glaser (1992, p.22) who states that a researcher:

“…moves in with the abstract wonderment of what is going on that is an issue and how it is handled, [as] the research question in a grounded theory study is not a statement that identifies the phenomenon to be studied. The problem emerges and questions regarding the problem emerge by which to guide theoretical sampling [during data collection and analysis]”.

Using decision-making inefficiencies within UMR’s informal work environment as a preliminary focal point, it is expected that by using grounded theory’s data collection and analysis processes, a clearer research problem will emerge that continually redirects the research towards greater clarity of the problem area (Gilgun, 2015; Ruppel & Mey, 2015). By not being bound to specific concepts that may or may not relate to the identified problem area, this facilitates the free and non-biased emergence of theory from data as it is informed through data collected from participants’ ideas, mindsets, views, behavior, attitudes, and perspectives (Oktay, 2012). The focus therefore, is on authentic emergence of the actual underlying implicit causes to decision-making
inefficiency, as opposed to forcing the data to fulfill a preconceived notion or idea, which occurs when specific research problem or questions are formulated early on within a research (Glaser & Strauss, 1967).

This thesis’s selected area of concern was informed by the researcher’s experience, observation, and by previous studies, most notably by Simon (1979), Clampitt (2012), Milkman, Chugh, and Bazerman (2009), and Diefenbach & Sillince (2011). The evident existence of dysfunctional decision-making frameworks within UMR and the lack of established theories on decision-making within informal work environments, as discovered and presented in Chapter 2, played a significant role in legitimatizing the area of concern as a research topic. It also formed the core of the abstract wonderment where the aim of discovering a core social process that explores and explains the underlying decision-making phenomenon was developed. Chapter 4 presents how through the participation of organizational members contributing to the data collection and analysis processes, the area of concern becomes clearer and more focused. Access to the research field and data was facilitated through agreements with the organization’s upper management and provisions were made for significant flexibility to conduct the research as required. Research in the field was composed of semi-structured interviews, non-participatory overt observations, and access to documents pertaining to historical data to substantiate the emergent empirical data. Interviews, which formed the core of the data collection process and allowed for insight into participant’s lived experiences, were conducted through 4 stages over a period of 18 months with 23 initial participants\(^8\), and were used to encourage the emergence of underlying implicit data that would help explore and explain this thesis’s area of interest and were focused on ‘what and why’. Observations took place on 3 separate occasions, and were undertaken in order to explore the ongoing field-based interactionism between participants and to complement the interview-based data. The final data collection source used was historical documents, which are a form of record-keeping by UMR, and were utilized to identify patterns to that can broaden the collected data and either substantiate, challenge, or refute empirical data. A total of 9 historical documents were

\(^8\) 23 initial participants took part in the first stage of interviews.
used, representing a total of 13 projects and their results. Chapter 4 provides a comprehensive presentation of each data collection source used.

As this research progressed, it was discovered that a core category, which is a variable derived through the systematic analysis of empirical data using grounded theory principles, of ‘selective perception’ emerged as a basic social process (BSP), and was explained by three emergent concepts of communication, trust, and resources. Collectively, they were used to construct the emergent theoretical framework or theory, which presented data patterns that explained what is occurring within the research field regarding decision-making inefficiencies. Retaining elements of BSPPs and BSSPs⁹, selective perception explained the variations in the data, which when intertwined with the literature, a plan for action that involved short-term, recommendations, and long-term frameworks was developed that attempted to mitigate the underlying organizational issues that emerged from within the contextual situation.

A detailed presentation of how selective perception emerged as informing the research problem, and its role within the emergent theory, is presented in Chapters 4 and 5, while the action framework developed based on the theory is presented in Chapter 6.

1.3 Applied Research Methodology: Grounded Theory Principles

This thesis is a qualitative study that derives its data collection and analysis framework from, and relies upon, relevant grounded theory principles. It is used to develop an understanding of UMR’s underlying organizational problem and create a framework for informed action through the utilization of emergence, coding, and analysis. Developed in 1967 by Glaser and Strauss, grounded theory is a systematic research methodology that facilitates analyzing complex social environments whilst avoiding assumptions (Kennedy & Lingard, 2006), and is considered an appropriate methodology to rely upon

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⁹ Psychological Process (BSPP) and Social Structural Process (BSSP) are frameworks that explain variations within the data. They are discussed in-depth in Section 4.5.4 in Chapter 4.
for this research as it attempts to explain an unclear problem area within a social setting. It is selected as a research methodology due to five main reasons:

i. Given the fact there are a lack of theories or paradigms that directly address decision-making within informal work environments, as shown in Chapter 2, it became increasingly challenging to approach this thesis’s topic using a deductive research methodology where hypotheses could be used. Rather, the researcher believes that an inductive-based methodology focused on an exploratory approach to understanding an unclear organizational problem was necessary. Grounded theory principles, as presented in Chapter 3, fulfill the criteria required to effectively address this thesis’s aims and goals.

ii. The current research problem lacks a clear understanding of its underlying dynamics, and new insights are required in order to create a framework for resolution. Grounded theory is most appropriate when “there is already some knowledge about the research phenomenon but a new point of view is required” Backman & Kyngas (1999, p.148), as it focuses on empirical data that reflects the viewpoints, ideas, and perceptions, of individuals involved within the problem area. It adopts and emphasizes a neutral stance towards social action within a contextual situation that is exploratory, and is guided in the early stages of the research through abstract wonderment that allows the problem to become clearer as the research progresses (Berge, et al. 2012).

iii. Grounded theory emphasizes theoretical sensitivity towards emergent empirical data through data emersion with a fundamental focus on contextual understandings and relevance (LaRossa, 2005), especially within qualitative research studies. This allows explicit and implicit data to emerge, whilst identifying patterns and data connections (Glaser, 1992). It also allows the research to focus on understanding what is occurring within the research field through a process of inductiveness as opposed to a focus on generalizability and verification (Glaser, 1978).

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10 Theoretical sensitivity is discussed in-depth in Section 3.1.2 in Chapter 3
iv. The notion of theoretical sampling\textsuperscript{11} is a cornerstone grounded theory principle that requires researcher reflexivity, questioning insight, and reflection. It allows the research to continuously adapt to the emerging data as opposed to adopting a rigid linear research approach (Draucker, et al. 2007). This is particularly important given that the dynamics of the problem and the type of data that may emerge remains obscured, unclear, and ingrained within an implicit social framework. An adaptable methodology that allows for greater flexibility in analyzing the emerging data and understanding the underlying problem is considered a desirable approach to data analysis, as it would allow the researcher to fine-tune the methodology to fit the context of the research (Charmaz, 2014).

v. Grounded theory allows a core category that relates to the area of concern to emerge from the data through a process of ‘coding’, which is a type of inductive data analysis based on pattern identification (Poteat, German, & Kerrigan, 2013). The core category, when further developed and refined based on the available data, allows a problem-relevant data-grounded explanatory theory to emerge that can allow this thesis to understand the underlying phenomenon and provide an appropriate framework and direction for action.

The grounded theory methodology principles adopted, including data collection and analysis processes, and how they are used to facilitate understanding UMR’s contextual situation, are detailed in Chapter 3.

**1.3.1 The Role of the Literature within this Thesis**

This thesis includes a foundational literature review that provides the necessary informational background as it informs the research topic. Its purpose is to provide the reader with a peripheral understanding of the research topic and provide a framework of theoretical sensitivity for the researcher during the data collection and analysis stages.

\textsuperscript{11} Theoretical sampling is discussed in-depth in Section 3.2.1 in Chapter 3
The role of the literature within grounded theory or research that has adopted grounded theory principles has generally been considered contentious. It has created a certain level of incertitude as to whether it has a role prior to data collection and analysis completion, for fear that doing so would ‘force the data’ as opposed to allowing the theory to emerge (Strang, 2015). This uncertainty arises from Glaser & Strauss’s (1967, p.37) statement regarding the role of literature within grounded theory:

“an effective strategy is, at first, literally to ignore the literature of theory and fact on the area under study, in order to assure that the emergence of categories will not be contaminated by concepts more suited to different areas. Similarities and convergences with the literature can be established after the analytic core of categories has emerged”.

As a result, many researchers assume it is central to grounded theory tenets to initiate the research without any prior knowledge of the research topic (Suddaby, 2006), hence, fully avoiding the literature. Additionally, given Glaser’s (1998, p.67) statement that “the grounded theory researcher [needs to be] as free and as open as possible to discovery and to the emergence of concepts, problems and interpretations from the data”, grounded theorists may view the literature with hesitancy (McGhee, Marland, Atkinson, 2007). However, Glaser (2001) and other subsequent researchers on grounded theory have clarified this position by stating that while a researcher should avoid conducting an extensive or exhaustive literature review prior to data collection and analysis, it is erroneous to enter the field without any prior theoretical knowledge. According to Suddaby (2006, p.635), “formulation of grounded theory was never intended to encourage research that ignored existing empirical knowledge”, while Barley (1990) highlights the looming weaknesses and the impracticality of research where a researcher is completely unknowledgeable regarding the topic of research.

Although Glaser (1978, 1998) had intended that there be a role for the literature prior to data collection and analysis, this role needs to be properly understood in order to avoid invalidating the core foundation of adopted Glaserian grounded theory principles.

The decision to undertake a foundational literature review prior to completing the data
collection and analysis stages, is to:

i. provide the researcher and reader with a peripheral understanding of the various concepts and theories in relation to the area of interest, which allows the researcher theoretical resources (Dunne, 2011).

ii. allow the researcher to be ‘theoretically sensitive’ in order to allow conceptualization of theories as it emerges in the latter stages of the research (Goulding, 2001).

In keeping with grounded theory principles, its role is not:

i. to assist in the emergence of the research’s core category, which should be emergent from empirical and not secondary data (Glaser, 1978).

ii. to identify literary or research gaps. Doing so may result in the researcher entering the research with preconceived notions of what the emergent data should address (Glaser, 1992).

In order to further avoid allowing the literature review invaliding grounded theory paradigms, researchers suggest that grounded theorists broaden their understanding of the literature to areas that even may seem unrelated as opposed to focusing solely on one substantive area, and to be self-aware of how the literature may influence their research (Suddaby, 2006). The literature review has therefore been intentionally broadened to include core and peripheral areas on literary discourses relating to decision-making within formal and informal work environments.

While this thesis identifies a literary gap regarding a correlation between informal work environments and decision-making, this pertains only to the topic in a broad manner. No literary gaps are pursued or identified regarding the emergent theoretical framework or theory, emergent codes, or categories.
1.3.2 Adopting a Qualitative Data Method

While grounded theory as a research paradigm is sufficiently flexible and broad to accommodate a qualitative or quantitative approach, or a combination of both data methods (Glaser, 1992), this thesis is developed and constructed as a qualitative research. Deciding on a qualitative method was the result of recognizing that a qualitative framework would better facilitate exploring decision-making inefficiencies within a contextual situation and would assist in meeting the overall aims of this research.

Qualitative research as a paradigm has been gaining strength within the field of management and the areas of organizational phenomena (Chu, 2015). Its emergence and momentum has continued upwardly, despite being partially hampered by positivistic stigmatizations and invalidations (Eriksson & Kovalainen, 2015). While qualitative research is a broad terminology that could contain a very wide variety of paradigms, a “qualitative researcher embarks on a journey of discovery rather than one of verification [that] is likely to stimulate new leads and avenues of further research” Goulding (2002, p.16). It is often considered in the literature as reflective of an interpretivist epistemology and exploratory research (Klenke, 2015), while quantitative methods are viewed as positivist and empiricist, with greater focus on a high level of objective measurability (Golafshani, 2003). As they retain separate and distinctive epistemologies it is important for a research to clarify its position as a framework that supports the chosen method (Whittemore, Chase, & Mandle, 2001).

When choosing between qualitative and quantitative research, Crotty (1998) suggests a researcher consider four questions:
1. What is the used epistemology?
2. What is the theoretical perspective or philosophical framework of the methodology used?
3. What is the used methodology?
4. What methods will be used for data collection?
Using the above questions as a reflective framework, the researcher considered qualitative research as an appropriate method given the thesis’s aims, goals, and data structure, particularly its focus on attempting to understand a phenomenon derived from the viewpoints, ideas, and opinions, of participants. Qualitative research is most appropriate when the goal is the illustration, conceptualization, and description, of a phenomenon, where data collection involves methods such as interviews and observations (Creswell, 2013a). This is followed by sense-making and deriving patterns and insights from the data that would eventually inform the problem situation and lead to a potential resolution by developing a dense and descriptive theory.

The utilized research framework and its commensurability with a qualitative framework is described in detail in Chapter 3, and includes an in-depth analysis of the methodology, adopted epistemological and philosophical stance, and how data is collected and analyzed.

### 1.3.3 Defining the Emergent Theory

For researchers adopting grounded theory or its principles, the general aim is the discovery of an emergent substantive theory, which in some instances, can also be upscaled to formal theory (Glaser, 1978). While this thesis uses core grounded theory principles to construct the data collection and analysis framework, a substantive theory in the traditional sense as intended by grounded theory is not the ultimate aim of this research. A substantive theory is traditionally understood to be ‘contributive’ and needs to engage with existing literature and theories, and offer a certain level of generalizability and abstraction (Urquhart, 2012). Essentially, it is considered to retain a certain level of scope that allows generalizability beyond the immediate research area with broad applicability. Building substantive theory implies ‘theorizing’, which assumes that the substantive theory is extending or broadening extant literature (Hammersley, 1995).
This thesis however, differentiates between a substantive theory that is contributive to existing theoretical constructs and the more basic formulation of a ‘theory’ that is considered a theoretical framework that presents a conceptualization, description, and illustration, of a contextual problem that is confined by and grounded within a particular setting and situation (Creswell, 2002). It is constructed based upon a framework of assumptions, interpretation, concepts, and serves as an explanatory framework that emerges as a result of data coding and constant comparison. In other terms, the emergent theory is considered a ‘theory’ using a lower case 't' as opposed to a theory with a capital 'T', while the term ‘substantive’ is intermittently used when necessary to emphasize a particular technical concept, and in order to maintain linguistic consistency with the utilized grounded theory principles.

To assess the validity of the emergent theoretical construct or theory, this thesis relies upon two criteria originally proposed by Glaser (1978) to assess substantive theories, (i) whether the theory is commensurate with the situation, and (ii) whether the theory enriches stakeholders’ ability to address the situation. As is shown and discussed in Chapter 5, the emergent theory within this thesis meets both criteria as (i) it derives its empirical data directly from participants whom are involved with the problem situation on a daily basis, and (ii) is relatable to the organizational environment from which it was grounded as it explains an existing decision-making related phenomenon and provides the organization with an explanatory framework upon which actionable and relevant knowledge could be based.

According to Glaser and Strauss (1967, p. 31) researchers can present emergent theories as either “a well-codified set of propositions or [as] a running theoretical discussion, using conceptual categories and properties”. This research uses propositions to link the emergent theory with the situational context in which it is grounded. The reason propositions are used as opposed to a theoretical discussion is to delimit the boundaries of the theory and to structure the theory into explicit formulations that easily and clearly present the established relationships between the
core category, core phenomenon, and the main concepts. The emergent theory is presented and discussed in Chapter 5.

1.3.4 How this Thesis Generates Actionable Knowledge using Grounded Theory Principles

Although grounded theory’s framework is primarily and traditionally considered a theory-generation methodology (Glaser & Strauss, 1967), it is also considered an appropriate approach to generating actionable knowledge (Akhavan, Jafari, & Fathian, 2006). Its flexibility and contextual-focus on situational analysis within social settings discovers understandings that are relevant and relatable to practitioners. It supports organizational learning and practice as it focuses on evidence informed by the practice environment, whilst encouraging interpretation of data and taking into consideration organizational experiences and knowledge (Denyer & Tranfield, 2006). This is also supported by Gupta, Iyer, & Aronson (2000, p.671), who state that “grounded theory facilitates the generation of theories of process, sequence and change pertaining to organizations, positions, and social interaction”. Therefore, this thesis views grounded theory principles as fully relevant to the aim of discovering an emergent understanding, such as propositions, that can be actionable and be used to bring forth research recommendations that can be used to formulate organizational change.

1.4 Research Objectives

This thesis’s research objective is to develop an informed understanding of the phenomenon behind current inefficient decision-making within UMR’s informal work environment, and to create a framework for action based on this understanding that could potentially address the problem. This is achieved by pursuing and discovering an emergent explanatory theory that uncovers and explains an underlying phenomenon that can form the basis upon which, in conjunction with the literature and a discourse of
researcher interpretation, a relevant framework for change can be developed and implemented. A rigorous and iterative analysis through coding processes of emergent data as well as of the literature is conducted to uncover explicit and implicit data. In order to guide the research, data collection, and to facilitate the emergence of the explanatory theory, a general and broad research question was utilized:

*What data-emergent theory can help explain the impediments to effective decision-making within UMR's informal environment?*

The research question was used as a preliminary and initial tool to start the research, with the expectation that as data is collected and analyzed, new ideas and concepts will morph the research question into more refined and data-relevant questions. Hence, this initial research question is data-dependent and forms part of grounded theory’s ‘abstract wonderment’ (Cutcliffe, 2005). As discussed in Chapter 4, abstract wonderment is rooted in the researcher’s work experience as well as previous understanding of decision-making and the unique dynamics within UMR's informal work environment.

Once the emergent theory is developed, it is further saturated using the literature, and its core concepts are implemented into action to analyze its reliability and ability to address the contextual situation.

**1.4.1 An Emergent Theoretical Understanding**

As a result of the data collection and analysis processes utilized, selective perception emerged as the core category, which explained the occurring phenomenon within the research field. As highlighted in Section 1.2, it is considered a basic social process, and is explained by the three interrelated peripheral concepts of communication, trust, and resources. Collectively, they are reflected in the discovered core phenomenon of ‘sustained barriers to decision-making’.
The emergent theory, which is also presented as a model, is illustrated in Figure 1.1.

In order to discover and derive the emergent theory and model, analysis of the empirical data is conducted, as well as an in-depth exploration of the identified contextual situation, which are described and presented in Chapter 4.

The theory is also presented as a series of 9 emergent propositions that interrelate the emergent concepts and explains the underlying core phenomenon and organizational problem. They are presented and discussed in detail in Chapter 5.
1.4.2 Formulating Informed Action

This thesis uses the emergent theory to create actionable knowledge. The objective of action is to discover empirical data that supports the theory’s relevance to the situation problem as well as to identify and refine approaches that may lead to eventual resolution or mitigation (Lingard, Albert, & Levinson, 2008). Two types of action are presented within this thesis, (i) short-term action, and (ii) long-term action through researcher recommendations.

The decision to apply two types of action was based on the nature of the proposed changes, which involved a shift in current organizational thinking from a mechanistic approach to one that adopts adaptability and proactivity. Short-term action, which integrates the notion of adaptability, was designed in order to have a short turn-around time and quick results. The notion of adaptability, which is discussed in Section 6.1.1, encourages individuals within UMR to adapt their approach to the existing phenomenon as opposed to attempting to change the phenomenon in order for it to conform to existing organizational discourses. It views the informal work environment as a competency within the overall organization, and encourages individuals to adapt their mindsets, approaches, and attitudes, in order for those competencies to emerge.

Long-term action is presented as a narrative discussion and recommendations on how UMR could maintain momentum for continuous change and improvement by shifting its attitudes from being reactive to being proactive. Essentially, it is “about making things happen, anticipating and preventing problems, and seizing opportunities [and] involves self-initiated efforts to bring about change in the work environment [in order to] achieve a different future” (Parker, Bindl, & Strauss, 2010, p.827). Given that its framework is based on the future and continuous change, its realizable value in its adoption is considered to be accurately calculable only after prolonged time periods. So, while short-term action is based on individuals changing themselves, long-term action is based on UMR changing inadequate areas within the organization that have been identified in the emergent theory, providing a framework for continuous improvement.
and positive change.

Chapter 6 details the structure and composition of both, the short- and long-term action and recommendations.

1.5 Implications for Research and Practice

Although the aim of the emergent theory within this thesis is to explore and understand the inefficiencies of decision-making within UMR’s informal work environment and create an informed direction for action, it also retains implications for both, research and practice. The theory is constructed and derived from a real organizational problem that is perceptible, and focuses on developing a greater understanding of decision-making within an informal environment which retains unique characteristics that are different to those of the organization as a whole, and may include impediments, barriers, support, and directions for improvement. It also highlights the uniqueness of the informal environment as a valid and justifiable environment that could provide new research directions and perspectives.

In relation to research, the theory starts from the theoretical notions discussed in Section 1.1 where it is argued that rational decision-making models are generally considered ineffective and inefficient when applied within an informal work environment. By realizing the impact of informality and knowledge implicitness of such an environment, this could provide a framework that would allow new research directions to develop for future research that could include the role of perceptions, culture, and communication, as well as other variables that emerge from the environment. While existent theory is largely formalized through models and structured rational decision-making principles, there is a lack of established literary theories on the implications of decision-making discourses within an informal work environment.

The theory’s implication for practice is that it provides, through its emergent
propositions, new potential knowledge for practitioners. The propositions, which explore and explain the interrelation of variables as they relate to decision-making within an informal work environment, can result in practitioners developing a greater understanding of similar phenomena within their workplace where decision-making has stagnated or is inefficient by identifying the drivers that influence how decisions are perceived throughout that environment. The participants within this thesis provide unique insight of the role an informal work environment plays in shaping perceptions and actions as they relate to inefficient decision-making. Furthermore, as the emergent theory is used to undertake action with the aim of resolving or addressing decision-making issues or problems, this also provides a foundational basis and new avenues for practitioners to formulate appropriate resolution frameworks based on their contextual situation. In essence, the implication the emergent theory and its associated action framework could have on practice is that it creates a new thought-process that helps increase insight and greater potential for managing decisions within an informal work environment.

Although the emergent theory is based on a contextual situation, theories discovered through grounded theory are considered flexible and modifiable, and can become adapted to other organizations' situations and environmental settings (Pandit, 1996).

1.6 Thesis Structure

This thesis is segmented into four phases, each retaining its own respective chapters and sections, which collectively inform the entire thesis. Figure 1.2 provides an overview of each of those four phases and their chapters.
Figure 1.2 Thesis Structure

1. Phase 1 - Research Framework
   - Chapter 1 - Introduction
   - Chapter 2 - Foundational Literature Review
   - Chapter 3 - Grounded Theory Principles: Research Methodology

2. Phase 2 - Data Development
   - Chapter 4 - Data Collection and Analysis

3. Phase 3 - Theory Formulation and Action
   - Chapter 5 - Research Findings: Presenting the Emergent Theory

4. Phase 4 - Conclusions
   - Chapter 6 - Thesis Discussion, Summary, and Conclusions
Phase 1 provides the framework for this research, and includes Chapters 1, 2, and 3. It sets forth the direction the thesis will undertake as well as identifies the particulars necessary for how data will be approached. It includes an in-depth presentation of theoretical notions informing the research aims and objectives, research design, and the framework used for generating an emergent theory. Phase 2 is composed of Chapter 4, and describes the data collection and generation process and results, including how interviews, observations, historical documents, and the literature, were used to discover empirical data patterns. Phase 3 includes Chapter 5 and presents the emergent theory, resultant model, and propositions. Phase 4, which is comprised of Chapter 6, presents a discussion, summary, and conclusion, of this thesis, integrates the literature, presents short-term action implemented, presents recommendations for further actionable knowledge, as well as this thesis’s limitations, implications for research and practice, and the potential for future research.

Each of the chapters that inform the four phases is described below in detail:

**Chapter 1** sets forth the framework of the research, its context and rationale, as well as the structure of the research problem based on the applied research methodology of grounded theory principles. It also presents the research objectives, type of emergent theory, type of decision inefficiencies, and explains how the emergent theory is used to create and apply informed action.

**Chapter 2** provides a ‘knowledge-formulating’ foundational literature review that presents the various theoretical concepts relating to informal work environments and decision-making that have informed this thesis’s research topic. It is not presented as a traditional literature review, but rather, as a presentation of informal environments and decision-making paradigms, models, and frameworks, upon which the research was initially founded.

**Chapter 3** provides a detailed presentation of the grounded theory methodology principles adopted and how they are utilized within this thesis. Data collection and
analysis (coding) processes, the two main models of grounded theory, and this thesis's adopted philosophical stance. It also includes a presentation of the abstract wonderment that guided this research, the selected research site, utilized data sources, applied ethical framework, as well as the challenges associated with utilizing grounded theory principles.

**Chapter 4** presents how grounded theory coding procedures were used to analyze the collected data in order to discover the core category, core phenomenon and their related peripheral concepts. It also includes details relevant to the collected data, such as interviews, observations, historical documents, and the literature.

**Chapter 5** is dedicated to presenting and analyzing the emergent theory, which is also presented as a model and 9 propositions, with an analysis of the relationships between the emergent concepts.

**Chapter 6** concludes the thesis’s research with a summary and discussion of the emergent model and its role in formulating informed action. Researcher reflections on the emergent theory and its implications for UMR, as well as potential implications for practice and research are also presented, including research limitations and prospects for future research.

**1.7 Chapter Summary**

This chapter introduced the thesis’s background, including the research context, research rationale, and the research objectives. It presented grounded theory methodology principles and their commensurability with the thesis’s aims and goals, including the principles of abstract wonderment, and how inefficient and dysfunctional decision-making within UMR was used to initiate a research direction. Furthermore, a detailed explanation of this thesis’s implications for research and practice were presented. This chapter concluded with an overview of the thesis structure and a
description of each chapter.

Chapter 2 presents the foundational literature review and the preliminary concepts relating to informal work environments and decision-making used to guide the selected topic for this thesis.
Chapter 2
Foundational Literature Review

2.0 Introduction

Using the framework and limitations placed upon a comprehensive literature review by grounded theory’s framework, the researcher approached the literature with a certain level of cautiousness and apprehension. As discussed in Chapter 1, a qualitative methodology that utilizes grounded theory methodology principles requires that no comprehensive literature review be conducted prior to the completion of the data collection and analysis stages in order to avoid introducing researcher bias and preconceptions into the research (Glaser & Strauss, 1967), and to avoid ‘rhetorical jargon’ (Glaser, 1998) from impacting research results. Therefore, this literature review is not intended to formulate research problems or questions, nor is its purpose to identify literature gaps. This chapter solely serves to present extant theories that have informed the research’s initial area of interest, provide a contextual background for the reader, present the areas that have influenced the researcher’s understanding of the topic, and the concepts that have contributed to the research’s aims and objectives as discussed in Chapter 1. Comparable research employing grounded theory principles as part of their research methodology have also adopted similar strategies regarding a literature review, such as Dainty, Bagilhole, & Neale (2010), Lee & Kim (2007), and Crook & Kumar (1998).

To guide this foundational literature review, the researcher focused on understanding the unique characteristics of an informal work environment, and existing decision-making models, as their potential effectiveness within UMR’s informal environment are analyzed. As the focus is on the study of decision-making within an informal work environment, with the latter being the environment in which the study is situated, it is
useful to fracture this literature review into three separate sections, each with its own technical and fundamental differences. The first section presents an understanding of the theoretical framework, pertinent characteristics, and key themes of informal work environments, and how they emerge from within an organization’s formal structure. The second section serves to highlight and critically evaluate existent decision-making frameworks and models. The last section presents the role of ground theory’s principles in facilitating the emergence of an explanatory and exploratory theory within a research area that currently remains vague and not fully addressed in the literature, which adds further justification for this thesis’s area of interest.

2.1 Emergence of the Informal Environment

This section presents the dynamics, characteristics, emergence, and idiosyncrasies, of an informal work environment, as well as how it contrasts to the formal organization, from which it is derived. This allows the reader to better conceptualize the dimensions of what constitutes an informal work environment, which “arises [due to] the social interaction amongst the organization’s members [leading], to the formation of groups, both large and small” (Peterson & Kelly, 2004, p.36). The key term highlighted regarding the informal work environment is the social element of interaction. However, in order for it to be properly understood, it needs to be considered in contrast to the formal organization from which it emerges. The formal organization is defined as an entity where “secondary social collectivities are organized and regulated for purposes of efficiency by structured procedures” (Stolley, 2005, p.93), characterized by a high level of bureaucracy, regulations, and explicit rules, that define expected and approved behavior (Hodson, et al. 2013). The key characteristic is the structured approval of behavior, which highlights expectations by the organization’s need for efficiency. The level of contrast between the informal environment and formal environment at either end of the spectrum can be stark. However, it is important to note that there could be different degrees to informality and formality within organizational design (Marlow, Taylor, & Thompson, 2010).
Nadler & Tushman (1997) break down organizational design into two mechanisms: grouping and linking. Grouping is creating formalized organizational structures based on certain groups, such as departments, divisions, or geographical locations. It serves the purpose of creating a structure of interaction and coordination that is limited to the needs and requirements of the formalized organization (March & Simon, 1958; Thompson, 1967). Linking creates the formalized interactions between the various groupings based on workflow requirements, and can be both, vertical and horizontal (Gulati & Puranam, 2009). However, given the fact that interactions and knowledge transfer occur regularly between different groups, it becomes inevitable that certain informal interactions and behaviors, based on social elements, start to emerge (Fiol & Romanelli, 2011). Furthermore, the principles of organizational behavior generally accept that grouping and divisions within organizations will ultimately and unavoidably lead to the creation of subcultures based on a group’s own emergent views, ideas, values, and beliefs, which will become different than those that emerge in other groups, creating a ‘group membership’ mentality (Cole & Salimath, 2013; McEvily, Soda, & Tortoriello, 2014).

Gulati & Puranam (2009) argue that the emergence of an informal work environment is unavoidable, as individuals and actors within an organization are not void of different personalities, worldviews, ideas, and feelings. Such implicit or explicit individualism should be expected to eventually develop and fundamentally take hold within, and be part of, an organization’s formal structure. However, some researchers, such as Schneider et al. (1998) argue that while individual personalities and ideas may emerge within an organization, this is usually indicative of the failure of the organizational design, which was not fully capable of balancing the requirements of information and resource coordination between groups. Meyer & Rowan (1977) and Selznick (1948) also agree that the emergence of an informal work environment is largely due to the need to fill the gaps left by the wider formal organization in order to meet individuals’ needs. Reviewing the literature, it quickly becomes apparent that there are as many positives to an informal work environment as there are negatives. The informal relationships existent between individuals can impede certain organizational objectives
and goals (Shafritz, Ott, & Jang, 2015), and could lead to significant inefficiency, increased conflict, and the spread of negative rumors (Klotz & Buckley, 2013; Song, et al. 2015). On the positive side, informality can support faster communication as it bypasses bureaucracy, support the formal organization’s structural gaps, as well as provide a psychological support system to individuals, which emphasizes belonging and team support (Brennecke & Rank, 2016).

The researcher believes that to side with either argument is likely to require a comprehensive research framework focused on understanding whether indeed the emergence of an informal work environment is indicative of the formal structure’s weaknesses. Such is beyond this thesis’s scope, which is not concerned with the core reasons as to why the informal work environment emerged within UMR, but rather, to understand its relation to decision-making discourses.

The following sections present extant theories that relate to the informal environment, as well as critical analysis on their applicability and relevance to this thesis’s area of research.

2.1.1 Communities of Practice

One of the most prominent theories in the literature that relates to the informal work environment is the well-established concept of Communities of Practice. The reason this concept is relevant and of interest is that it can help explain the emergence of groups and their interactions within an informal work environment. The principle of Communities of Practice was established by Lave and Wenger (1991, p. 98), and is defined as “a system of relationships between people, activities, and the world; developing with time, and in relation to other tangential and overlapping communities of practice”. It explains the emergence of a group of individuals or members who interact, collaborate, learn, share a common concern, and rely on each other, separately from the larger organizational context (Brown & Duguid, 1991). As Communities of Practice
emerge, members interact using shared stories, personal perceptions, symbols, and routines, as certain norms and relationships develop that support the group and its members (Wenger, 1998).

Communities of Practice present a theoretical framework upon which to understand the ‘internal’ workings of an informal environment. While it brings to the forefront the interactions within an emergent organizational community, it focuses on “social interactive dimensions of situated learning” (Roberts, 2006, pg. 624). These interactive dimensions, as informal networks, “represent a wide range of connections, including activities as friendship, advice seeking, informational communication, and material transfers” (Krackhardt & Stern, 1988, p.127). While informal networks are frequently seen as a competency as they cut through formal procedures to ‘get work done fast’ (Krackhardt, 1990), they can also result in poor performance due to reduced communication effectiveness and resistance to the formal structure (Krackhardt & Hanson, 1993). Informal networks create new links between different individuals within the organization, resulting in operations occurring outside the formal network and structure. Its importance for this thesis is that it helps place into perspective the flow of information, ideas, feelings, and language, within an informal environment. For instance, it may help explain why training efforts by UMR’s management appear to have little effect on performance and work processes, as naturally, they are implicitly focused on abstract knowledge as opposed to learning and practice.

The literature generally agrees that Communities of Practice retain certain characteristics that differentiate them from the formal organization from where they emerge. At the forefront is that they are defined by a certain level of spontaneity and informality. Their spontaneity is conceptualized by the fact that they emerge without conscious effort or pre-planning, but rather, develop naturally as a community as individuals participate in problem solving and discuss pertinent workplace issues (Wasko & Faraj, 2000). Their informality is based on a focus on personal development, mutual benefit, personal experiences, feelings, and worldviews, with few rules to membership, relationship building, and collaboration (Ardichvili, Page, & Wentling,
2003). Within the context of this thesis, there is a presumption of a possibility that individuals within the selected six departments that are the focus of this study can either retain smaller individual Communities of Practice, or a larger and broader Community of Practice. This assumption is due to the fact that Communities of Practice can emerge as a result of individuals’ collaboration (Brown, 1998).

What is interesting in the literature is that many researchers, such as Wenger (2000), argue that Communities of Practice usually lack any tangible level of abstraction, as they are non-static, flexible, and continuously changing and evolving. Therefore, members within a Community of Practice may not even recognize or be aware of its existence or of its impact within their immediate or larger environment. Therefore, while members may be active within a Community of Practice, they may not consciously be aware of their active participation. This may have strong implications for this thesis, as participants within UMR’s informal work environment may not be consciously aware that their approach to decision-making is indeed ineffective or flawed despite outward appearances or tangible bottom-lines. This possibility can be an important area to pursue or be aware of as data is collected and analyzed, which can be a critical area that may explain or bring to the forefront important or relevant implications.

Despite the potential positives that result from Communities of Practice such as collaboration between members and support, they are also viewed in the literature as a potential source of organizational ‘vulnerability’, as they emphasizes a separation or alienation from the rest of the organization’s influence. According to Roberts (2006, p.628), “Communities of Practice have the potential to provide a place free from the power construct evident in the formal organizational structure”. This is an important issue, as it creates a potentially critical channel for analysis for this thesis where the informal work environment within UMR may retain its own influence and power over routine decision-making. Roberts (2006) also argues that the concept of trust is a core concept within Communities of Practice, as its absence can result in the exclusion of certain individuals or even departments, and is created or diminished based upon perceptions as opposed to actual experienced behaviors. As is discussed in Chapter 5,
trust also emerged within this thesis as a critical component and peripheral category that has directly impacted the current decision-making inefficiencies based on selective perception.

At the core of Communities of Practice, as argued by Brown (1998), is the principle of learning. Learning creates an explanatory framework for the emergence of an interpretive view of behavior and thinking processes where individuals are ‘learning-in-working’ (Brown & Duguid, 1991, p.41). The implication of learning within Communities of Practice is of particular importance for this thesis, as it highlights the acquisition of certain behaviors by individuals within an environment of social identities that may set them apart from the wider environmental context. Essentially, learning involves adopting certain epistemological viewpoints and perceptions by individuals, where this learning is a process that is “intrinsically social and collective” (Teece, et al. 1994, p.15), as individuals are influenced by the social context, or as considered within this thesis – UMR’s informal work environment.

### 2.1.2 Communication

Researchers have comprehensively addressed the importance of communication within organizations, with contemporary literature highlighting an increasing trend in its importance within organizational performance (Cheney, 2007; Marques, 2010). According to Byrne and LeMay (2006, p. 149), “satisfaction in organizational communication is positively related to actual job performance and productivity, organizational commitment, and job satisfaction”, placing organizational communication at the forefront of organizational theory (Cooren, 2012).

The structure of communication within an informal work environment can be fundamentally different when contrasted to the structure of communication within the larger formal organizational structure (Kandlousi, et al. 2010). It is generally defined by a series of complexities, ranging from a technical-based view to a meaning-centered
view, while a broader all-encompassing definition is that it is that it is fundamentally channels aimed at the flow of information (Jarrahi & Sawyer, 2013; Hossain, Murshed, & Uddin, 2013). Researchers interested in the technical-based view of communication highlight the notions of efficiency and accuracy in transmitting information between different points. The focus is on defining communication linearity identified by tools such as memos, emails, billboards, and telephones - areas that are sociometric in nature and quantifiable (Jarrahi & Sawyer, 2013). In contrast, the meaning-centered view places significant emphasis on the human element of interpretation and perceptions. It is focused on understanding the dynamism of communication as a language that is heavily reliant on meaning and personal understanding (Koohborfardhaghighi, Lee, & Kim, 2016). A critical and interpretive perspective is adopted where “words, symbols, and actions that [organizational] members invoke” (Johansson & Heide, 2008, p.291) are at the forefront of the communication perspective. This thesis is largely interested in the meaning-centered view of communication where interpretation and perceptions play a significant role.

Grapevine Communication

An informal work environment highlights many of the complexities of organizational communication, both within a technical-based view and a meaning-based view. This is due to the fact that it is impractical and erroneous to completely and decisively separate formally based interactions or technical artifacts from the human elements of behaviors and personal interpretations within informal environments (McEvily, Soda, & Tortoriello, 2014). As discussed earlier, the informal work environment arises from formal interactions, and hence, formal technical artifacts created by the technical-based view, remain existent, despite the potential of their relegation or inefficiencies (Houpt, Gilkey, & Ehringhaus, 2015). Arising from formal communication artifacts, communication within informal work environments has been defined as a ‘grapevine’ framework (Michelson & Mouly, 2002), where organizational boundaries are no longer barriers to multidirectional communication, and where authority is frequently undermined (Michelson, van Iterson, & Waddington, 2010).
Grapevine communication serves the organization on a social level that is not actively recognized, managed, nor approved, by an organization’s authority structure, but rather often merely reluctantly accepted as an inevitable component of the organization (Tukiainen, 2001). It is “entwined throughout the organization with branches going in all directions”, and is frequently considered a major channel for rumor spreading (Crampton, Hodge, Mishra, 1998, p.569). Rumor spreading can have a negative impact on organizational performance given the fact that a grapevine structure accelerates the speed of rumor dissemination and can be extremely challenging and difficult to limit or control by managers (Banerjee & Singh, 2015). Based on the researcher’s knowledge and experience of UMR’s informal work environment, the concept of grapevine communication is strongly ingrained within the fabric of interactions and information flow. Its prevalence within organizations is considered in the literature to be a result of existing ambiguousness and/or dysfunction within the internal environment. It becomes particularly prevalent when important situations arise that are not effectively clarified or change initiatives are proposed that lack a clear process or framework, and the ability for stakeholders to address this ambiguousness is limited due to a lack of formal communication channels (Burke & Wise, 2003).

An even greater issue associated with grapevine communication is that information traveling along its channels can often be selective, with information being incomplete, inaccurate, or potentially biased (Kramer, 2015). This is likely due to the speed information travels through its channels, which is usually faster than formal communication, with no processes in place to filter inaccurate information (Singh, 2013a). The selectiveness of information is due to the nature of informal environments where emergent groups are composed of individuals whom, within their own social system, have been identified to share a commonality of interests, values, and goals, with a high degree of group cooperation and exclusiveness (Bharadwaj, 2014).

While grapevine communication within informal environments is generally accepted as a negative aspect in both traditional and contemporary literature, there is also a general agreement that it offers some stakeholders certain potential benefits (Ansah, 2015).
These benefits however, are linear and one-sided, usually at the expense of the organization's effectiveness as a cohesive entity (Kramer, 2015). At the forefront of such benefits is that “employees often use the grapevine in an attempt to outmaneuver others, both inside and outside the organization [and] to increase power and promote self advancement” (Crampton, Hodge, & Mishra, 1998, p.572). Hence, while it creates a fracturing effect within the organization, it can be beneficial to those in a position where selective information provides them with opportunities for advancement (Wunderlich, 2012). The question at the forefront for UMR is whether grapevine communication could have an impact on how decision discourses take place. Critically, grapevine information provides a sense of security to certain stakeholders and a framework for the emergence of internal subcultures (Bharadwaj, 2014). These subcultures are normally considered significantly more efficient than the formal culture and address members’ issues of uncertainty and emotional anxiety, whilst increasing cohesion (Bharadwaj, 2014).

There is consensus in both, traditional and contemporary literature (Singh, 2013b; Zaremba, 1989) that managers should not attempt to control or influence grapevine communication channels, as this could foster greater distrust, suspicion, and cynicism, within the organization. Furthermore, controlling or even eliminating grapevine communication within an organization will almost always certainly lead to new grapevine communication channels emerging (Subramanian, 2006). As the informal work environment emerges to fill gaps created by the formal organization, grapevine communication can contribute to a certain degree, albeit disproportionately across the organization, to efficiency, proficiency, and productivity (DuFrene & Lehman, 2014).

2.1.3 Structural Framework

An informal work environment is identified largely by the manner in which it lacks a recognizable structure relative to the formal organization (Aquinas, 2009). Most organizational theory principles define an organizational structure, whether centralized or decentralized, as an “enduring configuration of tasks and activities” (Zheng, Yang, &
McLean, 2010, p.765), that are goal-oriented (Bock, et al. 2012), rigid (Soda & Zaheer, 2012), and aimed at creating mechanical and non-personal organizational positions through hierarchies (Houpt, Gilkey, & Ehringhaus, 2015). They are normally created and/or changed by the organization’s administrative authority within a framework of planning that is interested in creating job positions and descriptions without any particular interest in which individuals will personally fill those positions (Houpt, Gilkey, & Ehringhaus, 2015). Hence, the focus is on merit and meeting required goals, with a structured and composed flow of information (Mills & Smith, 2011).

In contrast, the informal environment emerges void of a structure, with greater interest and focus on meeting human emotional needs based on informal agreements, relationships, and individual expectations (Soda & Zaheer, 2012). This characterization is critical as it places the individual as the central focus of the data collection and analysis. The literature generally struggles with effectively relating a technical term to the lack of structure, with discourses being more descriptive in nature. However, some researchers have adopted terms such as ‘informal structure’ or ‘relationship-based structure’, which according to Chan (2002, cited in Chew & Gottschalk, 2009, p.134), are “structures that transcend the formal division of labor and coordination of tasks”. Given the importance placed on relationships and social interactions, there is significant attention placed on the individuals admitted to such emergent groups, and whether those individuals are of ‘value’ to the group on a shared-values level (Soda & Zaheer, 2012). The lack of structure within such emergent groups appears to be a form of emancipation (Bock, et al. 2012), where disenfranchised or disgruntled individuals are able to find support on a level-playing field where all individuals are viewed as equals with little regard for official position or title (Gluckler & Panitz, 2013). Hence, it is usually viewed as a way for less-powerful individuals to create a relationship-based support system that counterbalances the powerful elements within the formal organization (Kleinbaum, Stuart, & Tushman, 2013).

The importance of understanding structural frameworks within informal work environments is that they may help explain whether the lack of clearly identified tasks
and activities can impact decision-making discourses within UMR, particularly given the focus on relationship-building and social interactions.

2.1.4 Mechanisms of Control

Mechanisms of control, which incorporate the principle of power, are created by an organization’s authority structure in order to ensure stakeholders meet goals and objectives (Jap & Ganesan, 2000). It is defined by high bureaucracy (Bleiklie, Enders, & Lepori, 2015), superior-subordinate relationships (Flaherty & Pappas, 2012), rules and regulations (Baapogmah, et al. 2015), and as importantly, are explicit with little room for interpretations (Coombs, Knights, & Willmott, 1992). They are based upon notions of behavior control, with reward and punishment systems in place (Orlikowski, 1991) that are normally rigid, and mostly mandated by the organization’s authority structure.

According to Alvesson & Willmott (2002), formal mechanisms of control are the primary cause for the emergence of informal groups that develop their own mechanisms of control, with a positive correlation between both areas. As the degree of control applied by the formal organization increases, subordinates are more likely to ‘escape’ such control by associating themselves with other informal groups where controls are less rigid (Miller & Rice, 2013). The mechanisms of control created amongst informal groups are structured and executed based on different variables than those within the formal organization (Otley, 1994). They develop their own norms of behavior based on social processes, and are largely focused on creating guidelines based solely on social behaviors, with the potential of individuals being excluded from the informal groups if they violate those social norms (Fullerton, Kennedy, & Widener, 2013). In contrast to the formal organization however, these norms are usually implicit and emergent modes of behavior that become sanctioned by the group based upon their shared beliefs (Reinalda, 2013). They could be counterproductive to the organization as a whole or potentially damaging as it may impact the legitimacy of the organization’s official rules and regulations (Alvesson & Willmott, 2002).
2.1.5 Aims and Goals

The informal work environment is considered to frequently have divergent aims and goals to those held by the overall formal organization (Kozlowski & Salas, 2009). An organization that is designed to be structurally formal, such as UMR, is geared towards the creation of and meeting financial goals and creating a stable structure (Ruuska & Vartianinen, 2005), made possible through the development of organized work processes and the effective flow of information and co-ordination (Diefenbach & Sillince, 2011). Their goals are usually void of significant emphasis on individual emotions, feelings, or social expectations, as rationality and logic are given precedence (DuBrin, 2013; Lazega, Lemercier, & Mounier, 2006). Such an approach is expected from profit-g geared enterprises, and beneficially serves the formal organization in ensuring sustainability and continuity (Foss, 2007).

The emergent informal work environment within the formal organization is contrasted by greater emphasis on goals that are social in nature where personal interests, psychological support, and improving personal feelings are of upmost importance amongst individuals (Vabulas & Snidal, 2013). It aims to satisfy members of the group, offer protection and mutual help for members (Bartley & Roberts, 2006), and the preservation of shared values and beliefs (Pahl-Wostl, 2009).

Given the wide contrast between the aims and goals of the informal environment and formal organization, contention may develop if such objectives are at odds (Casey, 2005). Allen, James, & Gamlen (2007) highlight this problematic scenario where a particular profit-geared change undertaken by the formal organization proves to be unpopular amongst individuals or groups within the informal environment. Such a scenario may result in internal conflict developing where the organization finds itself in a position unable to execute the required changes effectively. Contributing adversely to the situation is the fact that the informal environment is generally considered to be impossible to eradicate or remove, as new informal groups will continuously re-emerge (Foss, 2007).
2.2 Understanding Decision-Making Frameworks and Discourses

During the proposal stage of this thesis, the researcher embarked on analyzing existing decision-making frameworks, and critically evaluated their applicability to the current social situation at UMR. This was also done in order to support the aims and goals of this thesis and to avoid researching an already well-researched area of concern. Only one framework of decision-making, rational decision-making, was known by the researcher to have been utilized by UMR on a continuous basis.

The researcher used two questions to guide researching decision-making frameworks within the literature:

i. What decision-making frameworks or models are established within the literature?
ii. What are the reasons they are incompatible with, and to what degree may they be useful and relatable to, the current situational issue identified at UMR?

As this thesis’s area of concern builds justification based on the argument that traditional rationally-based or structured decision-making models are ineffective within an informal work environment, it is valuable to present a description of what such models, frameworks, and approaches, entail. Derived from decision-making theory principles, decision-making is an area that has garnered substantial interest in both, traditional and contemporary literature. It is a broad term that encompasses various types of processes and frameworks. As a critical and central concept of organizational behavior, decision-making is the “point at which members of the authoritative decision unit select a particular course of action, that is, make a choice” (Hermann, 2001, p.48). It is considered a daily organizational activity, occurring within all levels of an organizational structure (Shapira, 2002), and “involves individuals who within the framework of a problem-solving approach make decisions by seeking and processing information” (Gurbutt, 2006, p.8). It is a form of ‘programmed’ decision process, as it is structured, repetitive, and operational in nature, with a high level of predictability and is in most instances standardized (Laureiro-Martinez, et al. 2015), and can be individual,
group, organizational, operational, routine, minor, and personal, decisions (Dong, Chen, & Herrera, 2015; Oppenheimer & Kelso, 2015; Shapira, 2002). An example of such type of decisions within an organizational framework would be a purchasing department making a decision regarding approving new suppliers (Hermann, 2001).

According to Gunia, et al. (2012), organizations normally view decisions as part of a holistic, collective, and objective-based approach where individuals are a component from amongst various other components, such as the internal and external environments, organizational structure, business processes, and overall strategy (Graham, Harvey, Puri, 2015; Moe, Aurum, Dyba, 2012), leading to a certain level of complexity requiring structured decision-making approaches (Craft, 2013). While an organization potentially views individuals in the aggregate, reducing a particular individual to a level of irrelevancy within the larger scope of the organizational context, which is reflected in their decision-making strategies (Hacklin & Wallnofer, 2012), individuals are normally concerned with and base their decisions on, their own individual interests within the organization. Such dissimilar views between the organization and its stakeholders can eventually lead to significant tension, particularly when an organization applies rational approaches to an environment entrenched within social interactions and differing worldviews (Astley & Zajac, 1991).

The following presents the most prominent decision-making frameworks in the literature, and critical evaluates their suitability regarding UMR’s current organizational problem.

2.2.1 Presenting and Critically Evaluating Decision-Making Frameworks and Models

Decision-making discourses within organizations are usually identified within models, used to delimit and clarify how decisions could be effectively undertaken. Such models are utilized as tools of sequenced processes to assist decision-makers to choose between alternatives (Betsch & Haberstroh, 2014), and can usually either be systematic in nature or based on intangibles such as ideas or instinct, or a combination of both
The literature presents a wide variety of different models, each designed to assist organizational managers to analyze, evaluate and implement decisions (Zsambok & Klein, 2014). This section highlights and critically evaluates the applicability of the four most prominent models in the literature to UMR’s contextual situation.

1. **Intuitional model:** Based on the notion of instinct, this model underscores the importance of personal insight (Dunn, et al. 2010) whilst setting aside conscious reasoning in favor of tacit knowledge (Dane & Pratt, 2007). The importance of intuition, sensitivity, emotions, and instinct, highlight the need for understanding existing knowledge and past experiences and their role in shaping current ideas and perceptions, as key areas that contribute to decision-making (Glockner & Witteman, 2010). Researchers argue that this model draws heavily on a ‘gut feeling’ as an area that connects a person’s feeling towards the current situation to their past experiences in similar situations (Miller & Ireland, 2005; Sinclair & Ashkanasy, 2005). Doing so requires decision-makers to identify patterns of decisions’ outcome (Dane & Pratt, 2007), which can equally either lead to poor decision-making or positive and valuable results (Myers, 2002).

This model is most common in situations that are rapidly changing, particularly within uncertain environments (Elbanna, 2006), where rapid decisions are required. According to Gigerenzer (2015), in certain situations, time can be of essence, making it difficult to utilize rational decision-making, as a situation can be further compounded when it is ill-defined or unstructured or when the situation is unique with no precedence to draw parallels or experiences from (Elbanna, 2006). This brings to the forefront notions of emotional intelligence and cognition, which can place decision-makers in a unique position where they need to be in-tune with the organization and the impact their intuitive-based decisions, may have (Sonenshein, 2007).
**Critical Reflection:**

The researcher believes that the intuitional model lacks the necessary framework to incorporate the various components and characteristics of an informal environment, including Communities of Practice, informal networks, grapevine communication, and shifting mechanisms of control. Although the literature highlights its appropriateness for making rapid decisions within ambiguous or unstructured situations, this is not reflective of the current situation within UMR’s informal environment. Rather, the core of the issue within UMR is not time-constraints, but routine decisions where employees have sufficient experience and where they have met similar situations on previous occasions. Therefore, while this model has not, to the researcher’s knowledge, been utilized at UMR, its usefulness within a specific and unique situation renders it inapplicable to the current situation at UMR.

2. **Rational model:** This model has been the most utilized and consistently applied model within UMR. It is grounded within the notion of maximizing decision-making economic returns and optimization (Goll & Rasheed, 2005), with a focus on rationality, consistency, and logic (Elbanna & Child, 2007). The adopted viewpoint within UMR is that the best possible decision could be made based on the available information, with the belief that such information, including decision alternatives, is usually sufficiently complete to make an informed decision. According to Buckley, Devinney, & Louviere (2007) and Elbanna & Child (2007), certain criteria define this model, including:

- a goal is always agreed upon and properly defined;
- the environment is considered ‘known’, with little to no ambiguity considered;
- there is a belief that all necessary information to make an informed decision is available;
- the problem being in question is considered structured and clear;
- there is significant emphasis on measurement and quantifying variables;
- alternative are considered in a rational and logical manner;
- there is an expectation that an optimal solution is available.
This model is derived from the notion of linearity, and is adopted based on an assumption that negates the human element from the equation (Khatri & Ng, 2000; McKenna & Martin-Smith, 2005). Figure 2.1 highlights the rational decision-making process as a predetermined, systematic, and sequenced, process as presented by Daft (2004, p.449). It is based upon maximizing decision-making effectiveness grounded
within data or information assumed to be available and true. Understanding rational decision-making and its place within the literature is of significant importance, as it facilitates understanding the context of the emergent empirical data and why decision-making has faltered within this thesis’s research field.

_Critical Reflection:_
This model has been widely utilized by UMR, with little success, likely due to its focus on rigidity. The researcher believes its focus on systematic stages is incompatible with an informal environment that is highly fluid and socially-constructed where individual behavior is built upon a framework of perceptions and friendships.

3. **Garbage can model:** Founded by Cohen, March, & Olsen (1972), it is most applicable within situations defined as ‘organized anarchy’. It sets itself apart from other models by focusing on the notions of cause-and-effect concerning a situation that is ambiguous within an environment of high uncertainty (Fioretti & Lomi, 2010). When organizations face multiple decisions at the same time, with managers unaware of what the ideal outcome of each decision ought to be, the decision-making process usually yields a haphazard plethora of unrelated decisions (Harrison, 2012). As rationality becomes improbable, this model is firmly grounded in intuitiveness, where decisions are made based on chance, luck, randomness, and impulse (Cohen, March, & Olsen, 1972). Decisions made have a random chance of being effective, given that they are not based on concrete information, as well as the various perspectives and interests that usually exist in an organization (Seshadri & Shapira, 2012; Troitzsch, 2012). The model's uniqueness is that while it does not apply a sequential framework in the traditional sense, solutions are created to problems that may not exist, and problems may exist in which no solutions have been developed (Takahashi, 1997). Hence, it attempts to connect prefabricated solutions to problems as they emerge (Takahashi, 1997).

_Critical Reflection:_
This model, which is grounded within the notion of ambiguity, is not reflective of an
informal work environment or of the current situation at UMR. Although it takes into account the existence of various perspectives and interests, and does not rely on a sequential framework, it is fundamentally concerned with randomness and luck. Hence, this framework remains irrelevant to the implications and characterizations of the informal environment, as discussed in Section 2.1.

4. **Incremental Decision Process Model:** This model views decision-making as a pattern of cycles, where significant decisions are an amalgamation of many smaller decisions (Hermann, 2015). It is sequential in nature, defined by three stages to decision-making; identification [of the situation or problem], development [of solutions and alternatives], and selection [of the most favorable solution] (Rainey, 2014). Major decisions are considered to require significant amounts of time to fully realize, with many minor decisions contributing to the final decision undertaken (Hastie, 2001; Daft, 2012).

*Critical Reflection:*
This model is clearly constructed as a sequential framework focused on long-term decisions. It appears to be better suited for strategic decisions as opposed to routine decisions, which as discussed in Chapter 1, are the main focus of this thesis and of UMR’s informal environment. Therefore, it is possible to conclude that it is unlikely to be suitable to the current social phenomenon.

A common theme amongst all frameworks and models described above, whether intangible or retaining elements of intuitiveness, either apply a predetermined, systematic, and sequenced, process to decision-making, or a model designed to accommodate significant amounts of information or ambiguity – areas that are not reflective of UMR’s situational problem. They are founded upon maximizing decision-making effectiveness based on data or information assumed to be available and true, or in certain cases, a lack of information or ambiguity. It is important to note that the aim of this section is not to prematurely reject or disregard decision-making models and frameworks, but to develop a theoretical understanding of the types of approaches
highlighted in the literature. The researcher aims to allow the emergent data to dictate the parameters of understanding the current decision-making inefficiencies at UMR without superimposing a particular idea or concept on the empirical data. Hence, it is acceptable for the emergent data to partially or fully indicate the commensurability of any of the models and frameworks discussed in this chapter.

### 2.3 Lack of Frameworks on Decision-Making within Informal Environments

This section extends the above discussion by presenting a narrative of how decision-making frameworks that relate directly to an informal environment remains lacking within the literature.

As discussed in Section 2.2, decision-making is based on rationality, logic, and the pursuit of structured organizational goals, all of which, at least partially, are lacking within an informal environment. One of the earliest traditional literature publications to highlight the incompatibility between such decision-making paradigms and the informal environment is by Farris (1979), who states that the informal environment can arise from irrational behavior, and that normative theories built upon a foundation of rationality, such as decision-making theories, fall short of having a substantial effect, and can be counterintuitive to its inner workings. Such sentiments are echoed by Blau & Scott (1962) who are highly critical of how organizations are solely regarded within the context of well-structured bureaucracy and rationality, and therefore, ignoring any underlying informality. This was also supported by Lindblom (1959, p.83) who states that a decision-maker’s “need for information on values or objectives is drastically reduced [as is his] capacity for grasping, comprehending, and relating values to one another”, when focused on rationality, which is viewed as counterproductive and unrealistic. At the opposing ends of the spectrum in traditional research is by Simon (1957b) and Weber (1947), both of whom put forth research that is highly ingrained in rational decision-making and administrative efficiency, evolved from bureaucratic idealism principles and technical analysis of decision-making processes. While it is clear
that certain traditional research has attempted to argue for or against the differences between formal and informal environments within the context of decision-making, and bring the subject to the forefront, the literature remains minimal in its quantity, and given the substantial changes organizations and organizational theory have undertaken over the past decades (Bansal, 2005; Etzion, 2007; Foreman, 1999), much of the information has become outdated and no longer fully relevant (O'Reilly III & Tushman, 2013).

The notion of decision-making within informal environments, however, appears to be completely absent from contemporary literature, with the exception of a few notable publications that are highly contextual in their research, such as Heisenberg (2005). There appears to be a lack of substantive theoretical frameworks, specifically geared towards informal environments as a collective entity. A collective entity is defined here as an informal environment that holistically encompasses its various characteristics, and where those characteristics are addressed collectively. Rather, organizational theory focuses primarily on decision-making within organizations, as a generic framework for analysis (Shekhar, 2016). Most contemporary literature treats the organization as a dependent variable, or as the background upon which to explore other variables. Published research appears to view organizations as a ‘homogeneous entity’, blurring the boundaries between formal and informal processes, or more specifically, removing them all together, particularly when the research is geared towards a specific variable (Cantrell & Smith, 2013). This is due to the need for greater simplicity in hypothesizing and deriving manageable research problems (Jain & Triandis, 1997). Hence, a schism can be identified between traditional and contemporary literature regarding decision-making within informal environments. The following table highlights research trends regarding how contemporary academic research approaches organizational theory.

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Table 2.1 Organizational Theory trends in Contemporary Research
Table 2.1 highlights that despite the wealth of research on various areas of organizational theory, researchers approach specific areas whilst viewing the organization as a framework upon which to analyze and address those specific notions that characterize their research. The distinction between the formal and informal environments, and how these variables are impacted by such notions are generally ignored.

2.3.1 Pattern Identification

While there is a lack of direct research that specifically addresses decision-making within informal environments, it is beneficial to review the literature whilst using certain notions discussed within this chapter that characterize informal environments and to draw similarities between patterns within organizational theory. To do so, a number of key characteristics that define informal environments were selected and cross-referenced with areas that could affect decision-making. Table 2.2 presents key and pertinent characteristics of informal environments, as discussed in Section 2.1, and how they relate to decision-making.

<table>
<thead>
<tr>
<th>Key Characteristic of informal organizations</th>
<th>Impact on Organizational decision-making processes</th>
<th>Empirical Research</th>
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| *Communication*: grapevine communication; rumours; bias; ambiguousness; rapidity | The core reasons behind decisions, and their purpose, does not effectively travel throughout the organization. This can result in significant yet unwarranted resistance to particular decisions. | Chiu (2002)  
Bonaccio & Dalal (2006)  
Loe, Ferrell, & Mansfield (2000) |
| *Control*: social processes; structure; lack of rigidity; social norms | Emergent rules and regulations that arise outside the established formal rules inhibit the proper implementation of organizational decisions. | Bordia, et al. (2004)  
Chattopadhyay, Glick, & Huber (2001)  
Chenhall (2003)  
Morrison & Milliken (2000) |
| *Structure*: Lacks a recognizable structure; no formal division of labor; relationship-based support system; emotions | The lack of a structure within an organization impedes effective decision-making as the flow of information in communicating decisions as well as | Carpenter & Westphal (2001)  
De Dreu & West (2001)  
Huber (1990) |
implementing decisions are severely impacted.

| Aims and Goals: individual interests; personal feelings; emotions; psychological support; mutual support; shared values | When an organization is faced with potential internal conflict due to opposing interests, decision-making can be severely impacted, and reduced in applicability within an organization. | Courtney (2001) Fisher, Turner, & Morling (2009) Pullin, et al. (2004) Vince & Broussine (1996) |

Table 2.2 Informal Environment’s Relation to Decision-Making within Literature

2.3.2 Why Grounded Theory Principles are Appropriate

This thesis is positioned to analyze and understand the implications of an informal environment on decision-making discourses within UMR’s contextual situation. As discussed in Chapter 1, UMR currently experiences significant decision-making inefficiencies, particularly within departments considered as informal environments, despite management’s efforts in attempting to implement a rigid mechanistic framework of rationality to decision-making discourses.

As shown in this foundational literature review, a clear and substantial framework for decision-making that is unique to informal environments, and that takes into consideration its various characterizations, is lacking in the literature. Although the dynamics and implications of an informal environment are well-established and widely researched, current decision-making frameworks as highlighted in Section 2.2.1, cannot be considered transferable or germane given their established rigidity and focus on sequence and predetermination. What is required, and is the aim of this thesis, is the development of an understanding regarding the direct experiences of individuals within the informal environment who can provide first-hand knowledge on underlying and socially-imbedded implications to efficient decision discourses. This should provide new and novel insights that can act as a relevant and applicable framework for change through action, which may also have implications for both research and practice.

Grounded theory principles are considered appropriate as they shift the focus from current literary theoretical constructs and quantitative frameworks that may not be fully
relevant or effective, to a focus on participant insights and highly relevant social experiences, which are often implicit and deeply imbedded in perceptions, actions, ideas, and behavior, and that are directly relatable. This invariably, requires engaging with the collective experiences of individuals who are directly involved on a daily basis with decision-making inefficiencies within their immediate environment. Therefore, their input, provided as words and sentences, that have been shaped by their experiences, will provide highly relevant information, which can be woven and developed into a theory that is grounded and delineated based on their lived experiences as opposed to externally developed theoretical constructs.

2.4 Chapter Summary

This chapter has provided a knowledge-formulating foundational literature review of the pertinent areas of informal environments and decision-making models and frameworks. The fundamental characteristics of an informal environment have been presented, including its emergence as a Community of Practice, communication framework, structure, mechanisms of control, and aims and goals. Decision-making is also presented, with emphasis and critical analysis of various decision-making frameworks. While the literature is rich regarding notions of informal environments and decision-making, most contemporary research views and treats them separately, with this foundational literature review showing that little research combines both notions.
Chapter 3
Research Methodology: Adopting Grounded Theory Principles

3.0 Introduction

This thesis adopts grounded theory principles, guidelines, and ideals, as a methodological framework for data collection\(^{13}\) and analysis, and to discover an emergent grounded theory. This chapter presents the principles, stages, and guidelines, which were used to inform this research’s design. Grounded theory principles were adopted in order to generate an exploratory and explanatory understanding that brings to the forefront the variables impacting decision-making inefficiencies within UMR’s informal environment. Focus is placed on presenting how principles such as emergence, constant comparison, memoing, relevance, coding, and data analysis were used by the researcher in order to research and understand the main concern. Although this thesis is not considered by the researcher to be a rigid grounded theory study in the classical and traditional sense as the aim is not a substantive theory, the researcher intentionally focused on adopting Glaserian grounded theory principles (Glaser, 1978, 1992, 2001). The reasons for adopting principles from within the Glaserian grounded theory model as opposed to the Straussian model of grounded theory are also presented in this chapter.

This thesis’s philosophical stance, and the challenges that were associated with adopting the methodology, and how they were mitigated by the researcher, are also presented. Emphasis is placed on the methodological stages, which dictate the

\(^{13}\) This thesis uses interviews, observations, and historical documents, as data collection methods. Each of those methods and their implications is presented in detail in Section 4.4 in Chapter 4.
research design, and how they were used to allow for the emergence of the theory and overall understanding. Chapter 4 presents the applied coding and data analysis processes, in conjunction with instances of raw empirical data, which were used to discover the emergent theory.

3.1 Choosing an Approach to Guide this Thesis’s Research Design

As discussed in Chapter 1, this thesis adopts grounded theory principles to construct a problem-relevant research design and approach. This decision was not immediately obvious during the earliest stages of the research, nor was it a decision that was made easily. What was clear at the outset was that a qualitative framework was necessary in order to facilitate an exploratory research framework that captures the complexity of an underlying social phenomenon that was not fully understood. Reviewing the literature for similar types of research, the advantages of qualitative research were clear and noticeable, as discussed in Chapter 1. Qualitative research also allowed the research design to remain flexible as it does not dictate a specific, distinct set of methods, paradigms, or methods (Denzin & Lincoln, 2011). This allowed the researcher to focus on designing a framework that was relevant to the identified research problem and sensitive to the type of data that could be mined from the research field.

During the proposal stage, the researcher considered grounded theory as one of two different methodologies from which to base this thesis’s research design. The focus was on selecting a research design that takes into account the unique context and situation of the research field. This aim was at the forefront and acted as a benchmark when evaluating different methodologies.

The first methodology considered was ethnography, which is a qualitative interpretivist framework that is focused on understanding participant behavior within a specific culture. As a methodology, it excels in highlighting participant narratives and their actions and given the depth and richness of such narratives, ethnographic researchers
usually require extended periods of time, sometimes years, to fully capture participant actions (Speziale & Carpenter, 2007). While intriguing, the practical implications and the time constraints of this thesis began to sway the researcher away from ethnography. Furthermore, the narrow nature of ethnographic research’s focus on culture led the researcher to believe that it would lead one to predetermine that the focus of the problem is identifiable within group or participant cultural dimensions, without taking into consideration the wider context of the underlying social phenomena.

The second methodology considered was grounded theory, which is a common and widely adopted methodology used to derive practical theory through the systematic analysis of data patterns ‘grounded’ within complex social phenomena. It is defined as:

“a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area. The research product constitutes a theoretical formulation or integrated set of conceptual hypotheses about the substantive area under study” (Glaser, 1988, p.16).

What makes it appropriate to adopt for this thesis’s research design where contextual analysis of an organizational problem is studied, is that it is focused on data emergence processes from the research field whilst providing data depth, richness, and relevance (Glaser & Strauss, 1967; Wolfwinkel, Furtmueller, & Wilderom, 2013). In order to explicate relevant data that from the outset is vague from the research field, an effective approach that allows one to go beyond obvious and objective units of data to access data that is ingrained within a subjective and social informal reality was required. Grounded theory’s data collection and analysis framework is considered commensurate, as discussed within this chapter, with such aims and objectives.

The commensurability of grounded theory is further supported as a review of the literature reveals numerous examples of research where grounded theory, whether partially or fully, was adopted as an appropriate exploratory methodology for understanding complex and yet unclear organizational problems that share certain identifiable similarities with UMR’s situational problem. For instance, research by Macri,
Tagliaventi, & Bertolotti (2002) use grounded theory to discover an interpretative and exploratory theory on the reasons for resistance to change within small-sized organizations. Similar to this thesis, they also employ interviews, observations, and documents as methods for data collection. Komives, et al. (2005) also uses grounded theory to explore how leadership identity develops within organizations. Their research’s premise is that leadership development is an unclear area, and requires a focused exploration and the discovery of a conceptual substantive model, similar to how this thesis is also focused on discovering a conceptual model relating to decision-making within an informal environment. The broadness, malleability, and flexibility, of grounded theory principles is also reflected in research by Kan & Parry (2004) which uses grounded theory to combine the notions of resistance to change and the role of leadership to understand how leadership can be used to overcome resistance to change within a hospital setting. As in this thesis, their research also discovers a core category that is a basic social process (BSP) that explained socially-based behaviors. Furthermore, they also employ interviews, observations, and documents, as data collection methods.

Using grounded theory principles to understand and explore a socially-based organizational problem where a theory is discovered, constructed, and grounded within empirical data to explain what is occurring within the research field is consistent across other research such as that by Lakshman (2007), Machin, Machin, & Pearson (2012), and Rothaermal & Sugiyama (2001). The researchers initiate the research using a broad area of interest without a specific research question, where a phenomenon, issue, or concept, is unclear, and would benefit from an exploratory research framework. As a priori deductive presumptions are considered undesirable, research is approached using abstract wonderment with as little predispositions or bias as possible, as is done within this thesis to ensure relevance and applicability.\textsuperscript{14}

The appropriateness of grounded theory principles for this thesis is that underlying its

\textsuperscript{14} As this thesis progresses, it gradually moves from an exploratory stage to greater emphasis on confirmatory notions as the literature is integrated within Chapters 5 and 6. This relies on deduction as prior theory is intertwined with the emergent theory in order to formulate informed action.
research premise is that problematic situations are usually impacted by implicit social and psychological experiences that are not made explicit without investigation and effective articulation (LaRossa, 2005). It sets forth a rigorous and inductive data analysis process of coding as conceptual categories are explicated from the empirically collected field data, allowing a core category that explains the underlying complex social phenomena to emerge (Draucker, et al. 2007). A relevant and contextual understanding of the decision-making research problem emerges as opposed to pursuing overly abstracted conceptualizations that may not be relevant within the wider organizational scope. Abstract wonderment, which is discussed in Section 4.2, is one of the key differences between grounded theory and other types of methodologies used within positivist or traditional research, as grounded theorists start their research with only a general area of interest that is non-specific regarding a particular well-defined variable or issue, as opposed to hypotheses testing or verification techniques to address literature gaps (Rennie, 1998).

In keeping with grounded theory’s framework, significant emphasis was placed on allowing theory to emerge empirically from the data, as Glaser (1992) cautions against ‘forcing the data’ to reflect a researcher’s a priori theoretical predispositions, which allows the research to remain relevant to the research site and practitioners. This also has added relevance given that the researcher has been previously involved and is well-informed of the discourses undertaken within the research field to improve the decision-making dynamics. As discussed in Chapter 1, given the potential a full and comprehensive literature review may have on a researcher’s bias towards a problem that is not yet well understood as well as the interpretation of results, this thesis avoids integrating the literature prior to completing the data collection and analysis stages (Glaser & Strauss, 1967). The researcher focused on setting aside previous preconceptions and theoretical ideas, which in turn facilitated the emergence of theoretical constructs through a constant interplay between the researcher and the empirical data (LaRossa, 2005). This constant interplay is reflected in discovering relationships between emergent concepts through the process of constant comparison of incidents within the data. Furthermore, the researcher intentionally focused on the
concept of emergence and the reduction of predispositions in order for a ‘new’ perspective that was not impacted by previous efforts to address decision-making within the organization or the literature, to effectively emerge from the data.

To formulate the research design, the researcher relied upon Urquhart (2012, p.16) framework of four distinctive characteristics of the grounded theory methodology as presented in Table 3.1:

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<th>Description</th>
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<td><strong>First characteristic</strong></td>
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<td>the main purpose of GTM [grounded theory methodology] is <em>theory building</em>(^{15}).</td>
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<td><strong>Second characteristic</strong></td>
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<td>As a general rule, the researcher should make sure that their prior – often expert – knowledge of the field does not lead them to preformulated hypotheses that their research then seeks to verify – or otherwise. Such preconceived theoretical ideas could hinder the emergence of ideas that should be firmly rooted in the data in the first instance.</td>
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<td><strong>Third characteristic</strong></td>
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<td>Analysis and conceptualization are engendered through the core process of <em>joint data collection and constant comparison</em>, where every slice of data is compared with all existing concepts and constructs to see if it enriches an existing category (i.e. by adding/enhancing its properties), forms a new one or points to a new relation.</td>
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<td><strong>Fourth characteristic</strong></td>
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<td>‘<em>Slices of data</em>’ of all kinds are selected by a process of <em>theoretical sampling</em>, where the researcher decides on analytical grounds where to sample from next.</td>
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*Table 3.1 Four Characteristics of Grounded Theory Methodology*

Although grounded theory’s underlying purpose is theory generation through an iterative analysis of empirical data, where hypotheses or propositions are usually left for future research to test or verify (Glaser & Strauss, 1967), this thesis employs the emergent propositions and theory to explain what is occurring in the research field and to create actionable knowledge that is relevant to UMR. Using an approach of iterative data collection and data analysis processes, theory emergence developed as an activity of interpreting patterns and assigning concepts to units of data, which was made possible

\(^{15}\) As discussed in Section 1.3.3 in Chapter 1, while substantive theory building is a main goal of grounded theory, it is not considered the ultimate aim of this thesis.
through the principle of ‘all is data’, which maintains that all information that “may come the researcher’s way in his substantive area of research is data for grounded theory” (Glaser, 1998, p.8). This created a framework for discovery for the researcher by providing data centrality and an area upon which the research is constructed and the theory developed. Data in a grounded theory research or one that adopts grounded theory principles may be qualitative or quantitative, and may be collected through various channels including interviews, observations, texts, surveys, and documents, which allows the researcher to engage with the data as to allow inferences and reasoning in understanding the phenomena area (Coyne, 1997). In order for a researcher to discover the core category from within the collected empirical data, three principles presented by Glaser & Strauss (1967) for data analysis that facilitate greater abstraction of raw data; theoretical sampling, constant comparison, and theoretical saturation, were adopted. Each of the principles is detailed within this chapter.

3.1.1 Glaserian and Straussian Grounded Theory Models

This thesis adopts grounded theory principles, ideals, and guidelines from within the Glaserian model of grounded theory, which is considered the original model of grounded theory developed, and was first established by Glaser & Strauss in 1967 to meet the needs of research conducted in complex social environments. Since its inception, it has branched into a number of additional models, although the most notable derived model is the Straussian model by Strauss & Corbin (1990). While both models, which are considered the most common grounded theory models, share many similarities and overlap significantly, there are crucial procedural and philosophical differences that would have impacted this thesis’s underlying research design, particularly regarding data analysis (Cooney, 2010). Although it is theoretically possible to combine principles from within both models, this is discouraged by researchers such as Wilson & Hutchinson (1996) and Heath & Cowley (2004), who state that this may result in serious methodological mistakes and a confused research. This section presents a contrast between the two models, and the reasons why the Glaserian
Grounded theory was first presented by Barney Glaser & Anselm Strauss in 1967 in their *The Discovery of Grounded Theory* publication as a novel approach to theoretical research. Strauss however, eventually become disenfranchised with the original model of grounded theory, and resorted to teaming with another researcher, Juliet Corbin, to publish *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* in 1990. Each of Glaser and Strauss continued publishing their respective perspectives, whilst progressively clarifying and updating their models of grounded theory concepts. The divergence between Glaser and Strauss eventually led to two separate models, respectively known as Glaserian grounded theory and Straussian grounded theory. Unimpressed, Glaser (1992) argued that the Straussian model had deviated so far from core grounded theory principles that using it for research would lead to no more than a ‘full conceptual description’, while critics of the Glaserian model theory argue that the methodology abandons previously published literature, which diminishes its ability to build theory (Cooney, 2010).

The original model of grounded theory by Glaser & Strauss (1967) was developed based primarily on the concept that theory emerges from, and is grounded in, data. Hence, data is central to the model, as a researcher utilizes the constant comparative method, conceptual categories and patterns that explain the core phenomenon emerge, allowing, a core category to also emerge upon which a theory would be developed (Alasuutari, Bickman, & Brannen, 2008). The model is designed to be flexible, permitting socially-constructed concepts and realities to emerge naturally without forcing the data. A key and critical characteristic of this model is that data informs the nature and direction subsequent collection and analysis (Klenke, 2015). It also places emphasis on induction and reducing researcher influence on data interpretation - mandated by the Glaserian model's insistence on avoiding preconceptions and biases that may be introduced by a comprehensive literature review prior to the completion of the data collection and analysis stages, which is termed ‘theoretical sensitivity’ (Heath & Cowley, 2004). According to Glaser (1992, p.71), a researcher “should simply code [the
data] and analyze categories and properties with theoretical codes which will emerge and generate their complex theory of a complex world”.

The Straussian model, in contrast, reduces the importance of theoretical sensitivity by refocusing grounded theory onto a more rigid structure of procedural rules that emphasize greater data generalizability, replicability, and verification (Bryant & Charmaz, 2010), which Glaser (1992) argues defeats the point of grounded theory as it is simply reflective of traditional quantitative research, which is nothing new. On a technical level, the differences between the two models are largely identifiable during the data coding stages, which Glaser refers to as ‘Open-Selective-Theoretical’, while Strauss uses the terms ‘Open-Axial-Selective’ (Charmaz, 2014). While Glaser considers the coding process as composed of numerous paradigms, Strauss argues only for one coding paradigm (Seidel & Urquhart, 2013). Axial coding, which Strauss & Corbin (1990, p.96) refer to as “a set of procedures whereby data are put back together in new ways after open coding”, relies heavily on deductive thinking, and emphasizes the need for integrating the researcher’s personal and professional experience, as well as the literature. While the Glaserian model stresses that the research problem or problems are discovered during the data analysis stage by focusing on emergence and that only abstract wonderment with a broad and vague research question is required to start the research, the Straussian model requires a codified research question or questions prior to data analysis in order to identify the phenomenon with emphasis on verification (Strauss & Corbin, 1990).

As a result of Straussian grounded theory focusing on a research question and an early literature review that could influence the data prematurely, and verification and generalization principles based on ‘template analysis’ and predetermination (Seidel & Urquhart, 2013), the differences between both models can be considered epistemological. Table 3.2 presents the main differences between both models:
### Table 3.2 Contrast between Glaserian and Straussian Grounded Theory

<table>
<thead>
<tr>
<th>Glaserian Grounded Theory</th>
<th>Straussian Grounded Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focuses on conceptualization</td>
<td>Focuses on creating descriptive accounts</td>
</tr>
<tr>
<td>Procedural flexibility</td>
<td>Procedural rigidity</td>
</tr>
<tr>
<td>Inductive in nature</td>
<td>Strong emphasis on deduction</td>
</tr>
<tr>
<td>No pre-research literature review - only an abstract wonderment required</td>
<td>Literature review required as well as an identified research problems</td>
</tr>
<tr>
<td>Theory emergence grounded in empirical data</td>
<td>Verification and generalization through ‘data forcing’ are core to the Straussian model</td>
</tr>
<tr>
<td>Focuses on social and cultural constructs</td>
<td>Focuses on a paradigm that is prestructured</td>
</tr>
</tbody>
</table>

Given the differences, it is imperative for a researcher to be clear on the adopted model and reasons for choosing it. The Glaserian grounded theory model has been selected for this research for a number of critical reasons, including:

i. Understanding the purpose of the research and how data collection will be conducted, influences the choice of the model (Deady, 2011). This research is founded upon understanding the social interactions of individuals within an informal environment, with basic social processes and constructs forming the core of the research. Therefore, the Glaserian model is better suited for this type of research.

ii. The Glaserian model is more appropriate as this research does not place importance on verification or validation, but on learning about and understanding the ongoing social phenomena occurring within the selected research field, requiring emphasis on emergence and inductiveness.

iii. As Glaserian grounded theory emphasizes flexibility and is less prescriptive than the Straussian model, it allows the research to be more focused on the actual emergent data concepts and categories. The Straussian model is more likely, due to its rigidity, to focus on methodologically imposed and overdrawn explanations instead of the theory (Heath & Cowley, 2004), making the Glaserian model more appropriate for this research. This is particularly important for this thesis, which only adopts grounded theory principles as opposed to being a rigid grounded theory research.
iv. While both models highlight the development of hypotheses or propositions, the Straussian model is more reliant on analyzing the data using the researcher’s pre-held knowledge and experience and validating those hypotheses through deductive reasoning (Keddy, Sims, & Stern, 1996). In contrast, the Glaserian model relies on the field data for the hypothesis, making it a more appropriate choice.

v. The Glaserian model principles are better suited for research involving broader organizational issues given its flexibility, while the Straussian model is better suited for narrower issues, such as instances where no social construct would be involved in the data (Walker & Myrick, 2006). As this research involves organizational issues, principles from within the Glaserian model are considered more appropriate.

vi. The exact nature of the problem is unknown and not well defined. Therefore, the principle of ‘abstract wonderment’ advocated by the Glaserian model makes it a better-suited model to adopt.

vii. The Glaserian model is also considered more commensurate with discovering a theory and general understanding that are actionable as it focuses on notions such as data disconfirmation, cyclic analysis, observation, reflexivity, and reflection. This is in contrast to the Straussian model, which places greater emphasis on deduction, generalizability, procedural rigidity, and a pre-structured paradigm, which leans more towards theory-driven data analysis, which would further alienate attempts to develop an action-oriented research.

3.1.2 Emphasizing Theoretical Sensitivity within this Thesis

The concept of theoretical sensitivity, which is derived from grounded theory’s sociology roots (Glaser & Strauss, 1967), was central within the data collection and analysis framework utilized. It is based on understanding the context of the theory being developed by the researcher through data emersion (Hall & Callery, 2001), which is
“forever in continual development” (Glaser & Strauss, 1967, p.46), and allowed the researcher to remain in a position of awareness regarding how to systematically relate data concepts derived to their own insights and past experiences (LaRossa, 2005; Morse, 1994). Sousa & Hendriks (2006) highlight how theoretical sensitivity is a core principle as it encourages researcher critical thinking and developing greater familiarity with the theories being grounded as opposed to viewing data as a linear and ‘monotone’ framework when conducting their research. It required specific emphasis within this thesis as a novel understanding of the underlying research problem that took into account the informal environment.

Being theoretically sensitive within this thesis required the researcher to analyze the continuously emerging codes in order to understand how they may ‘fit’ together as a ‘theory’. In order to avoid reaching premature conclusions, all emergent codes were equally considered as potentially contributive, whilst contemplating their relationship to ideas and concepts identified in the literature and discussed in Chapter 2, particularly towards the latter stages of coding. Table 3.3 exemplifies how theoretical sensitivity was used to generate continuous and iterative questioning insight when discovering emerging codes.

<table>
<thead>
<tr>
<th>Emergent Code (In-Vivo Open Codes)</th>
<th>Questioned Relevance</th>
<th>May be Impacted By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Belonging’</td>
<td>Could be relevant to emergence of teams and rejection of ‘outsiders’</td>
<td>Communities of Practice</td>
</tr>
<tr>
<td>‘Mental Modes’</td>
<td>Could Mental Modes be relevant to Cognition?</td>
<td>Culture</td>
</tr>
<tr>
<td>‘Cognition’</td>
<td>Could Cognition be relevant to Mental Modes and Emotions?</td>
<td>Informal Environment</td>
</tr>
<tr>
<td>‘Being Upset’</td>
<td>May be relevant to ‘Cause-and-Effect’</td>
<td>Not yet clear</td>
</tr>
<tr>
<td>‘Frustration’</td>
<td>Could be relevant to decision-making structure?</td>
<td>Culture / Informal Environment / Communication (Lack thereof)</td>
</tr>
</tbody>
</table>

Table 3.3 Using Theoretical Sensitivity to Generate Continuous Questioning Insight
Table 3.3 shows how emergent in-vivo open codes were analyzed and integrated into the larger network of emerging codes. Reflecting on their role within the emergent theory was ensured through questioning insight and their potential relevance to peripheral concepts. There are two vital researcher traits or attributes that need to be assumed and emphasized in order to ensure effective theoretical sensitivity as adopted within this thesis (Glaser, 1978):

1. A mindset that is able to conceptualize, collocate, envision, create abstract connections, and develop theoretical insight regarding all implicit and explicit data.

2. Ability to identify and avoid personal biases, accept the potential existence of conflicting and confusing data, avoid logical predetermination or deduction regarding data, whilst concurrently focusing on the importance of continuous discovery and emergence of a theory.

Section 3.4 of this chapter further expands on how those two traits were integrated within this thesis as part of the challenges associated with utilizing grounded theory principles and how those challenges were addressed.

Theoretical sensitivity helped avoiding falling into the pitfalls of accuracy, data volume and objectivity, generalizability, and truth, all of which are characteristics of traditional qualitative data analysis (Glaser, 1978). It was expected during the data collection and analysis stages that the data exemplified in Table 3.3 may not be entirely accurate or even relevant, but also that as the coding process developed and further data is collected, a clearer and more affirmative picture of the underlying phenomenon will emerge. This expectation was supported and given legitimacy by grounded theory’s focus on conceptual data development through a flexible framework where core variables will emerge through effective theoretical sensitivity, leading to inductive theory generation. Disregarding theoretical sensitivity, and focusing on rigidness of traditional qualitative analysis, would have only served to impede and reduce the thesis’s ability to effectively understand the data relating to the research problem (Glaser, 1978, 1992).
3.2 Adopted Grounded Theory Principles

The following sections present Glaserian grounded theory data analysis procedures utilized within this thesis, which occur in parallel with the data collection processes presented in Chapter 4. Data analysis is considered a multistage process, and is based on two rules; i. “everything is a concept [based on the principle] that all is data [and] ii. data analysis [proceeds] in relation to the research question, aims and unit of analysis planned for in the initial research design” (Birks & Mills, 2015, p.183). Those rules allowed the researcher to remain focused on the boundaries of this research during data analysis.

3.2.1 Employing Theoretical Sampling

The sampling process is considered an early endeavour within most traditional research, normally fully defined prior to initiating a research. The sample size, population, sample schema and type, are selected based on the type and breadth of the research to be conducted (Onwuegbuzie & Leech, 2007). Such sampling is normally referred to as ‘purposeful sampling’ and is defined as selecting research areas or participants based upon a specific set of purposely chosen criteria (Sandelowski 1995). It is encouraged within grounded theory only to set the framework for the initial stage of the research and not beyond (Glaser & Strauss, 1967).

Using the criteria set forth and presented in Chapters 1 and 4 as the aims of this thesis, purposeful sampling was initially used to select six departments within UMR where routine decision-making is prevalent. This is in keeping with Glaser’s (1978, p.45) suggestion that a researcher should select research areas or sites that are most likely to “maximize the possibilities of obtaining data and leads for more data”. Purposeful sampling is also considered a necessity, as there is an invariable need to identify a starting point for sampling.
However, as the research progressed, an iterative sampling process, referred to ‘theoretical sampling’, was utilized (Glaser & Strauss, 1967). Theoretical sampling is the “process of data collection whereby the researcher simultaneously collects, codes and analyzes the data in order to decide what data to collect next [and] where to sample next according to the emerging codes and categories” (Coyne, 1997, p.635). Hence, the sample size is not predetermined prior to the research commences, nor is there is a set limit to the size of the sample.

To conduct theoretical sampling, Glaser (1992, p.102), who negates the need for random or purposeful sampling during the latter stages of grounded theory research, maintains that:

“...the general procedure of theoretical sampling is to elicit codes from the raw data from the start of data collection through constant comparative analysis as the data pour in. Then one uses the codes to direct further data collection, from which the codes are further developed theoretically with properties and theoretically coded connections with other categories until, each category is saturated. Theoretical sampling on any category ceases when it is saturated, elaborated and integrated into the emerging theory…”

The above statement by Glaser (1992) highlights the framework necessary for the researcher to understand how theoretical sampling should be iterative and as importantly, highlights theoretical saturation16, which is the point at which a researcher ceases further sampling. As is demonstrated in Section 4.4 of Chapter 4, the type of data sampled within this thesis through theoretical sampling was dictated and guided by the emergent theory and empirical data. For instance, the emergence of the concept of ‘cognition’ during the interview processes led the researcher to pursue interviews with participants that could clarify how cognition ‘fits’ within the broader underlying phenomenon, its relevance to the emerging theory, and whether other concepts can be discovered that relate to cognition. In other terms, the emerging data helped decide which participants to select for further interviews, which areas to focus on during observations, and which areas to research within historical documents.

16 Theoretical saturation is discussed in detail in Section 3.2.4
To guide theoretical sampling, the researcher focused on three questions as proposed by Glaser & Strauss (1967, p.47) and presented in Table 3.4.

<table>
<thead>
<tr>
<th>Questions researchers ask themselves, adopted from Glaser &amp; Strauss (1967, p.47)</th>
<th>Significance within this Thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>what</em> groups or subgroups does one turn to <em>next</em> in data collection?</td>
<td>iterative; no predetermination; emergence; reflexivity</td>
</tr>
<tr>
<td>for <em>what</em> theoretical purpose?</td>
<td>theoretical criteria; induction and deduction;</td>
</tr>
<tr>
<td>how does the [researcher] select multiple comparison groups?</td>
<td>theoretical saturation; analysis of incidents; constant comparison</td>
</tr>
</tbody>
</table>

Table 3.4 Guiding the Theoretical Process

The ultimate aim of theoretical sampling as used within this thesis and suggested by Glaser (2001) is not to comprehensively attempt to gather all possible data, but rather, to delimit relevant data. Hence, using the concept of memoing, which is discussed in the next section, in parallel with theoretical sampling, all potential leads were analyzed and delimited as reduction and saturation of data occurred. Theoretical sampling ceased to be used once the core category, peripheral categories, and underlying phenomenon emerged from the data.

Its importance within this thesis is that it focuses the data on the individuals whom are involved with routine decision-making and are deemed to retain contributive information that could assist in constructing the theory and develop a richer understanding.

### 3.2.2 Using Theoretical Memoing

During the course of this thesis’s research, 88 theoretical memos, totaling over 12,000 words, were written by the researcher. They were conducted in parallel and iteratively during coding, and in most instances, were written using informal language and were used as notes to record reflections, theoretical ideas, thoughts, and potential meanings
of emerging data snippets and codes. Theoretical memoing is an important component of the constant comparison method, which is discussed in Section 3.2.3, and started when the research was conceptualized (Birks, Chapman, & Francis, 2008). It was heavily relied upon by the researcher in order to identify and clarify the relationship and constructs existent within the emergent substantive codes. This facilitated a direction for the research as the emergence of ideas occurred and assisted the researcher in identifying patterns and relationships within the data and whether they hold any substance for further categorization through careful analysis and critical evaluations (Lazenbatt & Elliot, 2005; Montgomery & Bailey, 2007). As the researcher used interpretation to explore, question, and articulate, the data, in order to increase theoretical sensitivity (Birks et al. 2013), “memos slowed the [researcher’s] pace, forcing him/her to reason through and verify categories and their integration and fit, relevance and work for the theory” (Glaser & Holton, 2004, p.60), avoiding premature theoretical conclusions (Glaser, 1978).

‘What is actually happening in the data?’ (Glaser, 1978, p.57) was a central question that was continuously considered by the researcher during theoretical memoing. It was used when analyzing the emergent data by dissecting the information through a process of reflexivity pertaining to decision-making and UMR’s informal environment, which created abstract conceptualizations that eventually formed the foundation upon which to build the emergent theory.

During the process of working through the data, there was no predefined structure to what memoing should be as it is a flexible process that included notes, pictures, sentences, paragraphs, outlines, and diagrams, which allowed it to be conducive to researcher conceptualization of emerging ideas (Glaser & Holton, 2004). Essentially, there was no ‘right or wrong’ way to theoretical memoing, as long as the process assisted in challenging the emerging ideas, concepts, directed theoretical sampling, and data categorization (Glaser, 1978). A framework for memoing recommended by Birks et al. (2013) to assist a researcher in memoing efficiency was used during this thesis’s research, which entailed:
i. Identifying and jotting down any emergent issues or problems concerning the design of the research

ii. Describing the researcher’s own assumptions and feelings about the research

iii. Writing down the coding process and codes as they continue to be developed

iv. Writing down notes or concepts that have been read and may be of value to the coding process

v. Memoing how one’s philosophical position relates to the research being conducted

Theoretical memoing is also reflective of the researcher’s immersion in the data and its composition is unique to each individual researcher, as they attempt to capture key concepts and functions through descriptions that are continuously being challenged and related to the contextual situation (Checkland, 1981). It also allowed the researcher to identify personal biases and preconceived notions in order for the emergent theory to be mostly influenced by the empirical data and literature17.

The data collection and analysis presented in Chapter 4 includes detailed analysis and examples of how theoretical memoing was used to analyze the emergent empirical data.

### 3.2.3 Adopting the Constant Comparative Method

The constant comparative method is a key component of grounded theory’s research process, and is adopted within this thesis to identify data patterns and causality between emerging data units. It was used to “uncover and explain patterns and variations” (Bitsch, 2005, p.79), of the emerging categories, codes, and concepts being developed from the empirical data. Its aim is to shift the qualitative and descriptive data to a framework of conceptual abstraction (Kolb, 2012), by continuously questioning the derived meanings from categories, as data analysis and coding occurred.

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17 Section 3.4 of Chapter 3 discusses in detail how the need to reduce bias when interpreting the empirical data is deemed a challenge within grounded theory, and how this challenge was addressed.
simultaneously (Taylor & Bogdan, 1998). Utilizing the constant comparative method facilitated theoretical sampling, which in turn, allowed the theory to emerge from the raw empirical data and become reinforced (Goulding, 2002).

Using the concepts derived from theoretical sampling, as discussed in Section 3.2.1, the researcher compared the data in an iterative manner as categories overlapped (Kolb, 2012). Glaser & Strauss (1967, p.105) provided four key stages, which the researcher used to guide constant comparison:

i. comparing incidents applicable to each category,
ii. integrating categories and their properties,
iii. delimiting the theory, and
iv. writing the theory

The constant comparative method is considered integral to grounded theory’s principles of cyclic and interpretative analysis, as the researcher is searching for patterns that can either be supported or disproved within the data (Boeije, 2002). It is an important analytical tool within this thesis due to its emphasis on criticality given that the exact nature of the situational problem of decision-making within UMR is not fully understood. It allowed all data units to remain constantly under review, facilitated by theoretical memoing, which allowed a clearer and more nuanced understanding of the composition of each emergent category.

Its importance is also reflected in research by Conrad (1978), where it arises as a core and central notion to maintaining rigor in identifying patterns when researching a subject that was at that time not fully understood and not yet well established theoretically.

### 3.2.4 Emphasizing Theoretical Saturation

The aim of theoretical saturation in grounded theory is to exhaust the coding process
whereby no new coding emerges and to ensure that the emergent theory is reflective of the data. Glaser & Strauss (1967, p.61) place theoretical saturation within the context of data analysis by stating:

“[Saturation occurs when] no additional data [is] being found whereby the [researcher] can develop properties of the category. As he sees similar instances over and over again, the researcher becomes empirically confident that a category is saturated...[he] will usually find that some gap in his theory, especially in his major categories, is almost, if not completely filled. In trying to reach saturation he maximizes differences in his groups in order to maximize the varieties of data bearing on a category, and thereby develops as many diverse properties of the category as possible”.

Theoretical saturation occurred through the persistent application of theoretical sampling, where concepts were developed and connected through patterns. This is critical, as theoretical sampling increased the scope and broadened the emergent theory (Pandit, 1996). It formed the final point of theory analysis and emergence, as the researcher could at this point identify the emergent theory.

As theoretical saturation was achieved, the researcher proceeded to develop and build the emergent theory.

### 3.3 Applied Data Analysis Processes

One of the advantages of grounded theory that made it an appropriate selection for this thesis is that it utilizes a systematic data analysis framework (Glaser & Strauss, 1967), allowing the researcher to approach the research data in a clear and focused manner. It allowed the generation of theory through an active inductive process that involved fracturing the data into units and categories to facilitate the discovery and emergence of data patterns and themes, as conceptual labels were attached to the fractured data. This occurred by identifying reoccurring incidents and linking the data units, or codes, to draw relationships between them (Bowen, 2006). Initial coding was considered the “primary intervention into the data” (Walker & Myrick, 2006, p.550). Its implications for
this research is that it allowed the researcher to remain involved and engaged with the data in order to pursue active discovery of a social phenomenon as opposed to a passive approach to data analysis (Stebbins, 2001). This is important given the implicit nature of data and information within informal work environments as highlighted in Chapter 2.

Coding is considered a central procedure within grounded theory, and while not completely unique to grounded theory, there are specific coding procedures that are required within the methodology\(^\text{18}\), as adopted within this thesis. The coding process is detailed and cyclical, and could be in the form of single words or short sentences (Holton, 2007), starting with in-vivo and descriptive codes, gradually being developed into analytical codes and higher levels of abstraction. Unlike coding in other methodologies that derive codes from the literature, grounded theory uses bottom-up coding (Walker & Myrick, 2006), where “codes are suggested by the data, not the literature” (Urquhart, 2012, p.38), which firmly grounds this research within the empirical data relating to the situational context. As discussed in Chapter 1, although the literature is avoided during the early stages of the coding process, it is interwoven with the emergent codes and categories at the latter stages of higher abstraction.

In keeping with Glaserian grounded theory principles, the coding process used within this thesis is an amalgamation of two main stages: substantive and theoretical. Substantive coding, which is the first stage of grounded theory’s coding process, is composed of two levels: open and selective coding (Glaser & Strauss, 1967), and uses in-vivo language identified within the data (Urquhart, 2012). It conceptualized the emerging data from the research field, by focusing the data analysis on identifying preliminary categories and data properties that can subsequently be analyzed for greater abstraction and generalization (Walker & Myrick, 2006). By uncovering incidents within the data, a tentative core category emerged as the data collection and analysis was delimited and theoretical saturation was achieved. Each type of substantive coding

\(^{18}\) Section 4.5 of Chapter 4 presents detailed examples of the employed coding process and its gradual development.
retains its unique procedures to analyzing the data, where certain necessary criterion needs to be met before a researcher may proceed to the subsequent coding stage\textsuperscript{19}.

There were a number of challenges to the coding process, especially given the fact that, as reflected within this thesis, the researcher needed to contend with large amounts of data. Some of those challenges included:

i. Effectively moving the emergent codes from a descriptive level to an analytical level. While identifying descriptive codes could be considered straightforward and sufficiently uncomplicated, they alone hold little value within the wider context of theory development (Urquhart, 2012). During data analysis, upscaling descriptive codes to analytical codes required some level of practice by the researcher, and a solid understanding of grounded theory’s data analysis processes. It was important to pursue analytical codes since while descriptive codes describe the data’s main concepts, analytical coding allows one to frame the problem and start the theorizing process.

ii. Being able to intuitively decide when to delimit the data collection and analysis process (Backman & Kyngas, 1999). As all data is considered valuable in grounded theory, it was challenging to decide when sufficient data had been collected and at what point its analysis was really complete. Malterud (2001) suggests that this challenge can be mediated by appreciating that grounded theory does not focus on the data itself or its quantity, but rather, on the concepts that exist in the data. Hence, the researcher intentionally focused on the emerging concepts and their potential value within the emergent theory as opposed to solely the data quantity.

iii. Once substantive coding was complete, and the research moved on to the theoretical coding stage, the researcher, invariably, was focused on the accuracy of the discovered theory. To address this, the researcher integrated the framework suggested by Glaser (1992), who states that a theory’s accuracy is based on whether it is emergent and

\textsuperscript{19} Substantive coding’s two stages of open and selective coding, are presented in detail in Sections 3.3.2 and 3.3.3 of this chapter.
whether the researcher avoided a theory that is even partially ‘forced’ or mundane and not novel. This required ensuring that theoretical saturation had been achieved and that constant comparison was effectively conducted to order to ensure a relevant and accurate emergent theory.

Figure 3.1 presents an overview of the flow of the coding process as used within this thesis.

![Figure 3.1 Coding Process as Applied within this Thesis](image)

Chapter 4 presents an in-depth presentation of the utilized coding process and examples on how the codes emerged from the raw empirical data.

### 3.3.1 Discovering the Core Category

Identifying a core category was central for delimiting the theoretical scope of the
emerging theory. According to Glaser (2007, p.14), a core category “has grab; it is often a high impact dependent variable of great importance; it is hard to resist; it happens automatically with ease. Researchers tend to see their core category everywhere”. It ensured relevance as concepts emerged during the various analytic stages of theory development by emphasizing that variables and concepts were only included in the theory if a relationship, pattern, or relevance, was identified (Draucker, et al. 2007). It accounted for the variations in the data and helped explain the social phenomenon within the situation area as it integrated the theory and increased its level of saturation and density. The core category can be any type of theoretical code that emerges from within the empirical data (MacLaren & Mills, 2015), which is due to the delimiting factor of the core category, as the web of relationships is further developed and increased (Hallberg, 2006). As it emerged during the early stages of coding, the researcher was aware that it would not be static, but rather, it is intentionally elastic and flexible in order to prevent the researcher from subconsciously ‘forcing’ the data into the core category (Goulding, 2005). While it is central, frequently occurring, focused on explanatory power and relevance, it is essentially, modifiable and variable, as the research process itself is multidirectional. Hence, the core category is dependent and not independent of the emergent data, variables, and theory (Glaser, 1998).

The core category highlights the “patterned, systematic uniformity flows of social life” (Glaser, 1978, p.100), bringing forth the concept of ‘basic social processes’ or BSPs. As BSPs are defined as a type of core category, using Glaser’s (1978) framework on BSPs, Gregor & Hart (2005, p.53), explain that there are four characteristics of BSPs that need to be considered by a researcher:

i. BSPs ‘process out’ at least two emergent stages that ‘differentiate and account for variations in the problematic pattern of behavior.’

ii. BSPs may not be present in a grounded theory-based study (i.e. researchers may not have two or more stages in the central concept).
iii. BSPs are ideally suited to qualitative studies where the analyst observes the evolution of a process over time (i.e. influencing outcomes in a project).

iv. BSPs are labeled by a gerund that reflects their evolving nature and a sense of motion (i.e. resolving, influencing, communicating, becoming).

While a core category may be a BSP, this may not always be the case, and that is possible for BSPs not to exist within grounded theory studies (Glaser, 1978). However, if a core category can be identified as a BSP, it could either be considered unit-based or process-based (Saarinen & Rilla, 2009). Unit-based core categories are more focused on the study of a particular person, group, or organization (Glenwick, 2016), while process-based core categories emphasize theoretical conceptualization and social structures (Tossy, 2016). Theoretical conceptualization emphasizes the properties of processes, where units such as organizations are where those processes take place (Glaser, 1978). This thesis is largely focused on the study of social processes as they relate to the decision-making processes within an informal environment, hence, it was expected during the data analysis stages that the core category would emerge as a process-based BSP.

The core category as a BSP, and how is developed and emerged within this thesis is discussed in Chapter 4 as the codes emerged and data analyzed.

### 3.3.2 Applying Open Coding

Open coding is the first stage of theoretical analysis within grounded theory, and the first level of substantive coding used within this thesis. It is defined as ‘first-order’ coding, and is considered related closely to the data (Glaser, 1978). It uses the language identified within the empirical data, such as in-vivo codes, and is focused on greater descriptive analysis. It “conceptualize(s) the empirical substance of the research area” (Glaser, 1978, p.55), by fracturing the data into smaller units for pattern analysis.
and categorization which is a lengthy process that required intense researcher engagement with the data (Heath & Cowley, 2004).

During the open coding stage, the data gathered from the research field was fractured as to “produce a set of categories that fit, work and are relevant for the purposes of theory” (Gibson & Hartman, 2013, p.91). This involved sentence-by-sentence, and even word-by-word analysis, through a process of induction, continuously assigning codes to the emerging concepts from the collected data (Lowe, 1996). Data used was primary and empirical, and included data collected through interviews and observations, whilst avoiding secondary data such as the literature (Duchscher & Morgan, 2004). The researcher immersed themselves into the data, exhausting all possible conceptual and theoretical concepts that could arise from the coding, thereby using an approach of ‘reduction’. Doing so, “carries with it verification, correction, and saturation” (Glaser, 1978, p.60). Glaser also cautions against conducting this process rapidly, as important concepts may be unintentionally overlooked. Open coding is a lengthy process that required intense researcher engagement with the data (Heath & Cowley, 2004).

During open coding, the researcher continuously focused on three questions regarding the emerging data as a way to guide the process as suggested by Glaser (1978, p.57):

- What is this data a study of?
- What category does this incident indicate?
- What is actually happening in the data?

Considering the above questions, the researcher undertook a reflective, iterative, and reflexive stance, as the coding started from the simple in-vivo and descriptive coding to analytical coding. Open coding was considered complete when the researcher was able to identify emergent categories that encompassed all the data and saturation was achieved as mandated by grounded theory’s framework (Gibson & Hartman, 2013). It was at this point that a core category was identified, hence, delimiting the open coding process (Lowe, 1996).
The specific steps undertaken during the open coding stage and how the researcher critically engaged with the emerging data is presented in Chapter 4.

3.3.3 Applying Selective Coding

Selective coding is the second level of substantive coding, and started when open coding ended as categories and their respective properties were identified. At this stage, no new concepts were pursued by the researcher beyond what was identified during the open coding process. It helped delimit the identified categories in a selective manner and focus the research onto a discovered core category. Glaser (1978) maintains that selective coding should only start when the researcher is confident that the core category has already been identified during the open coding process, and cautions against using selective coding to start coding, as this could lead to a premature conceptualization of a yet unclear core category.

Selective coding, similar to open coding, is not a linear process. Rather, the researcher was constantly reevaluating the data to try and focus the codes and categories into broader themes (Scott & Howell, 2008). To assist in this process, Dey (1999) suggests taking advantage of theoretical memos20, which raises “the description to a theoretical level through conceptual rendering of the material” (Glaser, 1978, p.84). This allowed the researcher to organize ideas that emerged during the coding process.

Selective coding was considered complete when the researcher was confident that the core category had been clarified and encompassed all the issues, concepts, and subcategories that have emerged during the substantive coding process (open and selective coding).

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20 Theoretical memoing was discussed in Section 3.2.2
3.3.4 Applying Theoretical Coding

Theoretical coding, which is a ‘second-order’ level of coding, is a process whereby theoretical codes are used to “conceptualize how the substantive codes may relate to each other as hypotheses to be integrated into a theory” (Glaser, 1978, p.72). By utilizing codes developed during the substantive coding stage, after saturation has occurred, the researcher related those codes to each in order to identify a relationship, whilst significantly relying on the constant comparison of data (Holton & Walsh, 2016). Conceptual codes developed during the substantive stage were “sorted, written, theorized, and cross-referenced with literature” (Jones & Alony, 2011, p.7), leading to new perspectives, increased scope, consistency, and objectivity (Glaser, 1978).

While substantive coding, as discussed earlier, was focused on generating and discovering a conceptual theory, theoretical coding, which is also considered emergent, was focused on resolving the main issue under study by allowing the fractured data to emerge and be integrated into a cohesive explanatory theory. Theoretical coding is considered the final stage in grounded theory’s data analysis procedures (Holton & Walsh, 2016), as adopted within this thesis.

3.4 Limitations and Challenges in Adopting Grounded Theory Principles

Grounded theory, as with other types of methodologies, presents certain challenges, which could be both, epistemological and methodological. In order to maintain the credibility of the methodology and the reliability of the emergent theory, it was necessary for the researcher to identify and mitigate those challenges, as suggested by Eisenhardt & Graebner (2007). This section presents four challenges faced by the researcher and how they were addressed.

i. Avoiding preconceived notions: Glaser (1978) strongly emphasized the need for a researcher to enter the research with no preconceived notions or ideas that may
influence the emergent data, which may include theoretical ideas previously studied or researched and any personal experiences as they pertain to the empirical area of research. During this thesis’s research, this was found to be fundamentally unrealistic and a futile endeavor. Hence, rather than attempting to deny preconceptions, a separate section was devoted to theoretical memoing that solely served to record personal preconceptions separately from the emerging data, which assisted in creating a mental and physical separation between personal ideas and experiences and the empirical emergent data. As such, it became significantly easier to differentiate between personal preconceptions and the emergent empirical data.

ii. Understanding the role of the literature: As discussed in Chapter 1, Glaserian grounded theory emphasizes avoiding a comprehensive literature review prior to completing the data collection and analysis stages. This can be challenging given the need to understand the established conceptual theories regarding the area of research (Backman & Kyngas, 1999). In order to avoid reducing the credibility of this research’s methodological design, only a foundational literature review that focuses on the general conceptualizations of informal environments and decision-making frameworks and models was undertaken. This ensured that while a greater understanding of the concepts was made possible, it did not directly impact the emerging data. Emphasis was placed on avoiding the literature during the substantive coding stages, and was introduced fully during the theoretical coding stage as the core category, main concepts, and core phenomenon, were already discovered and known.

iii. Theoretical saturation: One of the most significant challenges faced during the data collection process was deciding when and how to delimit the data. Although Glaser (1978) argues that when theoretical saturation is achieved, data collection ceases, identifying the exact point at which theoretical saturation had been reached was trivial. The risk in ceasing data collection prematurely is discovering an incomplete theory, while too much data can lead to an unnecessary broadening of the research problem.

21 Theoretical memos detailing personal ideas and experiences did not form a part of the coding process. It was used to simply create a separation between the researcher’s own personal ideas and the emergent data in order to attempt to increase objectivity and reduce bias.
To counter this challenge, a careful focus on the constant comparative method was necessary to ensure that an effective ‘fit’ of the emergent categories was possible, and that no further new categories or properties relating to those categories were emerging from the data.

iv. Avoiding methodology confusion: As discussed in Section 3.1.1, there are two main models of grounded theory; Glaserian and Straussian. While there is certain overlap between the two models, their approaches to theory discovery, data collection, and data analysis, are fundamentally different. It was important to avoid confusing how the data was approached, and how the coding process was applied to the data. This required continuously referring to Glaserian coding procedures. The specific area where confusion could have developed was during the coding process, particularly during the substantive coding stage.

3.5 This Thesis’s Philosophical Stance

An adopted philosophical stance can impact how a research is constructed and how the results are interpreted (Creswell, 2013b). The axioms of truth, the nature of reality, and how knowledge is constructed, can radically differ between research and researchers, impacting the value and manner of a research’s investigations (Ponterotto, 2005; Rolfe, 2006). This creates a close and interrelated framework between the used ontology, epistemology, and methodology.

The generally accepted research axiom is that researchers have an identified philosophical belief or position on truth and knowledge that guides their research approach and strategy (Denzin & Lincoln, 2011). However, Glaserian grounded theory and its principles are presented as philosophically, ontologically, and epistemologically neutral (Glaser, 2002), based on the notion that such neutrality allows a researcher to approach their research without a predetermined theoretical perspective. The benefit is that this limits potential bias and allows developed theory to inform the research itself.
Such an approach, conversely, has been met with resistance due to the traditional expectation of a clearly defined and declared ontological and epistemological position (Grix, 2002). Adopting a stance of neutrality has been ridiculed amongst academics as a noncommittal and epistemological fairytale (Bryant, 2009).

As this thesis adopts grounded theory principles, the researcher believes that adopting grounded theory’s philosophical stance is beneficial in order to maintain overall consistency and directional clarity when analyzing and coding emergent data. The reality of grounded theory is that it can accommodate numerous truth paradigms, including positivism, post-positivism, interpretivism, and constructivism, amongst others, as long as a pragmatic stance is clear as to why a particular truth paradigm was selected (Glaser, 1978, 1992). Each of these paradigms could directly impact how the research is constructed and how data is analyzed, and therefore, further investigation by the researcher in the discourse of grounded theory neutrality was required as to avoid confusion and backtracking during the data collection and analysis stages.

Annells (1996) argued that if one reviews grounded theory’s dynamics, there is a strong directional force towards symbolic interactionism and pragmatism regarding the nature of reality. This essentially implies that there is an underlying belief embedded within grounded theory that supports the hypothesis that social and natural realms view realities differently. Glaser (1978, 1992) appeared to be of similar opinion, suggesting that researchers need to search for reality within the research site, hence a pragmatic stance where the research site, the participants, researcher observations, and analysis of interactions, will collectively lead to a pragmatic view of truth.

Given the emphasis provided in the literature on the flexibility of grounded theory regarding a particular philosophical stance, the researcher decided that given its neutrality as a methodology, it was not expected that a philosophical position would significantly impact the data results, as a researcher partially or fully adopting grounded theory principles, is more focused on allowing the data and emergent theory dictate the research’s direction. However, as this research is situated within a socially-constructed
reality, where data is derived from participants’ worldviews and interactions within a contextual setting, this suggests a strong element of subjectivity. Furthermore, as the researcher interprets the emergent data to allow for abstraction and construction of the substantive theory, elements of interpretivism are integrated into the research process. Therefore, it is possible to conclude that this research adopts a broad interpretivist epistemology in how data is constructed, with elements of symbolic interactionism and pragmatism in the manner in which data is collected and saturated.

3.6 Chapter Summary

This chapter presented a discussion on Glaserian grounded theory methodology processes and procedures as well as their implications as adopted to construct this thesis’s methodology. Its approach to theory generation through a structured process of coding was introduced, as well as the utilization of its core framework of emergence, constant comparison, theoretical saturation, and theoretical memoing. A description of the challenges faced in using grounded theory’s principles was also discussed. This chapter concluded with a presentation of this thesis’s adopted philosophical stance, and how it is derived from and based on grounded theory principles.

The next chapter introduces the data collection and analysis processes derived from grounded theory’s framework with the aim of understanding decision-making inefficiencies within UMR’s informal work environment.
Chapter 4
Data Collection and Analysis

4.0 Introduction

This chapter presents a narrative description of the applied data collection and analysis procedures employed and how codes, concepts, and patterns emerged. It focuses on showing the conceptual development process regarding the emergence of the conceptual theory. Although the procedures are presented in a linear manner, grounded theory data collection and analysis stages are usually conducted iteratively. This is intentional in order to facilitate the emergence of patterns, themes, and multivariate relationships, from within the collected data, as constant comparison, categorization, abstraction, and conceptualization, take place (Kelle, 2007; Lewis, 2015). Data collection and analysis through theoretical sampling and coding continued until theoretical saturation was achieved and a dense theory emerged as suggested by grounded theory principles and discussed in Chapter 3.

This thesis started by capitalizing on an opportunity to research inadequately understood decision-making inefficiencies within UMR’s informal work environment, which formed the basis of an abstract wonderment. In order to facilitate the systematic analysis of data and allow the emergence of ideas, viewpoints, and concepts, from the research field, the researcher’s previously held theoretical ideas were set aside. Hence, the focus within this chapter is on the notion of conceptualization, as emerging concepts derived from the data are systematically connected and relationships between them become more apparent.

Empirical data generated through interviews and observations were used to discover emerging concepts and their relationships, and confirmed through historical documents
and the literature, which in turn, created the foundation upon which to build the emergent theory\textsuperscript{22}. The research field offered a rich environment where participants provided substantial yet relevant data as it pertains to this thesis’s main topic.

The first half of this chapter presents UMR’s organizational context, the research site and its data sources, a description of the abstract wonderment, applied ethical framework, how data was collected from the field, and how the literature was integrated into emergent empirical data in order to ensure theoretical saturation and to remain theoretically sensitive to the emergent codes. The second half describes the data’s analysis procedures, with detailed focus on the coding processes and the emergence of the data patterns, core category, and core phenomenon.

4.1 The Selected Research Site

This thesis focuses on a contextual social situation faced by UMR, a medium-sized manufacturing organization with three sites across the Middle East. Founded in Cyprus in 1991 as a small family-run trading company specializing in power station development, it quickly become successful in its field, with partnerships across Europe, North America, and the Middle East. Its primary activities involved supplying high-power equipment manufactured in Europe and North America to growing markets in the Middle East. UMR is characterized by very rapid expansion period, which according to management is evident in how its market share was doubling year-on-year. As it grew and expanded its activities, it relocated its head-office to Cairo, Egypt in 2000 in order to serve a growing and expanding Middle East market and to be closer to its customers. In order to maintain a more competitive market position, it shifted its focus from being a trading company to being primarily a manufacturing organization, and developed three manufacturing facilities, one in each of Egypt, Libya, and Algeria. This allowed UMR control over its supply chain, as well as to become significantly more competitive. Today, with a market capitalization of $22 million and over 85 employees, UMR

\textsuperscript{22} The emergent theory is presented in Chapter 5.
continues to be a leader in manufacturing and power station equipment supply. It is recognized in the market as a highly specialized organization in the engineering aspects of electrical power distribution.

UMR’s Egypt manufacturing site was selected for this thesis due to accessibility considerations and the researcher’s internal knowledge of that particular site. It is also considered their leading manufacturing facility, with a larger number of production lines, operations, and higher levels of activity. This ensured that there was sufficient opportunity and time to understand the issues in depth and to develop a richness of the emergent theory. UMR’s other sites, and whether they face similar contextual situations, was not a consideration within this thesis.

As discussed in Chapter 3, purposeful sampling was used when selecting a research site for this thesis in order to ensure research feasibility and access to data that may be relevant to the research topic. A research site should not be “based on criteria such as typicality or heterogeneity [but rather] on information about either the outcomes achieved in the particular site studied or the conditions obtaining there” (Huberman & Miles, 2002, p.189). The site was selected due to the fact that it retained an informal environment and was experiencing a social situation relating to decision-making. Access to the research site, permission for interviews, access to historical documents, opportunities for observation, and any relevant information that arises during the research under Glaser’s banner of ‘all is data’, was approved and granted by the organization given the researcher’s own personal and professional relationship with upper management.

Data collection focused exclusively on six departments within UMR. Interviews were open to individuals from within four production departments, the Procurement and Supplier Relations Department, and the Sales and Delivery Department. To avoid introducing unintentional bias, and given that decisions occur regardless of individual role or position, a participant’s status within their respective department was

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23 Section 1.11 in Chapter 1 highlights the reasoning behind selecting those specific six departments
disregarded as a variable.

4.2 Abstract Wonderment: Initiating this Thesis’s Research

Abstract wonderment, which was used by the researcher to guide the initial stages of this thesis, is a principle of grounded theory that is used to initiate a research and develop a general idea on what the research is attempting to understand. It is directional in purpose and allows the research problem to be discovered through grounded theory’s principles on data analysis, namely, open coding, selective coding, and theoretical coding. (Berge, et al. 2012). Glaser (1992, p.22) was emphatic that a researcher adopting grounded theory principles should only enter a research with “abstract wonderment of what is going on that is an issue and how it is handled”.

The general and broad research question, ‘What data-emergent theory can help explain the impediments to effective decision-making within UMR’s informal environment?’, was used to initiate this research and create the necessary channels for data collection. The research began by focusing on semi-structured interview questions pertaining to the relationship between the concepts of an informal environment and decision-making. Using the notion of informality as the research’s contextual background and research setting, the goal was to allow implicit themes and concepts to emerge during the collective data collection and analysis stages. Unlike traditional research that starts with a predetermined set of research questions to guide the research (Grover & Vriens, 2006), grounded theory uses abstract wonderment to allow emergent data through continuous analysis to direct the research as appropriate. In keeping with such principles, further, narrower, research questions for this research emerged after the first stage of interviews, and were continuously modified and altered based on the discussions within the interviews and theoretical memoing. Figure 4.1 highlights how abstract wonderment was used to initiate this thesis research and how data patterns informed the emerging research questions.
The choice of a research question’s topic used to initiate a grounded theory research, is, according to Wolfswinkel, Furtmueller, & Wilderom (2013) dependent on a researcher’s epistemological position and worldview. As discussed in Chapter 1, this thesis’s topic was selected based on the researcher’s view that within social organizational environments, particularly those where poorly understood problems exist, implicit understandings and viewpoints are inevitable and deeply ingrained within behaviors, that can best be uncovered and understood using an interpretative social paradigm (Brook, et al. 2016). Additionally, the researcher’s experience in working
within a UMR’s informal environment and their knowledge of the lack of contemporary literature addressing the topic played a role in deciding on that specific topic.

4.3 Applied Ethical Framework

As this research involves participants that are external to the actual research, it became imperative that an appropriate ethical framework was applied prior to the data collection stage to ensure the research’s legitimacy and credibility. A number of specific steps were taken to protect the privacy of the participants, and to ensure this research meets the University of Liverpool’s Committee on Research Ethics guidelines and standard.

i. The first step taken was to ensure that the researcher was granted permission to collect data by UMR management. The dynamics of the research were discussed in detail and a presentation of the type of data to be collected was provided to management, as well as a copy of the research’s proposal. An authorization letter signed by the organization’s CEO and Human Resources manager was provided to and retained by the researcher.24

ii. All prospective participants were provided with a Participant Information Sheet (PIS), in both, the English and Arabic languages, that detailed the research’s particulars including that no personal information would be collected, their participation was voluntary, and that they may withdraw at any time without any consequences or repercussions.25 This information was also communicated verbally. All participants who agreed to take part in the research signed an informed consent form prior to participating26 and were informed that data would only be stored for the duration of the research, after which it would be destroyed. The researcher’s contact information was also made available to all participants.

24 A copy of the authorization letter to conduct research at UMR is presented as Appendix B.
25 A copy of the English version of the PIS is presented as Appendix C.
26 A copy of the Informed Consent form is presented as Appendix D.
iii. A member of Human Resources was always present during the interview stages in order to ensure that all procedures were effectively followed, as well as to address any concerns participants had before, during, or after the interviews, if they were uncomfortable talking directly to the researcher.

4.4 Applied Data Collection Processes

This section describes this thesis’s data collection sources and their structure. Grounded theory is “uniquely suited [to be] easily used as a general method of analysis with any form of data collection [and] transcends specific data collection methods” (Glaser, 1978, p.6). Using grounded theory’s principle of ‘all is data’ discussed in Chapter 3, any type of data or source that pertains to the research field, whether it is vague, objective, subjective, conceptual, biased, or even appears irrelevant, as long as it assists in the early stages of abstraction, was considered to have value and was analyzed as ensure that the credibility of the theory being generated was not compromised. This also allowed the research to retain the potential for richer data that is multivariate and more systematic, and encouraged the researcher to avoid presumption towards any specific type of data or source.

When analyzing the research site to identify any potential data-rich sources that could contribute to understanding the problem situation, assist in abstraction, and eventual theoretical saturation, it was important to ensure that access to data sources was guaranteed by UMR’s management. After discussions with management, three primary sources were identified - field interviews, observations, and historical documents. Those sources formed the core data collection platform, which were subsequently developed into higher abstraction using the secondary source of the published literature during the final stages of data analysis.

Table 4.1 presents an example of how theoretical sampling, theoretical memoing, and data collection were used to saturate the discovered abstract code of ‘pressure’, and
understand its relation, importance, or relevance, within the context of this research. Moving from one stage to the next required reflexivity, questioning insight, and reflection.

<table>
<thead>
<tr>
<th>Substantive Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open Coding Stage</strong></td>
</tr>
<tr>
<td>Purposeful Sampling Applied</td>
</tr>
<tr>
<td>Purposeful Sampling allowed the discovery of as many categories as possible within research field</td>
</tr>
<tr>
<td>Open Coding yielded 100+ abstract codes</td>
</tr>
<tr>
<td>Example Abstract Code: Pressure (to complete tasks)</td>
</tr>
<tr>
<td>Theoretical Memo Extract: ‘Pressure to complete tasks is a reoccurring code, yet does not appear to have much relevance to decision-making. Code needs confirmation’</td>
</tr>
<tr>
<td>Constant Comparison Applied: Using constant comparison allows searching for patterns relating to ‘pressure’. To help with identifying confirmatory patterns, further sampling is required.</td>
</tr>
<tr>
<td>Subsequent sampling utilizes theoretical sampling.</td>
</tr>
</tbody>
</table>

Table 4.1 Example of Theoretical Sampling and Theoretical Memoing

The processes of collection and analysis were undertaken intermittently over a total period of nineteen months and were started using abstract wonderment. Initial interview
data provided key information that shaped subsequent data collection processes, as participants discussed how they view UMR’s decision-making processes. Data analysis was initiated immediately after the first stage of interviews was completed, as open coding of broad data allowed theoretical sampling to be applied, leading to further refinement of data and the eventual emergence of concepts as shown in Table 4.1. The emergent theory’s framework was developed as the data became saturated and emerging concepts were juxtaposed with the literature as theoretical coding was conducted.

A significant challenge was realizing that often, emerging concepts, ideas, notions, or information, required constant inductive reasoning in order to understand their relevance within the overall underlying phenomenon. Much of the emerging data contained gaps that needed to be filled and ‘woven’ together to ensure that a pattern became cohesive, which is an expected challenge of ‘bottom-up’ coding due to the nature of using interviews and observations as opposed to the literature as the study’s starting point (Andrade, 2009). Furthermore, when upscaling in-vivo codes and units of data to a broader level of abstraction and patterns, it was important to understand and accept that certain biases could potentially emerge in the data. This ensured that the researcher continuously broadened the data and focused on confirmatory patterns as support for emerging codes. Interview data was treated with particular caution, as it was a narrative that could be skewed or incomplete given participants’ emotional stance at the time of the interviews and potentially underlying implicit meanings. Accessing a wider base of interviews, observations, and historical documents, and a focus on constant comparison and theoretical saturation, helped ensure biases were identifiable and data analyzed for inconsistencies.

Figure 4.2 shows the iterative nature of the data collection and analysis processes that eventually led to the emergence of codes and categories. The bottom action-related component concerns interviews and observations conducted post-theory, and relates to informed action as discussed in Chapter 6.
Figure 4.2 Applied Data Collection and Analysis Process
The following subsections present the structure of each of the data collection sources.

### 4.4.1 Conducting Semi-Structured Interviews

Interviews formed the first and most intensive data collection method in discovering the emergent theory, and took place in four separate stages. They were structured and designed to encourage the emergence of underlying cognitive thinking processes that relate to the contextual area under study. A semi-structured framework was used, which is most appropriate for “finding out Why rather than How many or How much” (Miles & Gilbert, 2005, p.66). Relevant preliminary questions were prepared that allowed a conversational undertone to the interviews helping participant information to emerge naturally. This limited research predispositions, allowed new questions to emerge from the data, and facilitated the emergence of genuine participant thoughts and viewpoints.

Through purposeful sampling, as discussed in Chapter 3, interviews were initially open to all 43 possible participants within six of UMR’s departments, which ensured greater data broadness. As the first stage of interviews were completed and data analyzed, theoretical sampling was used to focus on participants who were more actively engaged with the organization’s decision-making processes as well as those who were more informed regarding the organization’s informal work environment.

Interviews took place within UMR’s meeting rooms, and the duration and structure of each stage was dependent on available participants’ time in order to avoid affecting or disrupting their work schedules. They were conducted in a group setting, with intermittent questions asked by the researcher to ensure the conversation maintained momentum and remained on topic. Participants frequently asked rhetorical questions, to which other participants added their input, which increased the depth and richness of

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27 43 is the total number of potential participants. Actual number of individuals who chose to participate was 23 as mentioned in Chapter 1.

28 As discussed in Section 4.2, the six departments included four production departments, the Procurement and Supplier Relations Department, and the Sales and Delivery Department.
the discussions by allowing tacit and implicit information to become clearer. Table 4.2 presents preliminary interview questions used to start the interview process, formulated based on the dimensions of this research’s abstract wonderment. It is notable that the questions were initially general and broad in order to encourage discussions on areas that may not be initially identifiable as well as to avoid the researcher’s own preconceived notions or biases from impacting the direction of emerging data.

<table>
<thead>
<tr>
<th>Interview Stage</th>
<th>Preliminary Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1 Interviews (Using Abstract Wonderment as a base for questioning)</strong></td>
<td>How would you describe your experience working within an informal work environment? How do you view the current communications framework used within such a context? How do you view the current decision-making framework? How do you define the organization’s informal elements and do you think they have a positive or negative impact?</td>
</tr>
</tbody>
</table>

Table 4.2 Preliminary Interview Questions

Table 4.3 provides an overview of each stage, date, duration, as well as the number of participants in each stage.

<table>
<thead>
<tr>
<th>Interview stages</th>
<th>Date</th>
<th>Duration</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First stage interviews</strong></td>
<td>January 2015</td>
<td>~ 3 hours (1 hour each day for three consecutive days)</td>
<td>23</td>
</tr>
<tr>
<td><strong>Second stage interviews</strong></td>
<td>May 2015</td>
<td>~ 2 hours (1 hour mornings &amp; 1 hour afternoon)</td>
<td>18</td>
</tr>
<tr>
<td><strong>Third stage interviews</strong></td>
<td>September 2015</td>
<td>~ 3.5 hours (1.5 hours first day &amp; 2 hours three days later)</td>
<td>10</td>
</tr>
</tbody>
</table>
The gradual decrease in the number of participants across the interview stages was due to theoretical sampling, as the data become more focused and narrower, only participants with direct knowledge and experience of the emerging concepts were selected for each subsequent interview stage.

As this thesis uses the emergent theory to formulate informed action, ‘interviews relating to action’ in the table refers to a separate set of interviews used after short-term action was implemented, as presented in Chapter 6. The interview structure used was similar to the structure described in this section although questions were more structured and geared towards specific concepts relating to the emergent theory. A total of 16 participants took part in those interviews, and the context in which they took place is presented in Sections 6.2 and 6.2.1 of Chapter 6.

In order to facilitate understanding patterns within the data and keep track of an individual’s contribution, each participant was assigned two letters and a number, which were used to identify any data collected from them throughout the research process. The letters and number were updated depending on whether they were included in subsequent data collection stages. For example, an individual who participated in the first stage interview, could be assigned ‘AB1’. While the ‘AB’ is assigned randomly, but unique to that individual, the ‘1’, indicated that they took part in the first stage interviews. If they were selected through theoretical sampling to take part in the second stage interviews, their assigned number was updated to reflect their participation, and thus would become ‘AB1.2’. This process was used throughout the interview process and

<table>
<thead>
<tr>
<th>Forth stage interviews</th>
<th>January 2016</th>
<th>~ 2 hours (1 hour mornings &amp; 1 hour afternoon)</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews relating to Action</td>
<td>August 2016</td>
<td>~ 3 hours (1 day)</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 4.3 Characteristics of Interview Process
ensured the researcher was able to refer back to particular individuals and their data contributions when necessary.

4.4.2 Conducting Observations

Observations formed an additional empirical data source, were non-participatory, took place on 3 separate occasions\(^{29}\), and conducted randomly and overtly. Observations may be of two types - formal and informal (McFarland, 2001). Formal observations are structured and focused on collecting data from participants, while informal observations are unobtrusive as participants do not participate while the researcher collects information from a distance (Jennex, 2008). This research solely uses informal observations.

Observations allowed one to appreciate and understand ongoing field-based interactionism between participants (Elsbach & Kramer, 2015). Removed from the artificial confines meeting rooms, participants interacted more freely, and hence, it was possible to capture how verbal and non-verbal communication and decision-making processes took place without hindrance. This is particularly true regarding gathering data that was not made explicit during interviews due to participant bias or subconscious omission. This also assisted in reducing the potential differential between declared ideas during interviews and revealed ideas during activities.

While non-participatory overt observations proved to be valuable in contributing to the data, there are certain weaknesses that one needs to be aware of when utilizing this type of method. Overt observations require the researcher to fully define their role in order to avoid influencing the data being gathered (Flick, 2009). Additionally, participants may behave differently when they are aware of an observer noting their behaviors. Flick maintains however, that it may be inevitable that a researcher begins to

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\(^{29}\) Two additional instances of observations were conducted during the action component of this thesis, which is discussed in-depth in Chapter 6.
take an active role in those observations, which in turn, could result in unreliable data. The researcher’s experience during the observations uncovered an additional limitation of such observations where ‘group pressure’ appeared to influence how decisions were made, presumably to avoid contention while being observed. Despite the potential challenges and limitations, it is well established that observations form an integral component of symbolic interactionism (Jeon, 2004), which is a foundational concept of grounded theory (Crooks, 2001), as discussed in Chapter 3. A number of basic steps to limit such issues during the observations stages were taken:

i. As an observer, it is critical to maintain a physical distance from the participants.
ii. Limit all unnecessary communication with participants in order to avoid over-engagement.
iii. Observations were limited to three times, each being no longer than sixty minutes.
iv. Observations were scheduled at times that would intentionally coincide with important interactions during the day. This allowed the observations to be unsystematic as well as focused on actions that would be relevant, such as during active decision-making discourses.
v. As a distant observer, it was expected that data would be limited in scope. However, it was important to emphasize that the focus is on identifying incidents through categorization. It was decided that such incidents would hold little value if not substantiated by incidents identified during the interview process.

Observations were used during the substantive coding stage, and increased the data’s depth and richness as concepts were reaffirmed and new categories and patterns identified. Appendix E presents a sheet example used during observations.

4.4.3 Using Historical Documents

Historical documents represented the last field data source, and were made available by the organization for the purpose of this thesis as long as details pertaining to
suppliers and names of participants within projects were not used as part of the data. Historical documents, which are considered proprietary, are a record of previous internal projects, intended aims, their results, participants, and with a commentary section on the identified difficulties or challenges during those projects, which proved useful during the open and selective stages of coding. They are structured sequentially and are composed formally using both qualitative and quantitative information, and were most effective when attempting to identify long-term patterns from the data.

They were considered key in broadening the data field to include historical instances of issues that may not be otherwise identifiable within real-time interviews and observations. Table 4.4 provides an example of a historical document and how patterns of behavior were deduced from the data through theoretical memoing by the researcher. The data from the historical document is presented as a verbatim translation from the Arabic language to English.

<table>
<thead>
<tr>
<th>Substantive Coding (Open and Selective codes)</th>
<th>Memo Excerpt</th>
<th>Tentative Emerging Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural restrictions/historical reference</td>
<td>…recent discussions have focused on areas of culture and communication, and the ‘fact’ that participants feel that issues have long spread throughout the organization, and have long become the standard.</td>
<td>A correlation is emerging between elements of the cultural phenomenon and perceptions are impacting effective communication.</td>
</tr>
<tr>
<td>Rhetoric Culture Communication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Document 8-1A 15 July 2013 (Quality Control Improvement for Silicon Insulators) | Result of Analysis (Theoretical Memoing) |
Expected level of quality assurance: 0.9-1.0 to be confirmed by visual inspection before final packaging.

**Result:**

0.6 (60% approval)

Responsible group has not met the required change in quality control processes. Instructions were presented by department manager to workers. Damaged items or items with faults continue make it to final packaging.

**Recommendation:**

Codify employee knowledge and create training manual. Previous training was unsuccessful, so new training required whilst using data relating to reasons of products being below standard.

The organization is recognizing an issue of communication where although workers were provided with the necessary information to improve quality control, the required results were still not met. The recommendations highlight that this is a reoccurring issue, which may be due to cultural/perception limitations (or simply ineffective training - ask participants about their thoughts on training and whether they thought it was effective).

Pattern emergence needs to be reconfirmed using data from codes/observations/other historical documents.

---

**Table 4.4 Historical Document Example**

Although historical documents’ data was occasionally inconsistent since they were composed by different individuals, this was treated as differing perceptions of reality that still retained value in contributing to understanding the underlying problem situation. Such an approach is supported by grounded theory’s lack of emphasis on data accuracy, but rather, on how those differing realities impact the situation under study (Glaser, 1992). The value of historical documents within this thesis is in providing a point of reference for emerging data in order to discover data patterns. Hence, they are utilized in order to help “answer questions about causes, effects, or trends relating to past events that may shed light on present behaviors or practices” (Polit & Beck, 2008, p.232).

As historical documents number in the thousands at UMR, and in order to delimit the data and avoid introducing information to this research that may be outdated or no longer relevant, no historical documents were used that were dated prior to 2012. In total, 9 historical documents were used, representing an aggregate of 13 projects.
4.4.4 How the Literature is Intertwined with the Emerging Data

The literature plays a unique role within this thesis, as its purpose is ‘contributive’ as opposed to ‘foundational’ (Dubois & Gadde, 2002), which was inspired by grounded theory principles, as discussed in Chapter 3. During data analysis, it was used in an iterative manner throughout theoretical coding, helping increase the level of abstraction, confirm patterns, and substantiate emerging data, and was considered an additional data source used to achieve theoretical saturation.

Literature integration occurred based on the emerging data, and emphasis was placed on not allowing the literature to ‘force’ certain themes, rather, the research data guided the selection of the literature during coding. For instance, it helped clarify and define many of the emerging codes’ conceptualizations relating to ‘perceptions’ and ‘communication’, two concepts that emerged from the data. Literature that addressed those areas was researched in order to assign patterns to emergent data units and codes. Such an approach was used throughout the theoretical coding in order to achieve a higher level of abstraction of codes.

When using the literature, focus was placed on maximizing the number of peer-reviewed publications from well-established and respected journals. This was to ensure that the used literature was of high empirical and research value, and that it would not contribute in a negative manner to the emergent data. A good example of such a journal was Academy of Management Review, which was instrumental in helping interpret data patterns that were occasionally obscured within interview narratives. It assisted in substantiating certain categories and helped identify important peripheral concepts.

4.5 Data Analysis: The Coding Process

This section presents this thesis’s data analysis and development processes, and presents the conceptual development process that resulted in the development of the
emergent theory, core phenomenon, and propositions. It is reflective of the researcher’s personal experience as the data was collected, analyzed, and developed, into a cohesive explanatory theory. It also attempts to demonstrate to the reader the experiential process used as a result of adopting grounded theory principles.

Using Glaserian grounded theory principles as described Chapter 3, data analysis processes presented in this section highlights the stages of substantive coding (open and selective) and theoretical coding of data from interviews, observations, and historical documents. The focus is on demonstrating the conceptualization process, how relationships between units of data were developed, emergence, and how the core phenomenon, core category, and related concepts, emerged from the data. Examples of theoretical memos and how they assisted in understanding the emergent data are also included to highlight the data’s conceptual process.

4.5.1 Applying Open Coding: Fracturing the Data

As the first stage of interviews were completed, the researcher began to appreciate the challenge ahead in using grounded theory as a framework for data analysis. Although its stages and particulars were well understood and clear in the researcher’s mind, one of the first roadblocks that immediately emerged was upscaling the collected data from the basic descriptive stage of describing the data to a higher level of conceptualization that explains what is the data really stating regarding the social phenomenon. As highlighted by Glaser (1998) and discussed in Chapter 3, it is crucial for the researcher to focus on conceptualization in order to successfully analyze emerging data, which appeared challenging to the researcher given that the first set of interviews yielded over 15 pages of notes and memos. There was a sense of ‘impatience’ as the researcher attempted to quickly identify any ‘hidden’ phenomenon within the data upon which to use as a foundation to build further data analysis.

It was at this stage that it became necessary for the researcher to re-evaluate their
understanding of how grounded theory handles data units in order to avoid approaching the data in a biased manner, especially given the initial tendency to attempt to quickly locate a phenomenon within such early stages of data analysis. It was important to take a step back and carefully re-evaluate what is required in order to properly interpret the emergent raw data. Revising and re-reading Glaser’s (1978) ideas on theoretical sensitivity, it immediately became clear how conceptualization cannot be a rushed process, but should naturally emerge from the data incrementally. What is indeed required is an appreciation of how theoretical conceptualization can only come about as a result of a long and consistent process of collecting, coding, memoing, re-collecting, and re-evaluating, pockets of data. Although this appeared to be overwhelming, the researcher eventually began to believe that what is necessary is an initial ‘spark’ to data analysis that ‘kick-starts’ the process and allows conceptualization to occur when least expected. To illustrate this process, the raw data collected during the first stage interview was typed out and printed in order to block out any distractions, and divided into smaller excerpts in order to be managed easier. The data was arranged in the order it was collected and divided into separate lines that made it easier to read and understand the flow of information it contained.

Table 4.5 presents an example of how the data was arranged prior to any active analysis by the researcher. At that point, an associated memo encompassing the researcher’s reflections on what the excerpt is discussing was also developed where key terms were identified, and is presented as Table 4.6.
Example of group interview excerpt (first stage interview) Int.1

Participant SA1: ....the issue here is that the culture got used to it as it is

Participant RA1: ...i agree

Participant SA1: (question to group), doesn’t everyone make decisions that they know will just get them through the day?

Participant YA1: I am not sure what that means

Interviewer (myself): Can you elaborate on what you mean by ‘getting through the day’?

Participant SA1: Simply to avoid any contentions or problems from coming up. Just get it done

Participant RA1: It is so easy to get carried away with what management wants versus what can be done with what we have to work with

Table 4.5 Group Interview Excerpt

Associated Memo #4

In this excerpt, there is a focus on culture. It appears to be a main area of concern for participants. Participant SA1 is under the strong impression that one needs to avoid contention - just get the job done and move on. The notion of culture and ‘how things are normally done’ seems to be a common theme that keeps emerging. On some level, the participants seem to accept that there is a certain level of dysfunction occurring within the organization. That said however, they also seem to accept this dysfunction as a normal component of organizational life. What is really interesting is that while individuals seem to constantly search for group reinforcement and support, there is a certain level of communication discord between individuals within the same group. Overall, there is an underlying culture element. It will be interesting to see how further analysis of the data relates to the emerging notion of culture and its role towards decision-making.

The comment by participant RA1 is of particular importance. Maybe it would be useful to pursue this point further next time. Is management being unreasonable? Are there other individuals who agree? Are there any examples that can be identified? Just as importantly, if management is not being unreasonable, where are participants getting such an impression??**IMPORTANT (this could be a new issue that could lead to something yet unknown).

Table 4.6 Group Interview Memo

At this point, the only analysis conducted was the development of memos, reflecting the researcher’s ideas, understanding, and impression, of individual excerpts. To initiate the ‘spark’ discussed earlier, the researcher began open coding each excerpt individually, then again collectively as a whole. This involved breaking-down and fracturing the
gathered data in order to assign conceptual labels to its individual parts. The process involved word-by-word and line-by-line analysis of the data, as in-vivo codes were extracted then upscaled to descriptive and then analytical codes. Doing so allowed the data to go from simply understanding what is being stated, to understanding the underlying meaning behind the statements being made and their relevance (King & Horrocks, 2010). This process was done by hand, although admittedly, was a mundane and slow moving process. However, it was considered a starting point - a point that can start the data analysis process and allow it to morph into exploring other channels as new data emerges. Using computer software to analyze the data was avoided as suggested by Glaser (2002), who argued that analysis software is likely to focus a researcher on accuracy as opposed to conceptualization.

Using the excerpt presented in Table 4.5, line-by-line analysis was conducted whereby in-vivo, descriptive, and analytical codes eventually started to emerge, as presented in Table 4.7.

<table>
<thead>
<tr>
<th>Line by Line Analysis</th>
<th>Open Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In-Vivo coding</td>
</tr>
<tr>
<td>1 …the issue here is that the culture got used to it as it is</td>
<td>Culture is an issue</td>
</tr>
<tr>
<td>2 …i agree</td>
<td>Agree</td>
</tr>
<tr>
<td>3 (question to group), doesn’t everyone make decisions that they know will just get them through the day?</td>
<td>-</td>
</tr>
<tr>
<td>4 I am not sure what that means</td>
<td>Individuals not sure</td>
</tr>
<tr>
<td>5 Interviewer - Can you elaborate on what you mean by ‘getting through the day’?</td>
<td>-</td>
</tr>
<tr>
<td>6 Simply to avoid any contentions or problems from coming up. Just get it done</td>
<td>Contentions and problems emerging</td>
</tr>
</tbody>
</table>
It is so easy to get carried away with what management wants versus what can be done with what we have to work with. Management wants vs. what can in fact be done

<table>
<thead>
<tr>
<th>Separation</th>
<th>Maintaining Status Quo/agenda setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7 Open Coding Example

As in-vivo codes emerged, the researcher faced another challenge. Despite a significant number of codes, they appeared disparate with no apparent pattern. Doubt began to develop as the researcher became concerned that the coding process was being conducted incorrectly. For instance, the codes ‘agree’ and ‘contentions and problems emerging’ highlighted in Table 4.7 appeared to have no connection to each other above a superficial level or within a scope that would be exceptionally broad. Despite the doubt, the researcher continued to develop in-vivo codes in hope that a pattern ‘magically’ began to emerge. It was at this point that a realization developed in the researcher’s mind, in that grounded theory data analysis’s reflective framework was in fact being subconsciously ignored. As highlighted in Chapter 3, Glaser (1978, p.57) had presented a series of three questions that a researcher should continuously focus on in order to guide the coding process. Recalling the framework, the researcher began reviewing each in-vivo code whilst reflecting on the three questions:

- What is this data a study of?
- What category does this incident indicate?
- What is actually happening in the data?

With a newfound level of confidence, the researcher began to cautiously move the in-vivo codes to a higher level of abstraction: descriptive codes, whilst continuously reflecting on and applying the three questions mentioned above. For example, the in-vivo code ‘contentions and problems emerging’ was re-coded as ‘problem avoidance’, since ‘contentions and problems emerging’ appeared to indicate that participants were exhibiting an attitude of ‘problem avoidance’. This higher level of abstraction seemed to make more sense, as one moved away from pure raw data to greater conceptualization. Finally, the initial momentum was beginning to gain traction, although it was important to
keep in mind that each code would not necessarily ‘fit’ within an emerging pattern, and that as the study progressed, codes may be changed or dropped completely as pursuing them may lead to a dead-end.

Pushing through the initial coding process, the concept of constant comparison discussed in Chapter 3 became central. For instance, the ‘problem avoidance’ code was compared with the ‘separation’ code (gap between management requirements and reality as perceived by participants), resulting in a higher abstraction of ‘maintaining the status quo’. Incidentally, maintaining the status quo became a cornerstone of the final emerging core phenomenon\(^{30}\) due to its persistence as an incident within the data. Comparing incidents of codes allowed the researcher to move the coding process from a descriptive level to greater conceptualization. The memo presented in Table 4.8 is a good example of such a process, which highlights the iterative nature of analysis used within this thesis, as incidents are compared with data and incidents in historical documents in order to facilitate pattern emergence.

\(^{30}\) Maintaining the status quo eventually contributed to the core phenomenon of ‘sustained barriers to decision-making’, which is discussed in Chapter 5.
Memo #17

A reoccurring area of interest has been that of a cultural norm. Can culture be a main source of the current social issue?

Document 8-1A has been important in providing some clarity in this regard, however, culture appears to be too broad of a concept. What exactly about the culture is the issue?

What is known:

1 - Culture is an issue
2 - There is a certain norm (behavioral) that has become ingrained within the culture
3 - Historical Document 8-1A provides an example of where efforts to improve packing and quality control has continued to fail. The same is identified in documents 9-5C, 9-6C, and 15-13P.

Although culture is identifiable within the historical documents, it is not directly addressed. It is possible that management does not see this as a cultural issue and therefore has ignored it as part of their record-keeping. However, whenever culture appears as an issue, communication as a concept appears directly within historical documents. This connection, while possible, is still very vague and not sufficiently substantiated.

Culture as an in-vivo code has been upscaled to an ‘issue or problem’. It is possible to upscale it further to cultural restrictions that are identified within historical references (participants seem to believe there are historical references).

It is likely that communication needs to be pursued further to either confirm it as a concept or reject it completely. It may be best be direct with participants in upcoming interviews on their view on communication.

---

Table 4.8 Memo Highlighting Cultural Open Code Emergence

Such memos were considered exceptionally important during data analysis as they helped the researcher search ‘beyond’ the immediate data to investigate incidents and question whether they can be related to other incidents. Not all codes were immediately obvious within the data, rather, most were exceptionally difficult to identify. This was a constant source of frustration as patterns frequently felt ‘just out of reach’. As a result, the researcher came to the realization that grounded theory data analysis is in fact not a straightforward process of steps that need to be applied. It is a long winding road that requires persistence and constant iteration in order to eventually be able to identify any substantial pattern within a plethora of raw data and codes. Furthermore, as the open
coding process progressed, the researcher came to appreciate that while understanding grounded theory’s theoretical principles lays down the foundation for utilizing the methodology, grounded theory can really only be understood through practice and possibly even as importantly, patience.

The process of identifying in-vivo and descriptive codes, and developing them to a higher abstraction of analytical codes continued throughout the open coding stage. These codes formed the bedrock upon which the theory would eventually emerge, as well as directed the research to more specific areas of concern and subsequently informed further theoretical sampling, as is discussed within this chapter.

4.5.2 Pattern and Concepts Emergence

As the data analysis progressed and the concepts were broadened, a series of open codes, along with tentative categories, started to emerge, as presented in Table 4.9. The codes and categories initially appeared un-cohesive and too broad with no common theme or pattern identifiable. This was also recognizable within categories, as some codes were not entirely representative of the category in which they were placed. However, Glaser (1992) highlights that this is a normative component of the coding process, where a pattern should eventually emerge as a core phenomenon is pursued through the utilization of the comparative method and theoretical memoing. To start the categorization process, the researcher focused on the broadest categories that would allow for a spectrum of different codes. The researcher decided on 5 emergent categories - cognition, organizational environment, communication channels, decision-making culture, and group alignment/loyalty, which although were considered tentative, we seeming sufficiently broad to allow coding to progress and develop. Theoretical memoing was instrumental at this point to refocus the research on a common pattern.
## Categories and their respective substantive codes

<table>
<thead>
<tr>
<th>Categories</th>
<th>Organizational Environment</th>
<th>Communication Channels</th>
<th>Decision-making Culture</th>
<th>Group Alignment/Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition</td>
<td>strong reasoning/feelings</td>
<td>chaotically</td>
<td>ambiguousness</td>
<td>cultural restrictions</td>
</tr>
<tr>
<td></td>
<td>overwhelming perceptions</td>
<td>maintaining status quo</td>
<td>lack of definition</td>
<td>absent decision making support</td>
</tr>
<tr>
<td></td>
<td>problem solving</td>
<td>geared towards end goal</td>
<td>informal channels</td>
<td>historical references</td>
</tr>
<tr>
<td></td>
<td>experience</td>
<td>tacit knowledge</td>
<td>obstacles</td>
<td>rationale</td>
</tr>
<tr>
<td></td>
<td>terminology</td>
<td>problem avoidance</td>
<td>impact of personality</td>
<td>decision coercion</td>
</tr>
<tr>
<td></td>
<td>ambition/mental modes</td>
<td>rampant disappointment</td>
<td>addressing uncertainty</td>
<td>judgment heuristic</td>
</tr>
</tbody>
</table>

### Table 4.9 Emergence of Open Codes and Tentative Categories

Prior to presenting the memoing process used to discover a pattern, it is important to discuss each tentative category and how it emerged and decided upon. Each category described below includes a table that presents select verbatim translations of statements made by participants and their context/subject, which directed the researcher to discover each individual category. The context/subject is presented to assist the reader understand the topic in which each statement is grounded, and are not presented as descriptive or abstracted codes.

i. Cognition: This category is comprised of codes that relate specifically to how the individuals and participants react, understand, perceive, and justify their behaviors within their environment. It formed the primary base for understanding how they view their roles within UMR. It was considered a starting point for analysis, as the data suggested a strong underlying cognitive and interpretive dimension. Table 4.10 presents participant verbatim statements contributing to and allowing the emergence of, the category of cognition.
Verbatim translation of participant statements | Context/Subject
---|---
‘It can be frustrating when something so simple such as getting clarity on an issue becomes a whole big messy thing’ | problem solving
‘Everyone has different experiences, perceptions, and ideas on how to improve things’ | improvement of processes
‘Managers get angry when things go wrong, even though I don’t think they explained it well’ | reaction to problems
‘I think there is a good opportunity to make things better, if there was some support at higher levels’ | decision-making

Table 4.10 Participant Statements relating to ‘Cognition’ and their Context

ii. Organizational Environment: This category relates to UMR itself, and its imbedded dynamics. The encapsulated codes, presented in Table 4.9, occurred frequently during interviews, and were continuously reiterated by participants. Codes such as tacit knowledge and chaotic, highlighted the underlying principles that point to an informal environment. Table 4.11 highlights participant statements contributing to the category.

Verbatim translation of participant statements | Context/Subject
---|---
‘When I say there is disappointment - that is an understatement, it is just so chaotic’ | support from management
‘Instead of being disappointed so frequently, it is better just to avoid the problem completely’ | reaction to problems
‘Avoid the problem and just continue doing what we are already doing as there is no structure to really deal with it’ | reaction to problems
‘We know more information (tacit) than most managers’ | problem solving

Table 4.11 Participant Statements relating to ‘Organizational Environment’ and their Context

iii. Communication Channels: This category conceptualizes the nodes and connections between UMR’s environment and its employees. The data emphasized the underlying communication structure and its predominance as both a potentially supportive and detrimental element of decision-making processes, as presented in Table 4.12.

Verbatim translation of participant statements | Context/Subject
---|---
‘It’s crazy, but I don’t even know how to start complaining about an issue, even after so many years working here’ | communication structure
iv. Decision-making Culture: Collectively, the codes within this category represent the emergent understanding of UMR’s culture. Although it was initially treated as a subcomponent of the Organizational Environment category, its strong predominance within the data highlighted its emergence as a separate category, as presented in Table 4.13.

<table>
<thead>
<tr>
<th>Verbatim translation of participant statements</th>
<th>Context/Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘I think many people feel they have to agree with a decision even if they don’t really agree’</td>
<td>decision-making</td>
</tr>
<tr>
<td>‘I can’t say always, but sometimes things are just unclear and confusing’</td>
<td>decision-making</td>
</tr>
<tr>
<td>‘It is fair to say that everybody has a different personality and that will impact decisions’</td>
<td>decision-making</td>
</tr>
<tr>
<td>‘I think many people feel they have to agree with a decision even if they don’t really agree’</td>
<td>decision-making</td>
</tr>
</tbody>
</table>

Table 4.13 Participant Statements relating to ‘Decision-Making Culture’ and their Context

v. Group Alignment/Loyalty: This category arose to conceptualize the codes that relate to group dynamics within UMR - their role, how they arose, and how they interact, as presented in Table 4.14.

<table>
<thead>
<tr>
<th>Verbatim translation of participant statements</th>
<th>Context/Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Everybody has their own group’</td>
<td>decision-making</td>
</tr>
<tr>
<td>‘It’s easier to work with the same people all the time’</td>
<td>decision-making</td>
</tr>
<tr>
<td>‘Everybody in a group knows what to expect’</td>
<td>decision-making</td>
</tr>
</tbody>
</table>

Table 4.14 Participant Statements relating to ‘Group Alignment/Loyalty’ and their Context
After extensive open coding, constant comparison, and memoing, the core phenomenon gradually started emerging from the data. The core phenomenon, which is a basic process that explains the general implications of social behavior that will eventually inform the emerging theory (Parry, 1998), provides empirical indicators of what is occurring in the data, as well as provides a basis for theoretical sampling and defines a provisional direction for the research (Hallberg, 2006). In this research, the core phenomenon emerged as one of ‘sustained barriers to effective decision-making’, which was a pattern that first emerged in a series of early memos, and was confirmed in later stage memoing, as indicated in the memo examples in Table 4.15:

<table>
<thead>
<tr>
<th>Memo #31 May 23, 2015 - barriers to decision-making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants thus far seem to collectively agree that there are issues relating to decision-making, both vertically and horizontally within the organization. Those issues however, appear broad and disjointed, with no real focus. Some participants believe it to be an issue of communication, however, during discussions, they seem to discuss other variables as well, such as culture, knowledge, and abilities. The way they highlight those issues is by using many examples of instances where decision-making was challenging.</td>
</tr>
</tbody>
</table>

A higher level of abstraction regarding those issues is needed as well as a broader data set.

<table>
<thead>
<tr>
<th>Memo #43 April 25, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>More coding of the data is resulting in a number of variables arising that seem to be at some level connected. There is general overlap between concepts, such as for example, the communication structure and the level of trustworthiness being perceived. One participant discussed that the issue is not decision-making, but what happens after a decision is made. Other participants agree with the statement. This is very interesting as it highlights an emphasis on decision-making processes and how they are structured. It is important to try and understand what the real underlying problem is as it seems to be a broader issue that cannot be conceptualized based on the current narrow codes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Memo #44 September 4, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>A second series of interviews were completed yesterday.</td>
</tr>
</tbody>
</table>

A general theme that is arising is that a high level of dysfunction regarding decision-making is present. While there are many high-level and low-level concepts and differing reasons regarding this dysfunction, there seems to be a larger issue at play.

For example, it seems that for every decision being made, an issue just ‘pops-up’ that creates a barrier. Those barriers are numerous, each reducing the decision’s effectiveness, even if a decision is eventually implemented. A review of select historical documents also indicates a
Similar pattern. Decision-makers are continuously battling having decisions implemented - even simple daily decisions can be frequently slow and ‘messy’ to implement.

As one stands back from the data and looks at it holistically, the overriding pattern relates to actual barriers to decision-making that are either emergent and unexpected, or are just a component of the organization’s environment.

Table 4.15 Memos highlighting Sustained Barriers to Decision-Making

Although the core phenomenon was not immediately obvious, as it was not an area that was expected nor initially envisioned, it bridged the three theoretically separate entities, (i) the organization and its environment, (ii) the individuals, and (iii) the network connections between them. Furthermore, it helped link and explain the 5 categories.

The process of discovery was cyclical, non-linear, and often chaotic, with new concepts and approximations continuously emerging. Identifying a core phenomenon from within disjointed units of data was facilitated by an approach of reflexivity. This approach is supported by Alvesson & Skoldberg (2009, p.9) who states that:

“[Through reflexivity], the centre of gravity is shifted from the handling of empirical material towards, as far as possible a consideration of the perceptual, cognitive, theoretical, linguistic, (inter)textual, political and cultural circumstances that form the backdrop to - as well as impregnate - the interpretations”.

During the constant comparison and memoing processes, it was necessary to approach the data by generating guiding research questions that could facilitate bringing the data together cohesively, such as, ‘What is contributing to the existent issue of decision-making?’; ‘What are the current decision-making approaches?’; ‘What is the role of communication?’; and, ‘What characteristics of the context of informality may be contributing to the various emergent variables?’

As the categories were developed further, they began merging into a core category of ‘judgment’. Judgment was selected as a core category in the early stages of the data analysis, as it explained the core phenomenon and appeared to be a naturally consistent element of decision-making. It also occurred frequently in the data, merged the majority of open codes, and united the emergent categories and retained
explanatory power. Furthermore, it conceptualized how individuals were judging the validity of decision-making discourses, and subsequently creating barriers to those decisions that were judged to be incongruent with their beliefs and views. Although the researcher, at this point, was confident that judgment was a powerful all-encompassing code that was truly representative of what is occurring within the empirical data, it was still considered tentative, as further coding was required for confirmation.

Table 4.16 presents an early memo used to conceptualize how judgment was used as a filtering process for decisions. Figure 4.3 provides a snapshot of the memo, showing how decisions ‘pass’ through the five categories and how participants judge the legitimacy of decisions. The notion considered that if participants judge a decision to be poor or does not ‘fit’ within their judgment paradigm, the result is an inefficient decision-making process.
The emergence of ‘judgment’ appears to fit almost perfectly as a core category it feels almost magical. Its as if it clearly satisfies how each of the categories that retain the substantive codes can perfectly fit to create a self-explanatory emergent theory. Specifically:

Participants are continuously judging the congruence, merit, soundness, and practicality, of decision-making discourses within the context of other codes such as experience, problem solving, ambition, group pressure, and cultural restrictions. Once substantive codes were categorized into the five main categories, it was possible to see a pattern emerging. (Categories: Cognition, Organizational Environment, Communication Channels, Decision-making Culture, and Group Alignment/Loyalty).

1. Cognition plays a role in how participants judge a decision regarding their own perceptions. Based on their feelings, reasoning, experience, and mental modes, they judge a decision and whether it deserves their full attention. They judge a decision based on their own personal approach to problem solving. For instance, what problem would this decision solve or impact? Is it worth it? In other terms, there is a constant reflective attitude towards a decision and their own cognitive mindsets.

2. In terms of the organizational environment, participants appear to take certain cues from their immediate surroundings. Specifically, they take into account the chaos of the environment, the absolute desire to maintain the status quo, focus on their own personal end goal, the tacit knowledge gained from within the environment, the strong need to avoid problems/contentions, and the existing but broad disappointment experienced by participants. Taking these various areas into account, participants then attempt to judge the legitimacy of a decision.

3. Communication emerged as an important and central category as it set forth a more comprehensive set of variables upon which to judge decisions by participants. Data indicates that participants seem to judge the ambiguousness, detail, and delivery channel, of decisions. Based on such variables, decisions are judged to either be important or irrelevant. The researcher believes that communication seems to be central in judging decisions when compared to other variables, simply due to the fact that it is emerging frequently in the data within the context of judgment.

4. Participants are judging decisions based on the decision-making culture based within their respective department. For instance, if there is a strong historical trend of decisions being generally ignored, or there has always been a slow response towards decisions, this trend seems to continue. The researcher was unable to find historical documents to substantiate historical patterns towards decisions, however, participants seem to highlight that there is a historical element that has ‘morphed’ into a micro-cultural attitude.

5. Participants are judging whether decisions may jeopardize their standing within their group and whether there is group support based on their approach to decision-making. Generally, they are giving precedence to their group possibly to avoid alienation.

Note:
It is important to take note that there does not appear to be a direct process to judgment! It is almost as if it is a semi-random occurrence, which is confusing.

Table 4.16 Memo on the Emergence of Judgment as a Core Category
As discussed in Section 4.5.3, once the core category emerged and conceptualized as encompassing the various categories, selective coding started. The focus at this point was to selectively code for the core category of judgment in order to delimit the emergent pattern as well as ensure theoretical saturation. As noted in Table 4.16, there still appeared to be a certain level of confusion regarding how judgment really worked in relation to decision-making. The researcher was uncomfortable with the notion that decisions could potentially be rejected or accepted based on individuals’ judgments. Although the data was indicating such a process, it seemed too unrealistic and vague. The process of continuously judging decisions appeared to be excessive, with a wasted amount of energy for participants to conduct, particularly regarding routine decisions - decisions that occur on a daily basis. It was a frustrating experience at this point, as it felt as if the answer was so close, yet concurrency still felt beyond reach. The potential for researcher bias, also compounded the researcher’s confusion and concern. However, given that Glaser (1978) highlighted that most of early coding is tentative and achieves higher abstraction and clarity as the research progresses, the researcher continued through the data collection and analysis process, namely selective coding, temporarily setting their concerns aside.

As the core phenomenon became clearer, and more affirmative, certain relevant
concepts continued to emerge and impact the core category, as discussed in the next sections.

4.5.3 Applying Selective Coding: Data Reduction and Higher Abstraction

In keeping with grounded theory principles, the open coding process was used to fracture and analyze the emergent data with emphasis on saturation and the emergence of a core phenomenon and a core category. The next stage, selective coding, further reduces the data by using the identified core category of ‘judgment’, the core phenomenon, and the 5 general categories, as starting points for further theoretical sampling, coding, constant comparison, and theoretical memoing. Revision of the core category and general categories is a normative expectation, as a researcher should expect the core category and patterns to adjust accordingly as data is further delimited and moved to a higher level of abstraction during selective coding (Glaser & Strauss, 1967). It is possible to state that selective coding served two core purposes:

i. Refine the core category of judgment
ii. Delimit the theory and ensure saturation

The aim to delineate concepts as they relate to the core phenomenon was branched out to identify any variables that contribute to its legitimacy as a phenomenon or pattern within UMR. A number of relevant questions were used to achieve higher abstraction and focus the data on emerging variables:

i. What are the major areas impacting judgment?
ii. How are judgments developing and being implemented?
iii. How are decisions formed and what are the underlying barriers to such decisions?
iv. In what way do the various incidents impact decision-making processes?

In order to fully appreciate the contextually embedded social patterns within the data,
and their relevance to the notions of decision-making and identify a data pattern, a reflexive and reflective approach (Van Aken, 2005) was adopted. This is reflected in the memo excerpt presented in Table 4.17 as the researcher focused on explicating abstracted concepts.

<table>
<thead>
<tr>
<th>Memo #56</th>
</tr>
</thead>
<tbody>
<tr>
<td>[...]</td>
</tr>
</tbody>
</table>

It has so far been possible to ‘group’ the open codes into five broad categories. What is still required is organizing selective codes around the tentative core category of judgment (other memo). It is important to keep the core category central to the coding so that they remain relevant to the research problem and core phenomenon. It may be a good approach to focus on creating subcategories where codes and categories can be ‘grouped’ together. It is also helpful to continuously refer to decision-making, and to avoid going off on a tangent where irrelevant concepts are pursued that have little to do with the research problem. *This is important! The aim is to increase and achieve a higher level of abstraction.*

| [...] |

| Table 4.17 Explicating Abstracted Concepts Using Reflexivity |

As previously discussed, while the researcher proceeded with selective coding, the core category of judgment appeared to be lacking in logically integrating the core phenomenon of sustained barriers to decision-making, and the practicality of continuously judging decisions by individuals. This was a major challenge for the researcher, especially given the fact that no major or noticeable weaknesses were apparent in the approach utilized in fracturing and analyzing the data. To address this issue, over a period of two months, the researcher decided to focus on the basics of the coding process and theoretical sampling, and allow the data to dictate and lead the research in its own direction. If judgment was correct, then it was imperative to accept it as such, despite any impracticality in such a hypothesis.

The memo in Table 4.18 presents the conceptualization process that emerged during selective coding and how the core category became better refined. The emerging pattern started to become clearer, with a more focused conceptualization.
The main concern for participants is clearly getting their job done and work completed. This appears to be a genuine concern. This, which can be considered their need, is invariably impacted by the orders they receive either externally from management or from another department. These orders, which are primarily work orders, are resolved through ‘filtering’ these orders based on realities as they are perceived. Importantly, perceptions of reality here may not entirely be reflective of an objective reality. That said however, once they accept certain orders as applicable within their created context, decisions (routine) become fluid. That context is built upon their need as discussed earlier.

In essence, the core area of focus is really perceptions. Participants perceive certain decisions are legitimate and congruent with their need, while others are perceived to be incongruent. This perception, given that it is not based on an objective reality (otherwise, most if not all individuals would agree on the basics of how decision-making takes place), is based on a high level of subjectivity. When applying theoretical sampling regarding subjective perceptions, it became clear that this is based on certain variables, which they consider to be of vital importance.

Initially, the tentative core category was judgment, and was constructed around the principles that individuals are judging the legitimacy of decisions. However, this now appears not to be the case. In fact, the type of decision itself appears to have little to no relevance. In fact, this helps explain the illogical nature of judging every single decision, no matter how minute. Rather, participants appear to be placing their subjective reality in a position of precedence to decisions. In other terms, if decisions are in conflict with their reality, the decision is generally ignored - regardless of the decision’s nature. Hence, the core category of judgment does little to explain the underlying phenomenon. Rather, a new emerging core category that relates to perception appears to be a better fit with greater explanatory power. […]

Further selective coding surrounding the idea of perception has yielded a more abstract and better representative core category of ‘selective perception’\(^{31}\). It is a powerful category that unites emerging categories as well as accounts for data variation. Participants are selectively choosing to perceive, not the decisions themselves as previously considered, but the variables that contribute to their own needs. For instance, if they selectively perceive that their position within their group can be impacted by a certain decision, that decision is spurned.

| Table 4.18 Conceptualization Process during Selective Coding |

The memo highlights how although a core category of judgment was initially identified during the open coding process, during the selective coding process, it proved to be insufficiently representative of the core phenomenon and emergent data patterns, and required revision. Although judgment linked many of the open codes, the individuals, the organization, and certain areas of the environment, it did not seem to accurately represent the core phenomenon once a higher level of abstraction was achieved. With

\(^{31}\) Memos presented in Section 5.2.1 in Chapter 5 details the emergence of ‘perception’ as a core category and subsequently its change to ‘selective perception’.
many gaps and a lack of saturation associated with the core category of judgment, a new and more representative core category was necessary. After embarking on further abstraction, constant comparison, theoretical memoing, and a higher level of theoretical sensitivity, the focus shifted to the more encompassing core category of ‘perception’, and then subsequently, ‘selective perception’, which although related to judgment as a concept, it more effectively represented what is really occurring in the data. Selective perception emerged in the data frequently, and also emerged in the researcher’s vocabulary naturally when attempting to explain or describe a data set or code.

Selective perception, occurs when “people interpret an image of the real world with their own perception of reality which gives birth to a biased view of a particular situation [as they] process the provided information selectively in order not to change their point of view [and] hear what they want to hear and disregard any information threatening their perspective” (Yilmaz & Kilicoglu, 2013, p.17). Participants are ‘selectively perceiving’ the context upon which a decision is accepted or rejected, by choosing to consciously or subconsciously develop a bias towards a particular expected outcome as the result of a decision. This allowed them to better manage their position within their immediate environment.

On a technical and practical level, selective perception effectively captured and interrelated the research environment’s disparate variables, as well as the new emergent concepts. It was also a category that was situational and particular to the researched context. Furthermore, its importance as a core category was identifiable in the sequence of events embedded in the data, and was further supported by historical documents through a combination of inductive and deductive analysis.

The core category however, did not emerge until the emergent categories were further abstracted to three peripheral concepts as highlighted in Figure 4.4, which emerged as a result of selective coding.
Three main concepts that relate to the core phenomenon emerged, (i) Communication, (ii) Trust, and (iii) Resources. These concepts synthesize and effectively capture the notions and patterns emerging from the collected data. They also highlight the underlying phenomenon and link the various codes discussed in Section 4.5.2, as well as the 5 categories. Collectively, they form an interrelated pattern that explains the core phenomenon as well as integrate the overall data pattern into greater cohesiveness. Achieving a higher level of saturation and abstraction through incident conceptualization was necessary in order to allow for effective future substantive theory development.

i. Communication is considered a central dimension and inseparable concept of decision-making. Within the data, it provided a structural basis of understanding upon which information is transmitted and received, and its importance became more apparent as data relating to the trust concept materialized.
ii. Trust arose as a result of individual and group ideas, views, and behaviors, emerged from the data. It accounts for the ingrained social functioning highlighted as central within the core phenomenon. It emerges within the existing organizational culture, and in turn, directly impacts the implicit and explicit decision-making process.

iii. Resources is considered an abstraction of, financial, time, and quality resources, which integrate the various incidents of codes and data that contextualize the elements of the decision-making process. It highlights a certain level of decision-making limitations as it increases complexity, and explains the impact of such complexity on the eventual decision-making process.

Each of the categories and their emergence is discussed in its respective section in Chapter 5 in-depth. The core category, selective perception, and its relation to the emergent theory, as well as the related concepts, are also discussed in Chapter 5.

The selective coding process was considered complete once theoretical saturation had been achieved, as new data would contribute little or no additional value.

4.5.4 Selective Perception: A Basic Social Process (BSP)

One of the aims of the data analysis was to discover a data-emergent pattern that ultimately contributes to the construction of a theory that is relevant to the identified decision-making issue. This was achieved by identifying a core category upon which the theory can be constructed. A core category is considered a basic social process (BSP) if it explains variations within the data as well as unites all emergent categories (Glaser, 1978). As discussed in Chapter 3, a BSP is defined by Glaser (1978, p.99), as a process where a researcher can “follow changes over time, yet remain in grasp of a theoretical ‘whole’ process”. It is not necessarily always present and that not all core categories are BSPs, however, once present, a BSP can either be considered a social psychological process (BSPP), which focuses on the individual and behaviors relating to
the core phenomenon, or a social structural process (BSSP), which focuses on the broader social structure relating to the core phenomenon (Glaser, 1978). The core category of selective perception, which is considered a BSP, is seen retaining elements of both BSPPs and BSSPs as individuals absorb cues and information from the surrounding environment, which in turn defines the broader social structure of informality.

Glaser (1978) maintains that a BSP core category should ideally exhibit four criteria or characteristics, i. have at least two emergent stages; ii. be a process that changes and evolves over time; iii. preferable for a study to be qualitative in nature, and; iv. are labeled by a gerund. Selective perception meets all four criteria:

i. Selective perception retains two clear emergent stages that culminate into a synthesis of individual experience and decision-making patterns. The first is developing mental perceptions based on short- or long-term experiences within the contextual environment, while the second is acting on those mental perceptions through decision formulations and patterns.

ii. Given that a significant part of the selective perception category is dependent on the fluctuating environment of informality (Triplett, 2007), which was strongly apparent within the coding and memoing processes, the core category is one that changes and evolves over time based on environment cues that impact individual experiences. Hence, selective perception is strongly correlated to the changing organizational environment as a fluid, on-going activity, and hence cannot be considered a static non-changing concept.

iii. this thesis is grounded in, and defined as, a qualitative research.

iv. Selective perception is considered a gerund as it retains the characteristics of fluidness and connotes ongoing action, thus is non-stationary. It evolves with the changing environment, and is created based on certain cues and how they are
perceived. Selective perception can be considered the derivative of ‘perceiving’. Hence, it is possible to state that individuals within the organization ‘are perceiving’ the environment in a certain manner that leads to their bias towards certain viewpoints.

As presented in Chapter 3, BSPs can also either be considered unit-based or process-based. The core category of selective perception is considered a process-based BSP as it explains a theoretical conceptualization and social structure as properties of a process. The importance of defining a core category within the context of BSPs is critical as this impacts how a theory is constructed (Holton & Walsh, 2016). According to Glaser (1978), when a core category is defined as a BSP, this increases the theory’s scope and richness, particularly as it facilitates constructing the theory within a framework that considers the “particular and distinctive conditions, strategies, actions, and practices engaged in [by individuals and] the process and their consequences” (Outhwaite & Turner, 2007, p.425). The implications of the core category being a BSP is that as a central concept that reflects the core of the situational problem, is considered a fluid, flexible, and more importantly, changeable aspect of the decision-making inefficiencies. This lends significant support to the feasibility of change through action, which is also an objective of this thesis.

As the core category, selective perception has emerged from the data and is considered a BSP, the subsequent data analysis stage of theoretical coding, which is discussed in the next section, relationships are constructed between the various concepts using theoretical ‘coding families’ proposed by Glaser (1978, 2002) and the literature.

4.5.5 Applying Theoretical Coding: Identifying Conceptual Relationships

Theoretical coding is considered the final stage of the coding and data analysis processes adopted within this thesis, and started once saturation of the emergent categories had been achieved. The conditions for saturation are met when “one keeps on collecting data until one receives only already known statements” (Selden, 2005, p.
124). As discussed in Chapter 3, theoretical coding involves identifying conceptual relationships between the saturated categories as well as how they relate to the literature, in order to allow for a higher level of abstraction of either hypotheses or propositions in order to integrate into the emergent theory and move the research towards a theoretical construct (Glaser & Holton, 2004). According to Glaser (1978, p.72), “theoretical codes give integrative scope, broad pictures and a new perspective” of the saturated categories. It is at this point that the literature is fully employed. Glaser’s (1992, 1998, 2001) theoretical coding families were used as a starting point for identifying relationships between the categories. Glaser’s list of coding families is neither definitive nor exhaustive, as Glaser (1978) recommends researchers need to discover theoretical codes within any area of data, including the external literature.

Identifying conceptual relationships between the saturated categories resulted in a significant number of various relationships emerging, which assisted in developing the propositions presented in Chapter 5. Table 4.19 presents an example of the most pertinent relationships and how they were developed using Glaser’s (1978, 1998, 2001) coding families and the literature. Select theoretical codes, in parallel, were also drawn from the literature, as indicated in the table.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Theoretical Coding</th>
<th>Applied Glaser (1978; 1998) Coding Families</th>
<th>Codes derived from the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenomenon: Sustained Barriers to Decision-Making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Environment</td>
<td>Communication</td>
<td>Basics (Social Structural Process); Interactive (Face to Face Interactions, Dealing with, Techniques)</td>
<td>Obstacles to Communication (Macnamara &amp; Zerfass, 2012)</td>
</tr>
<tr>
<td>Group Alignment / Loyalty</td>
<td>Groups emerge in response of the environmental conditions</td>
<td>Consensus (Clusters, Conflict, Cooperation); Unit (Collective, Group, Behavior Pattern, Territorial Unit)</td>
<td>Experience; Internalization; Collaboration (Theiner, 2013)</td>
</tr>
<tr>
<td>Communication</td>
<td>Trust</td>
<td>Interactive (Mutual)</td>
<td>Experience</td>
</tr>
<tr>
<td>Communication</td>
<td>Resources</td>
<td>Level of efficiency</td>
<td>Process (Stage, Progressions, Sequencing)</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>---------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Culture (general)</td>
<td>Organizational Environment</td>
<td>Context relating areas of symbolic interactionism</td>
<td>The Six C’s (context, consequences, conditions); Unit (Situation, Collective, Organization, Behavior Pattern); Cultural (Social Norms, Social Values, Social Beliefs)</td>
</tr>
<tr>
<td>Decision-making Culture</td>
<td>Communication</td>
<td>Framework of cause-and-effect</td>
<td>The Six C’s (context, consequences, conditions)</td>
</tr>
<tr>
<td>Group Alignment / Loyalty</td>
<td>Trust</td>
<td>Strong group bond and trust - social process</td>
<td>Structural Functional (Groups, Role Sets); Cultural (Social Belief, Social Values, Social Sentiments)</td>
</tr>
<tr>
<td>Cognition</td>
<td>Group Alignment / Loyalty</td>
<td>Start of the process of selective perception</td>
<td>Consensus (Differential perception); Basics (Basic Psychological Process)</td>
</tr>
</tbody>
</table>

Table 4.19 Relationship Emergence using Glaser’s (1978, 1998, 2001) Coding Families and the Literature
4.6 Chapter Summary

This chapter presented the data collection and subsequent analysis processes. Although presented in a linear manner, the practical process was conducted iteratively and cyclically due to the nature of grounded theory’s methodological framework. The abstract wonderment used to guide this research was also presented, as well as the data sources used, which included interviews, observations, historical documents, and the literature, as was their role in contributing to the empirical data. A process of initial purposeful sampling was used to initiate the collection processes, which is later replaced by theoretical sampling as the initial data was collected.

As the raw data was collected, it was fractured using grounded theory’s coding procedures, starting with open coding and concluding with theoretical coding as the data was developed from in-vivo description codes to higher level of abstractions. Through coding, theoretical memoing, and constant comparison, a core phenomenon of ‘sustained barriers to effective decision-making’ emerged from the data, as did a core category of ‘selective perception’, which was considered a basic social process (BSP). Three concepts that relate to the core category, ‘communication’, ‘trust’, and ‘resources’, were also discovered.

Chapter 5 presents the emergent theory and propositions derived from the data, their relation to the literature, and how the credibility of the theory was evaluated.
Chapter 5
Research Findings: Presenting the Emergent Theory

5.0 Introduction

This chapter presents this thesis’s findings as a result of the applied data analysis and coding processes. It brings together the data codes and patterns relating to decision-making inefficiencies within UMR’s informal environment, and explains ‘what is occurring in the research field’ and ‘weaves’ the emergent codes identified in Chapter 4 to construct a cohesive theoretical framework that explains what, how, and why, current inefficiencies in decision-making exist. A core category of selective perception, a core phenomenon of ‘sustained barriers to effective decision-making’, and their related peripheral concepts of communication, trust, and resources, which were discovered within the data, are used within this chapter as the foundational elements upon which the theory is constructed. Relevant areas of the literature identified in Chapter 2, as well as the broader literature, are intertwined with the theory in order to increase its scope, depth, and relevance to academics and practitioners.

The emergent theory is presented in the form of a model and 9 emergent propositions that explain the contextually constructed data patterns. The chapter concludes with a presentation of how the validity of the emergent theory was evaluated.

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32 How the peripheral concepts of communication, trust, and resources emerged from the data is presented in Chapter 4 as well as in each respective section within this chapter.
5.1 Results of the Data Analysis and Coding Processes

This section looks at each of the core category and the peripheral concepts of communication, trust, and resources, and their interrelation, and how they emerged from the data. Focus is placed on presenting relationships between the concepts, and describing how they contribute to the emergent pattern. The literature is concurrently integrated in order to increase their explanatory scope and depth, as an emergent, cohesive, and illustrative, theory is presented at the end of this chapter. The theory is presented in the form of a model and propositions that capture the central activities and properties.

5.1.1 The Core Category of Selective Perception

Selective perception emerged as a dominant and relevant category within the empirical data that accounted for data variations and helped explain the occurring social phenomenon. Although when analyzing the data, ‘perception(s)’ could have been selected as a core category, selective perception better encapsulated the high degree of bias toward certain selective variables that impact decision-making within UMR as opposed to a wider sweeping perception phenomenon. The literature reflects this distinction where perception is viewed as the socially constructed set of ideas and opinions adopted by individuals as a result of their awareness of information within their environment and how this information is interpreted (Meglino & Ravlin, 1998). Selective perception, as identified within the empirical data however, places greater emphasis on perceptual processes where individuals within UMR selectively accept or reject information based on their own predispositions or beliefs, whether in a conscious or subconscious manner, which can often lead to fragmentation of organizational processes, negatively impacting decision-making (Pronin, Gilovich, & Ross, 2004). Such bias is also commonly referred to in the literature as ‘confirmation bias’, “where people seek out and interpret information that is consistent with their expectations” (Hernandez & Preston, 2013, p.178). This is particularly important as it explains how as
individuals perceive their beliefs to be correct, these beliefs are used to judge new information, such as decision-making discourses. Often, evidence and information that would have impacted an individual’s bias is systematically ignored solely based on the belief that they already have all the necessary and accurate information (Jonas, et al. 2001). Hence, there are strong parallels between selective perception and confirmation bias, particularly regarding an individual’s tendency to “seek out, interpret, and create new evidence in ways that validate [their] pre-existing beliefs” (Kukucka & Kassin, 2013, p.1), which are firmly grounded within the realm of psychological and cognitive frameworks (Nickerson, 1998).

Memos presented in Table 5.1 and 5.2 show how changing the core category from perception to selective perception was a gradual process, which took place over an extended period of time.  

<table>
<thead>
<tr>
<th>Memo #61</th>
</tr>
</thead>
</table>
| At this point, the idea of subjectivity or subjective reality is really starting to come through within the data. There is simply no consistency to emerging patterns if one considers them within a framework of logical analysis. A concept that appears to be going one direction in one instance, is going in a completely opposite direction in another instance. The data was approached with the aim of identifying patterns that address the strengths or weaknesses of decisions. However, this does not seem to be the case. Individuals are not judging decisions. The decisions in most instances are fine – especially given that they are routine decisions – decisions that have occurred countless times and frequently. There was always an expectation that the environment itself has an influence, but it seems that this influence is not on the decisions, but on an individual’s perceptions. It is almost as if they are looking through a prism, distorting the objective reality (if an objective reality really exists). Hence, the researcher is more inclined to view the core category as one of perception rather than judgment.  

[...]

| Table 5.1 Memo Excerpt relating Emergence of Perception |

<table>
<thead>
<tr>
<th>Memo #63</th>
</tr>
</thead>
</table>
| Selective perception – individuals seeing things based on their own frame of reference – is discussed by individuals in order to resolve issues within their immediate environment. They decide to base their perceptions on selective notions such as trust, that either facilitates decision-making or creates unnecessary barriers. Such perceptions are not necessarily based on truths, but on bias. This bias helps serve their best interest.  

It is considered selective because it is based on other seemingly unrelated factors, such as which...

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33 Chapter 4 details how the core category emerged and was discovered from within the empirical data.
department the individual works and who is communicating decisions. Individuals are not rejecting decisions per se or harboring displeasure towards specific decisions, but rather, barriers are created based on their position in relation to the decision. For example, if trust is low towards the individual who ordered the decision, the decision is resisted, if the exact same decision is coming from an individual with whom they have a high level of trust, decisions are carried out without issue. Hence, this has created the current sense of inconsistency evident in both the empirical data and the historical documents. This is why perception itself as a standalone category does not explain the emerging pattern. It is not just a matter of perception. This may have created some sense of consistency supported by the emergent culture for example. But rather, this perception is actually selective. Selective in the sense that it is continuously changing and morphing based on what the individual wants to see as opposed to what is actually there. In other words, selective perceptions are often based on incorrect or incomplete information.

Table 5.2 Memo Excerpt relating Emergence of Selective Perception

Despite the negative connotation of selective perception as identified within UMR, a lack of full uniformity of perceptions within organizations is not always considered undesirable in the literature. Contemporary literature argues for the support of multiple perceptions within organizations, which increases an organization’s ability to remain flexible and respond to changes in the external environment (Pratt & Foreman, 2000; Milliken & Martins, 1996). Multiple organizational identities and perceptions can exist successfully within organizations, although, while perceptions at higher hierarchical levels of an organization are formed within the context of organizational strategy, perceptions at lower levels are formed within the context of culture (Corley, 2004). This closely mirrors the pattern discovered within the data, where participants from lower hierarchal levels appear to develop perceptions based on their immediate cultural environment. However, as discovered in Chapter 2, an informal environment’s culture is largely defined by various emergent subcultures based on group-developed ideas, values, and beliefs, that may contradict the organizational strategy formed at the higher levels of hierarchy. While the literature considers such subcultures and group perceptions to be generally efficient, the degree of different perceptions and subcultures appears to be an important deciding factor (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Selective perceptions can be placed at the extreme end of the perception continuum, as it expounds a highly fractured environment.
Based on the empirical data and the literature, this research maintains that selective perception contributes to the current barriers to effective decision-making within UMR’s informal environment. This is due to two important reasons:

i. As identified in the empirical data, and highlighted in Table 5.2 selective perception was often based on fundamentally incorrect or incomplete information, enabling the creation of superfluous barriers. Its role in perpetuating inaccurate information and in acting as a barrier to objective decision-making is also supported in the literature (Shaw & Barrett-Power, 1997).

As an example, Table 5.3, presents a communications interview question showing how conflicting ideas and perceptions were identified in the data based on which department the participant worked. Participant responses from each department were based on the mode average, or response that occurs most often. To the researcher, this indicated that individuals were potentially basing their opinions on subjective understandings or perceptions, as opposed to substantiated facts.

<table>
<thead>
<tr>
<th>Interview Question / Context</th>
<th>Department</th>
<th>Participant Responses (Mode)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think or believe that communication channels used by the organization are clear and unambiguous?</td>
<td>Manufacturing Department 1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Department 2</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Department 3</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Department 4</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Procurement &amp; Supplier Relations Department</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Sales &amp; Delivery Department</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 5.3 Evidence Example of Perceptions Emerging within Empirical Data

The researcher considered that different communication approaches were used within each department. However, as shown in the memo presented in Table 5.4, this was dispelled, as the data gathered regarding the communication structure is generally consistent across the various departments. Furthermore, other codes such as culture,
trust, experience, and problem-solving, all showed similar inconsistencies based on which department or group an individual belonged.

<table>
<thead>
<tr>
<th>Memo #65</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is confusing is that each individual has his/her own ideas about each of the emergent codes. Additionally, responses are generally consistent within departments, which may lead one to believe that one of two things could be occurring. The first is that communication may indeed be different across departments. Could some departments have better communication channels than other departments?**</td>
</tr>
</tbody>
</table>

If this is not the case, it is also possible that individuals are being influenced by the notion of ‘group’ and departmental micro-cultures.

** Memo relating to above question after investigating.

Investigating the question on whether communication channels could be different across departments, two areas were focused on. The first was expanding on communication and allowing participants to explain the communication structure within their respective departments. The researcher asked participants to be as detailed as possible.

The second area focused on was during researcher observations. Specific effort was placed on trying to understand how communication flows from management to each of departments, particularly manufacturing departments as they were evenly split (2:2) regarding communication channels.

[...] 

As the researcher reviewed the data, no specific evidence indicated that communication different across departments. Setting aside whether the communication approaches are effective or ineffective (memo 54), communication channels were generally verbal (face-to-face) or through storytelling (a manager explains to an employee ABC and employee relays ABC to other employees - sometimes authenticity of ABC is questioned by others - memo 54). No formal communication channels are used, such as emails or memos. Could the fact that non-formal communication channels are contributing to different perceptions?

Observations also focused on analyzing communication channels and flow. Similarly, communication was verbal and non-formal, however, was consistent across all departments. There is very minimal variation between departments (any variations were as a result of the nature of the work processes within each department).

![Table 5.4 Memo indicating Selective Perception within Communication](image)

ii. the causes for selective perceptions emerged in the data to be socially-based and implicit, and occasionally conducted subconsciously, making it challenging to uncover. This, according to Williams (2012), and interpreted within the empirical data, leads to a higher level of complexity in addressing the current decision-making problem.
Resistance or support towards certain decisions can be based on underlying selective perceptions that may or may not be beneficial to UMR as a whole. In one example discovered in the empirical data, which is reflective of the concept of rumors discussed in Chapter 2, employees resisted a new healthcare plan that would have increased overall benefits. Logically and rationally, management could not understand why the plan was strongly resisted. It was later deduced, through informal and chance discussions, that employees resisted the plan out of concern that they would need to renegotiate their employment contracts - an idea that was covertly propagated by employees in a different department whose employment contracts did indeed need to be renegotiated. However, the contractual conditions between both departments were fundamentally different - information that was selectively ignored. Employees who resisted the new plan selectively chose to perceive the changes as a way for management to indirectly influence their contracts. Hence, it can be argued that employees resisted the new health plan based on their own perceptions about management, which contradicted the possibility that the organization had their best interests in mind. Information was therefore selected consciously or subconsciously based on their conviction that there must be an underlying ‘ploy’ to be perpetrated by management. As such the emergent data strongly suggests that selective perception can hinder cooperation, increase barriers, and facilitate greater fragmentation. It is cyclic in nature, as perceptions are continuously being built upon previous perceptions, creating an environment of un-abating barriers to effective decision-making. While this research views selective perceptions as an impediment towards effective decision-making within UMR, it also views it as a risk to progress, to both, the organization and its stakeholders, as it reduces overall organizational cohesiveness and increases a culture of embedded fragmentation.

Emergent data highlighted that selective perception is a consequence of the highly fluid nature of the informal work environment within UMR. As highlighted in Chapter 2, information flow within informal environments is often unrestricted and can easily cross different departments, as individuals decide, based on their own personal or group-based peer pressure, to selectively determine the importance, value, and relevance of
information. Hence, a reduction in selective perceptions can be expected to ultimately improve decision-making processes within such environments.

Based on the empirical data and the literature, perceptions are natural components of informal environments. It would be considered unrealistic for UMR to attempt to operate on the principle of eliminating perceptions, but rather, should ‘harness and manage’ the degree of perceptions, which could in turn be considered an organizational competency as highlighted by (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Individuals “form impressions or attributions to the causes of behavior based on various combinations of consensus, consistency, and distinctiveness” (Griffin & Moorhead, 2011, p.77), culminating in developing perceptions that inform ‘mental shortcuts’ based on own self-interests and experiences (Schreyogg & Kliesch-Eberl, 2007). Organizations that understand the underlying causes of emerging perceptions, can develop strategies and approaches to mitigate their negative effect.

Basic Social Process (BSP)

As discussed in Chapter 4, selective perception is considered a process-based BSP, with two emergent stages:

1. formation: this is the stage where individuals within UMR consciously or subconsciously select the kinds of information that inform their perceptions and thinking processes.

2. enactment: this is the stage where the formed perceptions are used to support or reject certain decisions.

As a core category and BSP, selective perception explains variations within the data, effectively explains the core phenomenon, as well as unites all other emergent concepts, which include communication, trust, and resources, each of which is discussed in detail in the subsequent sections. As selective perception forms the main
structural understanding of the emergent theoretical model, the other concepts are considered subservient peripherals.

5.1.2 The Concept of Communication

Communication emerged as one of three peripheral concepts that contribute to the problem situation, and is considered an important concept in explaining the core category of selective perception. Its emergence was not straightforward, despite the fact that as a concept, it was frequently evident within the empirical data. During the earliest stages of data collection, the researcher noticed that while communication was of concern to participants, it did not appear to have any centrality or to be directly contributive to the emerging phenomenon, and only truly emerged as higher abstraction of data was achieved. Table 5.5 highlights that while communication was evident after the first set of interviews were completed, the data was initially leading the researcher to focus on information flow channels.

<table>
<thead>
<tr>
<th>Memo #66</th>
</tr>
</thead>
<tbody>
<tr>
<td>This memo, relating to excerpt 18, attempts to highlight and explain what may be the intention of participants in discussing information as a concept. There are at least 20 instances of dissatisfaction regarding how information flows between the formal organization and the 6 departments. This also includes information flow between the 6 departments themselves. It seems that when communication initially starts, information almost ‘fizzles’ away by the time it is meant to reach its intended target, is ignored, changed, altered, or simply disregarded due to other (yet unknown) variables. Could this issue be related to information technology? Are inefficiencies in decision-making being impacted by a lack of efficient channels for the flow of information?</td>
</tr>
</tbody>
</table>

Table 5.5 Emergence of Communication

The researcher’s initial instinct was to pursue the concept of information technology. They were confident of such a concept given the prominence given by the participants to the flow of information between individuals and across departments. The issue faced however, was the concept of information could not be properly conceptualized. Information technology was too broad and could encompass various elements that have
not been identified in the data, such as video conferencing, the internet, formal documents, and memos. Furthermore, information flow did not seem to integrate the main categories discussed in Chapter 4. By the second set of interviews, as highlighted in the interview excerpt presented in Table 5.6, the underlying data began to denote an element of communication, which incidentally became one of the emergent peripheral categories.

**Interview Excerpt**

Researcher: I am interested to know more about the idea of information flow. It came up before, and I wanted to explore it more with you.

Participant RA1.2: Do you mean communication? What exactly would you like to know?

Researcher: Sure, if you feel communication is better representative of any issue or concern. Whatever comes to mind. Do you consider communication important? Does it have a role to play in how your work is done? Do you it they impact decisions on a daily or periodic basis? If anyone believes the term information flow is a better fit, by all means, you can discuss that as well.

Participant RA1.2: No doubt communication has an impact. Its very important. I’m not sure how it differs from information flow. Is there a difference? Anyways, I think communication here is poor. Not always, but sometimes.

Participant KA1.2: Yes, I also agree. Sometimes things that are said can be very confusing, and instructions can be incomplete. Just yesterday, I was told by [manager’s name] to properly check the upcoming order for dispatch. What does that mean? How can I check it properly? It’s always checked properly.

Participant RA1.2: I spoke to [manager’s name] 2 or 3 days ago and he asked me in the hallway as I was walking through the door whether there were any problems with any of the upcoming orders. I told him there wasn’t. So, I’m not sure what the issue is really.

Participant LA1.2: It’s just talk - no real purpose. Just to act as if managers care.

Researcher: Why do you feel managers pretend to care? Does everyone have this impression? Do they communicate such an attitude?

| Table 5.6 Emergence of Communication as a Concept |

The empirical data strongly indicated that the challenges and difficulties faced by UMR regarding decision-making are at least partially due to the current communication framework, which is largely reflective of grapevine communication as presented in Chapter 2. While the data indicated numerous incidents of poor communication, its
incidents are better reflected as notions of miscommunication, which is defined as a “ruined form of communication [where] what is to be communicated, does not get communicated and an obstructed form of the message is transmitted” (Kushal, 2009, p.24). As participants emphasized various communication issues such as ambiguity, cognitive obstacles, different personalities, and uncertainty, a higher level of abstraction of those issues revealed a multidimensional social construct of perspectives and retrospectives that are interrelated as lack of communication, miscommunication, and perceptions. Underlying the concept of communication within the context of decision-making are the principles of input, process, and impact - three areas where analysis of the empirical data show are largely impacted by perceptions (Carugati & Rossignoli, 2011). Decisions within UMR are undertaken based on how the decision-maker perceives the environment and its associated variables (input), including their own personal interpretation of how best to communicate the decision’s particulars to other individuals (process), with potentially different cognitive understanding between the sender and receiver (impact). Hence, a potential gap between the perceptions and between the sender and receiver is reducing overall decision effectiveness.

Within UMR’s research field, data also indicated that cognitive barriers progressively develop as communication is misinterpreted and misunderstood, leading to an escalation of inefficiency in the process of decision-making. The flow of communication is based upon impulse, without premeditation, and is often impromptu. A lack of formalized communication channels created an environment where selective perception and miscommunication emerge as barriers that hinder decision-making effectiveness. Decision-makers reduce the emphasis on effective communication, as it is replaced by a focus on tasks and end-goals. This is seen as a consistent pattern within the empirical data. The interview excerpt presented in Table 5.7 with one of the managers in the research field, highlights such a pattern.
This interview excerpt concerns a decision by a manager to update a weekly manufacturing schedule. Updating a weekly manufacturing schedule is not uncommon, however, what is interesting is the manner in which the decision was communicated.

Table 5.7 Interview Excerpt Denoting Communication Flow within UMR

During discussions with the manager, it became clear that the decision to change the schedule and assign the task to that particular individual was not planned, nor was a replacement schedule prepared. The manager was clearly operating under the perception that their approach to the changes was sufficient, regardless of the employee’s protest about having to deal with other employees. Despite the protesting, the manager selectively decided to have it ignored, whilst focusing on their personal relationship as a more important factor. Furthermore, the manager unilaterally decided to shift the schedule responsibility to the employee, and in the process, availing themselves from working on a schedule that they do not understand. During subsequent
interview discussions, the same particular employee approached that specific incident. They under the impression that the manager was being unfair by adding additional work burdens. When asked why they did not protest harder, their reply was that they did not want to be insubordinate or embarrass the manager, thus creating an emotional barrier between themselves and the manager. The manager and employee were both under different perceptions - perceptions that could have converged had their communication approach been more effective. Hence, this research argues that within an environment of complexity and informality, individuals are less likely to perceive the need to justify their decisions through effective communication, which leads to miscommunication. Individuals are electing to avoid undesirable tasks but shifting the responsibility to subordinates whilst not appreciating the value of communicating the reasons. As the particulars of the informal environment allow individuals to apply their own approaches to work processes, opportunistic thinking processes dictate decision-making.

The importance of communication within the context of decision-making is highly regarded in the literature, where it is considered instrumental to the degree of decision-making success (Martin, 2005). It is conceptualized as ‘channels’ comprised of visual, vocal, and synchronicity (immediate feedback in real time), where collectively, the degree of those channels’ utilization defines the degree of communication effectiveness (Swaab, et al. 2012). This research views communication as a three dimensional process: (a) bottom-up, (b) top-down, and (c) horizontally amongst and between individuals and groups within the same hierarchal level. This process captures how information relating to decisions is received or understood by individuals within UMR.

Proposition 1a: In the absence of formalized communication channels, selective perceptions and cognitive barriers are more likely to play a significant role during decision-making, as individuals are less likely to emphasize effective communication as an important variable when relaying information.

Although the informal nature of the communication structure within UMR significantly reduced the efficiency of fluid communication, a lack of common understanding of the reasons and manner in which decisions were being executed, further decreased
decision-making efficiency. The importance of a common understanding within decision-making is highlighted by Pettigrew (2014) and Vaiman, Scullion, & Collings (2012), who argue that disparate understandings of the decision-making process can lead to significant resistance and high overall inefficiency. In a complex informal environment such as that within UMR, there are natural task interdependencies where perception and communication play a vital role (Van der Vegt & Janssen, 2003). This research maintains that selective perception and communication fall into a relationship cycle where each impacts the other. Perceptions act as a barrier to effective communication while communication is hindered by predispositions. Furthermore, decisions may be viewed differently at different hierarchal levels, where in the above example, the decision to pass the task from the manager to the employee was viewed favorably by the manager (position of power) but viewed negatively by the employee (position of subordination). The argument being put forth is that a reciprocal relationship exists between selective perception and the communication process employed. The empirical data indicated that given a lack of formalized communication structure within UMR, the degree and success of communication depended on how individuals perceived each other. Conversely, depending on the degree of communication, incidences of selective perception were developed. Hence, a unique and cyclic relationship exists between the two concepts.

The data also highlighted patterns of selective perception-reliance communication processes. As individuals adopted a higher degree of negative perceptive selectiveness towards an individual, groups, or department, their level of communication was adversely affected. This was evident in the frequency and type of communication. In instances where one group perceived another group favorably, communication was more fluid, utilized various channels, with lower levels of miscommunication. Perceptions within this context are considered selective, and are based on predispositions and previously held biases. In the absence of formalized communication structures, individuals who perceived others as more collaborative, and appeared to share the same values and beliefs, expended greater effort on communicating information more effectively.
In instances where the levels of communication are reduced, the levels of unfavorable selective perception increased. This pattern agrees with established literature, which highlights that as a result of reduced communication, individuals develop their own ideas and viewpoints regarding other individuals (Hartog et al. 2012). Individuals within UMR exhibited higher levels of unfavorable perceptions towards individuals or groups with which they have had little to no communication. This pattern is expounded when communication channels are informal, as individuals usually elect to communicate with individuals on a voluntary basis. Given that communication channels are non-structured within informal environments, the options for communication between individuals are varied and multifarious. As observed in the data, individuals may elect to avoid direct communication with other individuals by involving third parties or by employing electronic means for communication such as the organization’s intranet or email, reducing overall decision-making effectiveness. Given the existence of varied communication options and a voluntary framework for communication, individuals do not find themselves in situations where they are ‘forced’ to establish relationships with others. This proposition agrees with established literature where the manner in which communication takes place is largely dependent on how others are perceived. Given that the channels for reversing those perceptions are compromised, perceptions continue to become compounded. Data compiled from the research field using both interviews and observations, is presented in Table 5.8, which shows that the level of communication effectiveness is dependent on the level of selective perceptions and cognitive biases.
<table>
<thead>
<tr>
<th>Pattern A</th>
<th>Pattern B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals perceived each other as being more collaborative and sharing</td>
<td>Individuals perceived each other as ‘distant’ and viewed as having little</td>
</tr>
<tr>
<td>the same values and beliefs</td>
<td>shared values and beliefs</td>
</tr>
<tr>
<td>Communication is protracted and engaging and focused on rich details</td>
<td>Communication is on a need-to-basis with little details</td>
</tr>
<tr>
<td>Communication is consistent</td>
<td>Communication is erratic</td>
</tr>
<tr>
<td>Utilized various channels of communication with high levels of</td>
<td>Communication was monotone, usually utilizing short written statements</td>
</tr>
<tr>
<td>synchronicity</td>
<td></td>
</tr>
<tr>
<td>High focus on clarifying assumptions</td>
<td>Assumptions are generally ignored</td>
</tr>
<tr>
<td>Low levels of miscommunication</td>
<td>Moderate to high levels of miscommunication</td>
</tr>
<tr>
<td>Proactive communication</td>
<td>Reactive communication</td>
</tr>
</tbody>
</table>

Table 5.8 Different Perceptions and Impact on Communication

In Table 5.8, individuals who adopted pattern B, viewed communication as a ‘chore’, where it was conducted solely based on the fact that it was required. They also exhibited a pattern of communication avoidance, reducing the importance of communication to relay important information, as is presented in the following proposition:

**Proposition 1b:** As the degree and effectiveness of communication is reduced amongst individuals, unfavorable levels of selective perceptions progressively increases, and conversely, as unfavorable levels of selective perceptions increases, communication effectiveness continues to decrease, leading to a cyclic relationship between both concepts.

This research does not argue that selective perception is the sole cause of poor communication, but rather, that poor communication is a symptom of selective perceptions within an informal environment. As a non-tangible variable, selective perception is measured within this research based on its degree level of favorability, ranging from low to moderate to high. A correlation can be drawn from the data that highlights that the degree of selective perception favorability directly impacts the degree of communication effectiveness. This is in line with attribution theory discussed in Section 5.1.1, which dictates that, certain behaviors such as distancing oneself or avoiding communicating with an individual that is perceived in a negative manner.
develops. Such a pattern falls within the realm of symbolic interactionism, where interactions through mediums such as communication, are formed on the basis of how others are perceived, whether those perceptions are accurate or erroneous (Benzies & Allen, 2001).

The interrelation between selective perception and communication and the two derived emergent propositions as modeled are presented in Figure 5.1.

![Figure 5.1 Interrelation between Selective Perception and Communication](image)

Highlighted in the figure is the interrelationship between the two concepts of selective perception and communication, and their impact within the overall framework of decision-making efficiency.
5.1.3 The Concept of Trust

Within the context of decision-making, trust is considered an important socially-based component that impacts individual and organizational goals (Edelenbos & Klijn, 2007). It is a subjective phenomenon where individuals assess other individuals’ sincerity and honesty in performing certain tasks (Collard, 1989), which may culminate in either supporting or resisting decisions. It did not initially directly emerge in the empirical data, but was hinted at by participants during interviews. The interview excerpt in Table 5.2 is the first instance where trust or lack thereof was subtly mentioned. Subsequent discussions with participants focused on trust directly, as the researcher proposed discussing trust itself as a concept. Data sentences were extracted and were complied by the researcher within excel to identify a pattern for further selective coding. Table 5.9 presents a screenshot of verbatim sentences by participants regarding trusting managers and their ability to make effective decisions.

![Table 5.9 Emergence of Trust](image)

It is important to put the information presented in Table 5.9 into the correct context. For
individuals who made the statements presented, a following-up question was asked of them, which was ‘Do you think they make effective decisions?’ Their response was unanimous that managers do not have the capacity to take effective decisions. However, for individuals who made positive statements regarding trust, were generally confident in managers’ ability to make effective decisions, to varying degrees, depending on the level of trust. It was also discovered in the data that individuals continuously change trust placement - creating new trust and replacing previous trust, as it is considered central within the complexity of cultural fragmentation and group emergence. The unique nature of the informal environment as a ‘community’ of individuals, places trust as the “key coordinating mechanism in the community form” (Adler, 2001, p.217).

While data patterns showed instances of data-driven rational decision-making processes that were considered by the organization to be a highly neutral non-partisan approach to decisions, an abstracted concept of trust frequently emerged within those instances as a critical component of decision implementation success, as presented in Figure 5.2. Some contemporary literature argues for a data-driven decision-making approach as a support for rational decision-making (Dunn, et al., 2013; Ediger 2003), which while potentially effective in certain environments, the concepts of emotions and selective perception are ingrained within an informal environment, increasing the importance of the notion of trust, how it is created, and how it is destroyed.

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34 A manager here refers to specific individual managers, and not all managers collectively.
Trust appeared to be a flexible concept, with a broad accommodation of the levels of perception, once a pattern of trustworthy behavior had already been established. For instance, individuals with high previous expectations and consistencies in behavior were often forgiven by other individuals for minor infractions. If a decision was perceived by individuals to have dishonest motives, individuals may selectively choose to either ignore the infraction or selectively choose to perceive the infraction as too major to maintain any further decision-making trust towards the individual. The data showed that such selectiveness was based on a nurtured relationship level they have with the individual or individuals. Hence, trust cannot be ignored or relegated as a naturally occurring, non-controllable emerging concept, but that principle efforts are required in order to nurture trust.

**Proposition 2a:** Within an environment that is characteristically based on ‘community’, individuals are more likely to emphasize relationships when considering whether to perceive an individual as trustworthy within the context of their ability to take effective decisions.
Trust is viewed as a relationally-based category, that is strengthened or weakened by individual or group perceptions. Empirical data shows that it is considered a two-stage process, where trust is first based on previous expectations and consistency and second on perceived motives. Figure 5.3 clarifies this process, and the interrelationship between perceptions and trust:

**Previous expectations and consistency:** this stage explains a pattern in behavior, such as whether an individual is consistently appearing honest and trustworthy to others.

**Perception of motives:** this stage explains that as a result of an individual’s consistent
honesty and trustworthiness, others start to perceive their decision-making motives as legitimate and can be relied upon.

This agrees with published literature, where the two stages are categorized as cognition-based and affect-based. Cognition-based trust is based on reliability, dependability, and the perception of competence, and is usually a prerequisite for affect-based trust to emerge, which is founded upon emotional notions (Chowdhury, 2005). The data suggests that cognition-based trust is insufficient in creating the necessary framework for effective communication within UMR, as there is a greater emphasis on emotionally-based variables as the basis for trust.

Proposition 2b: Given the emphasis on the notion of relationships within an informal environment, individuals are more likely to resist decisions based on the trust they have towards the decision-maker as opposed to the actual decision.

This research maintains that within informal environments, where socially-created relationships are the foundation of individual interactions, individuals may appear to resist decisions whilst in reality, are resisting the decision-makers with whom they have little to no trust. The importance of this proposition is that the focus shifts from the traditional understanding of analyzing the benefit of the decision itself, to understanding the trust relationship between the decision-maker and other stakeholders. This provides an explanation as to the reasons for the impracticality of decision-making models being applied within an informal environment as discussed in Chapter 2, as well as the reasons certain decisions are resisted despite their clear general benefits. Hence, the data indicates that as the level of trust between individuals increases, the less likely are decisions resisted, regardless of the decision’s rational benefits or detriments.

5.1.4 The Concept of Resources

The concept of resources within an organizational context is considered a broad formulation that can encompass a wide variety of different elements such as social
resources, financial capital, and strategic competencies (Mascarenhas, 2011). Resources within this thesis is categorized as the amalgamation of financial resources, time resources, and quality resources - all three are considered properties of the category of resources and are conceptualized as a cost as opposed to a competency. It arises frequently within the context of decision-making within UMR, where decisions are frequently consuming significantly higher resources than is necessary if a framework of greater efficiency existed. It is argued that this is due to decisions being viewed as a situation-based necessity as opposed to a pre-planned strategic framework for progress.

The concept of resources arose as a result of strong reliance on historical documents in order to identify a pattern. It is a highly abstracted concept that was first identified in the data as it matured during selective coding. The first instance of resources, specifically quality and time, was identified in the statements made during latter interviews as discussed in the memo presented in Table 5.10.

<table>
<thead>
<tr>
<th>Memo #70</th>
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</thead>
<tbody>
<tr>
<td>The key terms of cost and time were frequently mentioned in today’s interviews. It is too early to decide whether they are of any significance, or whether they are directly related, however, there is some hint of their relation to decision-making. In essence, it appears that decision-making within the informal environment itself is leading to wasted cost and time. I am finding it difficult to find sufficient codes that would indicate a pattern, possibly because participants are not consciously keeping track of cost or time. *** Refer to historical documents for possible pattern and re-confirm in subsequent interviews.</td>
</tr>
</tbody>
</table>

| Table 5.10 Emergent Substantive Codes relating to the Concept of Trust |

It was important at this point for the researcher to review historical documents with the aim of identifying a pattern where a correlation between cost and time and decision-making could be substantiated. Of the 9 historical documents that represented 13 projects, 8 projects identified higher than expected costs and expended time. This required a certain level of interpretation by the researcher based on the presupposition that even in projects that were considered to have failed, some level of success would still exist. Hence, the researcher searched for certain indicating terms, such as
‘unsuccessful’, ‘repeat’, ‘failure’, ‘no improvement’, as indicators of a high level of decision-making inefficiency or failure. All 8 of those projects failed to meet required criteria, with only minimal successes, indicating low overall quality performance. This led to the emergence of a pattern amalgamating cost, time, and quality.

Most decision-making processes within organizations start with an assessment of the expected end-result and the costs that may be associated with such decisions (Wu & Pagell, 2011). Such a process carefully considers cost-benefit analysis, and just as importantly, the degree of efficiency in executing such decisions (Al-Najjar & Alsyounf, 2003). Such efficiency in decision-making can be supported by areas of information technology (Shim, et al. 2002), or through internal support structures comprised of areas such as shared mental models, organizational citizenship behavior, and role-making (Evans & Davis, 2005). However, given the informal work environment within UMR, a support system for efficiency in decision-making is under-developed, as decision-making processes are executed on a need-to-basis where most emphasis is placed on the end result without a pre-calculated cost-benefit analysis framework, rendering resource expenditure management as low priority. As a result, in certain situations, the need to invest a disproportionate amount of resources is relegated as secondary to executing the actual decision.

An example of such an instance within UMR occurred when requiring the replacement of a particularly important manufacturing machine. Although the machine was critically overdue for replacement, no formal communication structure existed where this information could be relayed to those who have the necessary decision-making authority to replace the machine. Rather, communication was usually in the form of random discussions between various individuals when convenient. When the machine finally ceased operating, a gap in the production line led to projects coming to a standstill, creating a situation where replacing the machine became top priority for those involved - regardless of cost. Eventually, replacing the machine required almost twice the financial cost given the urgency in ordering the machine and the expenses of expedited shipping. The total time expended to order and receive the machine was two
weeks, which translated into two weeks of lost production time. This example reflects numerous reoccurring instances where due to inefficiency in decision-making, the organization faced higher financial costs and lost time. The potential for manufacturing equipment to breakdown is an expected, foreseeable, and normal component of daily organizational operations, and therefore, it is an issue that could have been better resolved through efficient planning as opposed to last-minute executive decision-making. Compounding the issue was that once the production line was once again operating, workers frequently ‘cut corners’ in order to make up lost production time, potentially compromising the quality of the finished products.

Researchers such as Barki & Pinsonneault (2005) and Gold, Malhotra, & Segars (2001) maintain that the complexity of an organizational system reduces the efficiency of a resource’s utility given the high level of inherent ambiguity. Complexity within an informal environment is considered within this research as “an intricate network of relationships existing amongst participants [based upon] subjective principles” (Ceccarelli, 2013, p.173). This research maintains that as the level of complexity within an informal environment increases, inefficiency in turn also increases, denoting a negative correlation between high complexity and high efficiency. Complexity is an issue that is naturally compounded within informal environments, particularly given the lack of formalized work processes and communication channels. The concept of decision-making models discussed in Chapter 2, which are sequential in nature, are rendered irrelevant within such complexity, and become less realistic (Jackson, 2005).

Proposition 3a. Given the inherent complexity of informal environments, inefficiencies are reflected in higher than expected resource expenditure.

This thesis argues that an informal environment’s unstructured nature results in decisions carrying higher execution and completion resource costs, which include financial, time, and quality costs. The empirical data also uncovered an additional dimension that interrelates the concept of resources expenditure and the core category of selective perception. As discussed in Section 5.1.1, selective perception occurs when information is selectively ignored based on one’s own predispositions or biases. The
data showed incidents that in situations where decision-makers did receive the necessary information, albeit using within informal communication channels, they frequently chose to ignore information that they perceived as non-contributive to their own personal goals, often eventually leading to higher organizational resource expenditures. Such personal goals included areas such as promotions, salary increases, or recognition, which were tangible in essence.

**Proposition 3b. Given the emphasis of roles within an informal environment, individuals are more likely to perceive non-tangible personal benefits as a greater drive for non-conditional full information utilization than tangible personal benefits.**

The utilized cost-benefit benchmark by individuals focused on individual self-benefits as opposed to organizational benefits, which is also reflective of the differing aims and goals relating to informal environments as presented in Chapter 2. In the data, this was attributed to the perception of roles, and the lack of codified job descriptions. Selective perception based on ignoring information that did not meet the individual's own cost-benefit benchmark resulted in less preparation for resource expenditure management.

### 5.1.5 Interrelationship: Communication, Trust, and Resources

The previous three sections presented the relationships between the core category of selective perception and each of the three concepts - communication, trust, and resources, within the context of decision-making. This section presents the interrelation between the three concepts as presented in the emergent model in Section 5.2. These interrelations further strengthen the theoretical model and allow for a greater understanding of the overall emergent theory. A series of theoretical emergent propositions relating to those interrelations are also presented and discussed.

*Relationship between resources and communication*

Resources is considered within this thesis as the combination of the expenditure of
financial resources, time, and quality, and as discussed in Section 5.1.4, it is considered a cost as opposed to a competency. This section presents the relationship between resources and the concept of communication as discovered in the empirical data in relation to the context of decision-making. The importance of resources arises from within the context of efficiency, and the need for organizations to limit and control such expenditures. This thesis argues that the level of communication influences the amount of resources expended, and conversely, the amount of resources available for expenditure influenced the strength of communication - although in a reversed manner of opposite impacts. To clarify, the relationship between resources and communication is unique in that while the increase in communication impacts resource expenditure positively, a reduction in available resources impacts communication negatively, hence, concluding that within the context of efficiency of decision-making, it is preferable for communication to be a starting point in the process as opposed to resources, as presented in Figure 5.4.
The diagram presents the proposition that efficient decision-making would require individuals to start with effective communication, which would ultimately reduce expended resources. As communication levels increase, the amount of financial resources, time, and quality compromised, would collectively decrease as communication facilitates greater collaboration and reduced resistance to changes. This is supported by Cushman & King (1995, p.36) who argue that “communication serves to continuously improve organizational effectiveness in managing a firm’s […] internal and external resources”, and Wrench (2013, p.194), who also states that “effective internal communication can have a strong impact on an organization’s financial side”. This is also further supported by Spaho (2013) who maintains that effective communication positively impacts an organization’s assets, including financial and time, as it reduces overall conflict and increases efficiency.

Proposition 4a. Within decision-making contexts, it is preferable for communication to be considered a determinant of efficiency as opposed to resources, given the negative impact the containment of resources has on communication, and ultimately, the decision-making process.

When analyzing scenarios or instances where resources were at a decreased availability level as a starting point for projects, individuals lost interest in maintaining communication momentum. Individuals perceived communication as unnecessary and irrelevant due to a perception that a project’s outcome has already been predetermined by the reduced resources. This reverse relationship however, is not considered as an unusual pattern within the literature. Resource containment is shown to decrease group cohesion in various situations, and ultimately significantly reduces communication, as the pressure of resource containment leads individuals to feel resigned and unmotivated to attempt to influence situation outcomes (Apker, 2013).

The machine replacement example discussed in Section 5.1.4 reflects the relationship between reduced levels of communication and increased expenditure, where due to poor communication, the organization found itself in a position that required utilizing a larger amount of resources than would have normally been the case had
communication been more effective.

**Relationship between resources and trust**

As previously discussed in Section 5.1.3, trust was a concept that when perceived, facilitated the decision-making process within informal environments. It increased the level of cooperation between individuals, and reduced decision resistance amongst individuals and increased decision-making efficiency. This research maintains that as the level of trust increases, the amount of resources required to implement decisions in turn, decreases, with a clear correlation between the two concepts.

An examination of the empirical data shows, as illustrated in Figure 5.5, that within departments where trust was considered relatively high, expended resources are lower. The data reflects decisions undertaken within internal departmental projects and their associated costs.

![Figure 5.5 Relationship between Trust and Resources](image-url)
Using resource expenditure figures from historical documents (X), they were compared to data from interviews that highlighted the concept of trust (Y), to attempt to identify a correlation between both concepts. Figure 5.5 plots data points indicating the relationship between the levels of trust within each department against resource expenditures for decisions involving bounded projects within each of six departments. Bounded projects are defined as projects that do not involve any areas outside each respective department. Obtaining and using such data was necessary in order to ensure that no other external variables impact the data results. To obtain the data, participants were asked during the interviews about the level of trust they have towards their respective department manager and amongst their departmental colleagues. The data was then compared with historical documents pertaining to three years of resources used by those departments, which included both, time expended on change projects and financial cost. All departments are relatively similar in size and have approximately similar sized budgets. Employees within departments 5 and 6, as shown in the chart, exhibited higher levels of distrust within their respective departments, while the other four departments where trust was relatively higher, had significantly lower resource expenditure. In order to avoid skewing the data, only projects that involved physical or procedural changes were considered. Data relating to manufacturing projects can vary widely, and so were disregarded as variables. Data from individuals departments, in contrast to the organization as a whole, indicated that individual departments displayed a higher level of overall cohesiveness and relationships between its respective employees. This allowed the analysis of an environment where trust was already nurtured, and removed other irrelevant variables from the analysis, as well as reduced the overall scale of complexity.

The identified pattern maintains that all other variables being equal, unknown, or not considered, higher trust reduces the need for higher expenditures within the context of decision-making. This statement is supported by the literature, where researchers such as Moye & Henkin (2006) argue that high levels of trust within organizations resulted in a number of advantages, including, a reduction in the organization’s transaction costs. Furthermore, Mishra & Mishra (1994), whose research supported a hypothesis that high
levels of trust facilitated decisions relating to change, argue that ultimately, high levels of trust resulted in cost-saving and reduced financial liabilities.

**Proposition 4b. High levels of trust, where an opportunity for cohesiveness and relationship building has contributed to such trust, will reduce the amount of resource expenditure (time and financial) regarding decision-making.**

Given an opportunity to foster trust through relationship building will facilitate decision-making by reducing tension, conflict, and resistance. In turn, the expended resources for implementing decisions is reduced as greater efficiency in decision implementation occurs.

*Relationship between communication and trust*

The interrelationship between communication and trust, according to the empirical data, is frequently reflected in how individuals interact, share information, offer mutual support, and in behaviors and attitudes. As concepts, they are compositely similar in that they develop in parallel, as each concept contributes to the other. According to Bialaszewski & Giallourakis (1985, p.206), the “degree of trust perceived in a relationship [within organizations] may be contingent upon the perceived adequacy of related communication”, and similarly, a qualitative study by Diallo & Thuillier (2005), found that the overall quality of communication was based on perceived levels of trust. The correlation and interdependence of the two concepts is a highly regarded proposition in the literature as well as within this research.

In the empirical data utilized for this research, the analysis discovered a similar pattern. Stakeholders within UMR develop relationships based on a number of informal elements, such as emotional and group support, and shared values and beliefs. These relationships are created based on selective perceptions that are voluntary in nature, creating an environment, mentality, and outward view, of ‘group’ and ‘group membership’ - concepts that were evident in the early stages of open coding. Within such groups, all instances exhibited high levels of trust if high levels of communication existed, and vice versa. However, within intergroup relationships, which were
considered lower in cohesiveness with a higher focus on personal and group competitiveness, a reduced indication of trust and communication was apparent. No instances indicated a high level of communication and low trust or high trust and low communication.

**Proposition 4c. When working in environments that lack structured roles and responsibilities, intergroup levels of constructive communication are reduced if trust is low, and similarly, trust is reduced when communication levels are low, eventually reducing decision-making effectiveness.**

Given the nature of the work environment within UMR, as is in most business environments, it is unavoidable for intergroup and inter-team interaction. Within such instances, it was discovered that when trust frameworks were weak, high tension and abrasiveness in communication quickly emerged. While communication was continuously maintained across groups and teams due to project requirements, communication between individuals gradually evolved from discussing project particulars to overt personal anxiety and animosity. Essentially, communication evolved from task-oriented and relevant discussions, to socially-oriented and personal hostilities. The non-formalized nature of the work structure within informal environments leads to blurring of responsibilities and an observed reduced clarity amongst individuals as to their exact roles (Cravens, et al. 2004). While such attributes within groups were also observed, individuals within the group were significantly less likely to develop animosity due to their high levels of trust and ‘relaxed’ communication channels. Tension within groups was generally swiftly mediated through constructive communication and a high level of openness, where when the levels of trust and communication concurrently increased, individuals were observed to be willing to share information more broadly and with fewer hindrances.
5.2 Conceptualizing and Evaluating the Emergent Theory

Using a framework of sensemaking, which allows one to analyze “the processes of action and interaction that enable individuals to make sense of organizational activities” (Lundin & Hartman, 2012), an emergent theory, which was discovered from within the empirical data, is presented as a model in Figure 5.6.

![Figure 5.6 Emergent Theoretical Model](image)

The model integrates the various categories and concepts on a high level of abstraction, as they explain the emergent theory of decision-making within UMR’s informal work environment. Selective perception emerged as the core category as it interrelates the three highly abstracted concepts of communication, trust, and resources. The model highlights that while selective perception is considered central to the theoretical model, it influences, and is influenced by the other three concepts.
An interpretation of the core phenomenon of ‘sustained barriers to decision-making’ provides three underlying principles that capture the pattern of how inefficiencies in decision-making processes arise:

i. The informal environment has led individuals adopting work processes that are largely subjective
ii. Informal processes led to the creation of barriers and complexities due to elements such as grapevine communication and disparate perceptions
iii. Such barriers reduce effective decision-making processes

Using Glaser & Strauss’s (1967) and Urquhart’s (2012) frameworks for judging the credibility of a substantive theory as a guide, the researcher compared and contrasted the characteristics of the emergent theory in order to substantiate its validity, credibility, and relevance, to the social concern and environment in which it is grounded. The researcher believes the framework intended for substantive theories is an appropriate framework given that this thesis also relies on core grounded theory concepts to discover an emergent theory. The literature on grounded theory is consistent on the type of theory generated by the methodology, and its primary characteristics. Those characteristics are identifiable in both, the manner in which the theory is generated from the data, and how the theory is developed and presented. A comparison between such a framework and this thesis’s emergent theory is presented in Table 5.11.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Characteristics of Substantive Theory in Grounded Theory Methodology (adapted from Glaser &amp; Strauss (1967) and Urquhart (2013))</th>
<th>Assessment of Emergent Theory generated in this Thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Generating</td>
<td>A theory generated in grounded theory needs to be grounded in social interactions within a real research setting through a series of data</td>
<td>The theory generated in this study is grounded in a social setting characterized as an informal environment, where decision-making was treated as an independent</td>
</tr>
</tbody>
</table>

35 As discussed in Chapter 1, the emergent theory within this thesis is not considered a substantive theory in the traditional sense given its lack of focus on broad applicability beyond the immediate research area.
Table 5.11 summarizes the various characteristics of a substantive theory as intended by classical grounded theory methodology, and highlights how the theory presented in this chapter shares similar characteristics and criteria. According to Glaser (1978), it is possible to judge the validity of an emergent theory based on two criteria, (i) whether the theory is commensurate with the situation, and (ii) whether the theory enriches stakeholders’ ability to address the situation. The emergent theory meets both criteria as (i) it derives its empirical data directly from participants whom are involved with the problem situation on a daily basis, and (ii) is relatable to the organizational environment.
from which it was grounded as it explains an existing decision-making related phenomenon within UMR and provides the organization with actionable and relevant knowledge.

5.3 Chapter Summary

This chapter presented the emergent theory in the form of a model and a total of 9 propositions, and brought to the forefront the reasons for decision-making inefficiencies within UMR, which have been identified as ‘barriers’ that emerge within its informal environment. The propositions interrelated the emergent concepts of selective perception, communication, trust, and resources, and placed them within the contextual situation. Collectively, they present a new understanding of how UMR’s informal environment is leading to inefficient and dysfunctional decision-making.

As the model explains the core phenomenon occurring in the data, and places the phenomenon within the context of the research area and its characteristics, the literature was integrated in order to increase the model’s depth and validity. An evaluation of the emergent theory was also presented within this chapter.
Chapter 6  
Thesis Discussion, Summary, and Conclusions

6.0 Introduction

This thesis’s aim was to develop a stronger understanding of a complex social phenomenon that involves decision-making within UMR’s informal work environment and to discover a framework for actionable knowledge.

This chapter discusses the emergent theoretical model, details the applied action framework based on the emergent theory, presents a recommendation for further actionable knowledge, discusses the implications for practice and research, as well as highlights the research’s limitations and potential for future research.

6.1 Discussing the Emergent Theory and Integrating the Literature

Using grounded theory methodology’s data collection and analysis procedures discussed in Chapter 3 to understand a contextual situation within UMR, a theoretical construct emerged that at its core was a phenomenon of ‘sustained barriers to effective decision-making’ that develops as a result of emergent social, perceptual, and behavioral, frameworks, effectively capturing the situation within the research field. This phenomenon was explained by the basic social process core category of selective perception, which rendered the theory dense, encapsulated the core phenomenon, and explained the ongoing behavior discovered within the research field. It emerged as a framework of selective perception, as a core category, based on socially-constructed
ideas and viewpoints, and interrelated the three peripheral concepts of communication, trust, and resources. Using Whetten’s (1989) framework of theoretical contribution of what, how, and why, it was possible to explain and construct the theory and its interrelated concepts as follows:

i. Communication is the reason (why) selective perceptions are a persistent notion within the organization.

iii. Trust is considered (how) their perceptions are formed and enacted.

iii. Resources is considered (what) eventually emerges as a result of selective perception.

The theory was presented as a model and 9 emergent propositions that highlighted the core category and its peripheral concepts.

While Chapter 5 discussed relevant areas of the literature relating to emerging individual concepts, this section is broadens the literature regarding the emergent theory as a whole, providing greater explanatory power and creating an appropriate framework for formulating informed action. The informal work environment formed the background upon which this thesis was situated. It was viewed and treated as a ‘context of limitations’, which gives the impression of potentially negative connotations. Although its uniqueness presents a series of challenges for organizational stakeholders as highlighted in the emergent theory, the literature views informal environments as a potential competency and strong advantage for organizations, although within certain considerations. Successful informal environments limit the potential weaknesses of informality, and take advantage of its strengths, by focusing on its characteristics and potential for adaptability (Hegar, 2011). According to Chan (2002, p.109), it “provides multiple, overlapped, reinforcing links to strengthen the firm’s ability to act as an integrated, aligned, high-performing unit over time [and] can react quickly to internal and external shocks, and permit the organization [to] excel”. This argument is also supported by Chitale, Mohanty, & Dubey (2012) and Gulati & Puranam (2009), who argue that its fluidity can positively impact performance, develop a strong culture, and
emphasize adaptability and flexibility. However, the literature agrees that its benefits can only be realized if utilized strategically and embraced by the organization's stakeholders (Harris & Hartman, 2001). This thesis, as discussed within this chapter, argues that by recognizing the strengths of its informal work environment through the integration of 'adaptability', UMR can leverage its advantages, which would in turn reduce current decision-making barriers. This would require refocusing the current organizational mindset from its traditional mechanistic approach to embracing greater adaptability. The argument being made is not for adopting a structured model that is applied within UMR, but rather, a paradigm for different thinking to how it operates and how it could continue operating in the future. Instead of attempting to assimilate the informal work environment within the overall formal structure, as previous efforts have attempted, but to recognize that it may be advantageous to view the informal environment as a component of the overall organization that retains its own competencies that can contribute to UMR's overall performance. This principle is used within this thesis to create the theoretical foundation upon which to initiate the changes believed to be necessary for resolving the contextual situation through informed action. It is important to note that what would be required is a holistic and comprehensive approach, as supported by the literature review in Chapter 2 on the futility of attempting to change individual areas of the informal environments such as, for instance, grapevine communication.

The concept of adaptability, within an organizational context, is well defined by Hall (2002, p.216), who states that it involves:

“openness to new and diverse ideas and people; responding differently to a varying environment - for example,, modifying a personal leadership style so that it remains consistent with the requirements of the varying cultures of different work groups or communicating differently in concern with different work group’s capability”

In other terms, organizations should adapt their approach to existing phenomenon as opposed to attempting to change the phenomenon in order for it to conform to existing
organizational discourses. The focus is on incremental adjustments instead of tackling issues as they arise. Rather than being reactive to issues as they emerge, such as for instance, decision-making issues and attempting to resolve them, being adaptable to the changing internal environment and being flexible to emergent processes, the organization can leverage its competencies whilst reducing potential short- and long-term weaknesses.

To explicate the argument for greater adaptability from within the emergent theory, it is important to consider the elements that contribute to the main concern. The core category of selective perception was instrumental in combining the various different aspects of the theory to explain the root cause of the core phenomenon and rendering the theory dense. In the literature, it is considered a branch of human perceptions that places greater emphasis on social interactions that are reflected in selective biases (Pronin, Lin, & Ross, 2002). This increases the level of “complexity and ambiguity [which results in individuals] selectively organizing and interpreting signals from the organizational context” (Hahn, et al. 2014, p.67). The concepts of communication, trust, and resources, while conceptualized individually, are most impactful when viewed holistically by focusing on their collective relationships. As discussed in Chapter 2, the notion of relationships is ingrained within an informal environment, where it emerged within the data as an underlying element that defined the overall contextual attitude towards decision-making, and the barriers that continuously emerge during decision-making processes. The implications of the theory in relation to the literature is that it attempts to conceptualize the underlying phenomenon discovered in the empirical data, whilst explaining how the relationships between emergent concepts are defined within and are as a result of complexity. This complexity can be conceptualized however, as flexibility and adaptability as opposed to conformity through control. Recent research by Elmes, Strong, & Volkoff (2005), who incidentally use Glaserian grounded theory as a methodology, identified that organizations that integrated adaptability within their overall structure encouraged individual reflectivity regarding embedded rules, which eventually led to greater employee discipline and improved efficiently and work effectiveness. They also argued that such an approach requires “disciplinary power rather than a traditional
perspective of mechanistic bureaucracy” (p. 1).

When reflecting upon the notions of flexibility and adaptability and the core interpretative understanding of the emergent theory, a framework of contradictory paradigms become evident between the identified mechanistic approach to decision-making within UMR and the underlying yet unacknowledged complexity within the organization. A mechanistic approach to decision-making is defined as the “centralization of decision making and control by superiors, who make the decisions, issue the instructions [in order to] maximize the efficiency of all its parts by insisting on standardization and control” (Clegg & Bailey, 2007, p.892) or decisions that dictate that “a particular task shall be done in a particular way” (Simon, 1997, p.112). The literature largely agrees that mechanistic decision-making is usually a characteristic of the formal organization, which is highly structured with significant internal environmental stability (Courtney, 2001; Homburg & Furst, 2005). However, as UMR uses a mechanistic decision-making approach by focusing on decision-making models, this may be considered in direct contradiction to its existent informal environment’s characteristics, and could potentially be contributing to its current decision-making barriers and dilemmas. When faced with inconsistency between daily organizational operations and the underlying realities, organizations are faced with resultant contradictions that lead to sub-optimization and underperformance (Hargrave & Van de Ven, 2016; Vince (2012). These arguments conform to the patterns discovered within the substantive data, where contradictions are accompanied with inefficiencies in decision-making. Current barriers to effective decision-making discussed in Chapter 4 become more pronounced as tensions arise amongst individuals within UMR. This is further compounded by the implicit nature of the contextual problem and its associated concepts, which when applying a framework of rationality and logic leads to a focus on processes and procedures as opposed to the underlying appreciation of the relationships between the problematic concepts.

The dichotomy of the informal work environment within UMR is apparent when analyzing the emergent theory, where one of the evident core notions was the fracturing of various departments into a certain level of autonomy within the organization.
Departments indicated high levels of internal cohesiveness that was not consistent across the organization nor reflected on an interdepartmental level. Such a phenomenon, however, is an expected pattern as highlighted in the literature in Chapter 2, which is identified as being due to the informal nature where groups emerge in response to emotional and cognitive support independently of other areas within the organization. Such fragmentation is reflected in the fact that departments have developed their own independent ‘histories’ (Baum & Singh, 1994), and in turn, departments are viewed by the organization in terms of reductionism (Goldstein, 1999). This, according to Manson & O’Sullivan (2006), leads to higher tension within environments of complexity, and higher discord between various areas within the organization. Within the emergent theory, this appears to be noticeable in how the three peripheral concepts converge based on individual selective perceptions. Through organizational ‘forcing’ of the current mechanical approach to decision-making, departments and other subsystems within UMR attempt to express their own understandings within an environment that places greater emphasis on generic output as opposed to learning, leading to discord and inefficiencies. Such a phenomenon is reflective of emergent groups evolving independently of the organization as a whole (Burke, Lake, & Paine, 2008; Topper & Carley, 1999).

The literature frequently emphasizes the notion of learning as a concept interrelated with the degree of organizational efficiency (Chiva & Alegre, 2005; Sinkula, Baker, & Noordewier, 1997), which is characterized by implicitness, developing through experience, occurring subconsciously, and being emergent (Nonaka, 1994). Critically, within UMR, this solely occurs on an individual level with little opportunity for such learning to influence other areas of the organization. As an example, the emergent theory indicates a lack of effective communication framework that facilitates the ability of pertinent information to flow interdepartmentally, leading to ‘containment’ of potentially important information. The notion of adaptability is also considered within the context of learning within the literature. According to Haunschild & Sullivan (2002, p.615), “diverse information stimulates constructive conflict around issues, which leads people to deliberate about approximate action, and this deliberation tends to improve group
performance, especially [within an environment of complexity]”. The argument being made in the literature is that the diversity embedded within an environment of complexity can actually improve learning and experience if organizations emphasize and embrace such complexity (McElroy, 2000).

An important concept that emerges in the literature in relation to adaptability is the concept of ‘self-designing’ (Nystrom, Hedberg, & Starbuck 1976). It is a broad concept that appears to conceptualize how organizations can be characterized by greater flexibility and adaptability. Self-designing organizations are focused on greater learning to improve performance, the development and appreciation of new attitudes and values, continuously redesigning their processes to identify weaknesses and solutions, avoiding antiquated practices, continuous learning, and commitment to improving outcomes (Cummings & Worley, 2014). Doing so creates less resistance within an organization in adopting unfamiliar features or engaging with unfamiliar environments (Levitt & March, 1988). However, in relation to UMR, probably one of the most important and relevant notions of self-designing is that individuals become actively conscious of their experiences in order to review assumptions and reformulate new thinking. This is important for UMR, as discussed in Chapters 4 and 5, as the empirical data and theoretical memoing highlighted the lack of knowledge by participants of the existence of a pertinent problem and their lack of conscious acknowledgment of being part of an informal work environment or Community of Practice.

Adaptability would not require individuals’ mindsets to converge (Gulati, 1995), but to focus on learning from experience, which is “critical in situations where social capabilities are essential” (Staber, 2013, p.125).

The above discussion created the foundation for the implementation of short-term action and recommendations for long-term action within UMR, with the ultimate aim of reducing current decision-making barriers. The following section discusses the action initiative.
6.2 Action using the Emergent Theory

The purpose of this section and subsequent subsections is to present the intended aims and goals of informed action and the implications for change within UMR’s informal work environment. Action that leads to change can be “defined as the difference(s) between two (or more) successive conditions, states, or moments of time” (Ford & Ford, 1995, p.543). Such a definition presents the need to clearly and effectively highlight what this thesis aims to change and how such change can be put into action. Action can involve a wide variety of different frameworks, including social changes, changes in practice, or change in strategy (Greenwood & Levin, 2006). To initiate action, the literature was used in conjunction with the emergent 9 propositions to develop a plan of action that addresses the current underlying phenomenon of inefficient decision-making within UMR. As supported by the literature review presented in Chapter 2, and discovered within the empirical data, changing individual concepts is and has proven futile and potentially counterproductive, as the core reasons for the problematic situation remain unchanged. This required the researcher to adopt a reflexivity approach to understanding how change could be developed that would go beyond the basic notions of changing each of the individual concepts discovered in the emergent theory.

In order to initiate change, a number of variables had to be considered, including the size of the organization, the embedded cultural framework, the degree of disruption change may bring, and how change may be managed by the organization’s power structure. As such, the aim and goals of change focused on short-term action, where results would be apparent relatively rapidly, with a short turn-around time to results. Using the empirical data and the literature, the researcher believes that a shift in the organization’s currently mechanistic framework to a framework that focuses on adaptability and proactivity could potentially improve the overall decision-making practices. As early data analysis suggested that the informal environment’s unstructured flow of information was a major area of contention, the immediate impulse was to reverse the current structure, and initiate change that moves the organization towards a rigid framework of conformity reflecting a more formal organizational environment.
However, further analysis indicated that this would be unnecessary and impractical, due to three main reasons:

i. The informal environment is viewed as a potential competency with numerous advantages as highlighted in Section 6.1. Hence, change required enhancing and emerging those advantages to maximize their impact, and that ignoring those potential advantages would be counterproductive.

ii. Changing the informal environment to a formal environment is a monumental task that would require extensive resources and cause significant disruption (Rao & Rao, 1999), and nor would it be desirable or effective, as highlighted in Chapter 2. Rather, the literature on organizational adaptability suggested that adopting such a view for changing the organization would allow the continuation of the current contextual environment, through the process of ‘adjustments’ as opposed to ‘replacing’. Avoiding disruptive change, when possible, would be a benefit for organizations and reduces the potential problems associated with organizational change (Holbeche, 2015).

iii. There was no evidence in the empirical data nor in the literature that ‘forcibly’ changing the informal environment to reflect greater formality would actually address the underlying contextual situation, especially as this type of change would not take into consideration the social realities and interactionism evident in the data. Data analysis in Chapter 4 emphasized that the underlying implicit social structure was central to the current situation, and would not be affected by suggesting the organization has become solely formal.

The aim and goals of the action would therefore be focused on change that improves decision-making within the current informal environment, whilst taking into account the socially embedded realities. Using the emergent core category of selective perception, and its related concepts of communication, trust, and resources, as guiding principles for action, successful change would need to result in a reduction in the current barriers to decision-making.
Although it was expected that the results of the change could be measured both qualitatively and quantitatively, greater emphasis is placed on the momentum for change as opposed to the degree of change results. This view was adopted based on the principles of organizational adaptability where immediate results are not always indicative of the degree of change success, but rather, on the change of attitudes, worldviews, and the ability of the organization to adopt a more effective sense-making framework (Burke, Pierce, & Salas, 2006).

How the Emergent Theory is used to Formulate Informed Action

To move the research forward, the researcher required a sound approach to shift the emergent theory from explaining the barriers of decision-making to understanding how the theory and the principles of adaptability and proactivity can be used to inform action. Using inductive and deductive reasoning, a number of statements and reflective questions that would form the bedrock of informed action using the theory were developed:

i. The emergent theory presents 9 propositions

ii. The propositions are focused on relationships between the core category of selective perception and three peripheral concepts; communication, trust, and resources

iii. The theory shows that selective perception arises due to a mismatch between the mechanistic approach adopted by management and the socially-based complex realities. Furthermore, selective perception is considered a BSP that is process-based, and retains elements of BSPPs and BSSPs. This requires action to formulated on a broader level in order to encompass the organization’s wider social environment.

iv. The three peripheral concepts attempt to explain individual ‘problematic’ areas, which collectively contribute to decision-making barriers

v. The literature discourages changing individual areas of an informal environment (Chapter 2)

vi. Even if individual areas were changed, this would likely be ineffective over the long-term as discovered in the literature (Chapters 2 and 6)
**Projecting Questions**

i. How can change be initiated?

ii. How can action be formulated whilst avoiding solely changing an individual concept area or areas identified in the emergent theory as discouraged by the literature?

iii. What does the emergent theory say about decision-making barriers?

iv. How could adaptability and proactivity support potential change?

v. Would adaptability and proactivity as notions, eventually address decision-making barriers?

vi. What value or implications for practice could adaptability and proactivity create?

Using the above statements and questions as a guiding tool, supported by the data that implicitly and explicitly emerged from within the emergent theory as shown within Chapter 5 and the literature discussed earlier within this chapter, a tentative action-based expected result statement was developed to guide action:

**Action Expected-Result Statement**

‘based on the emergent theory, understanding and embracing the notions of adaptability and proactivity may result in improving the current decision-making barriers within UMR’s informal environment’.

This statement served to focus efforts on explicating an approach to action that would entail greater adaptability and proactivity and how they could be accomplished. In order to do so, it was necessary to integrate the literature in support of the emergent theory and for change based on the theory’s conceptualizations.

The following subsections present the design of short-term action, which applies the notion of adaptability, and its results. Further recommendations and long-term action including a framework for proactivity, continuous change, and modification, of the action framework as necessary by the organization as it evaluates long-term action results, are presented in Section 6.2.3.
6.2.1 Designing and Implementing Short-Term Action

To initiate short-term action, participants from two departments\(^{36}\) were invited to a brief two-hour introduction on the interrelationship and interconnectedness of the emergent core categories, which included a presentation of the emergent propositions and contextual situation. The departments were selected based on the principles of theoretical sampling, as they are continuously facing new routine decision-making discourses within new projects, and therefore, provided an opportunity to initiate short-term action where emergent results could be analyzed. Discussing the propositions with the participants was a judgment made by the researcher based on the notion that their understanding of the underlying issues would facilitate greater appreciation for change, as well as help further validate the need for action, as suggested by Cawsey & Deszca (2007).

Short-term action was designed based on the idea of secondary control, which is a “process by which people adjust some aspect of the self and accept circumstances as they are, [and is] adaptive for coping [and] is relatively preferred in interdependent cultural contexts” (Morling & Evered, 2006, p.269). Secondary control is highly relevant as it focuses the short-term action on changing individuals’ mindsets and attitudes as opposed to changing the informal work environment, as it “is essentially a marker for processes that influence adaptive outcomes over and above the effects of control” (Skinner, 2007, p.912). It accepts the existence of different cultural contexts and the idea of relatedness, setting aside any attempts for controlling the environment whilst focusing on adaptability. Hence, the informal environment is constant with no effort to influence or change its dynamics or context\(^{37}\).

Given the rooted existence of selective perception, the introduction highlighted the principle of metaphor, where participants were encouraged to analyze how they frame

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\(^{36}\) Both departments are manufacturing units, and share similar characteristics in terms of size, number of individuals, and contribution to the overall decision-making framework within UMR

\(^{37}\) 6.2.3 focuses on ‘primary control’, where UMR can attempt to influence areas of weaknesses within the organization.
issues based on their mental modes that centered on their own perceptions as opposed to reality. Metaphor, according to Morgan (1980, p.6) is “based upon but partial truth [which] requires of its user a somewhat one-sided abstraction in which certain features are emphasized and others suppressed in a selective comparison [which leads one to] objectify a reality embody subjective intentions in the meanings that underwrite the symbolic constructs that are used”. The aim was to encourage participants to adopt the principles of adaptability, and to accept and embrace the informal environment as an area within the formal organization that while retained specific characteristics not necessarily accepted by the broader organization, it can nevertheless be considered an integral part of UMR and a source of positivity.

In order to relate the concept of adaptability, emphasis was placed on learning, where individuals from each department were encouraged to share experiences with each other. Additionally, participants were advised to avoid creating information obstacles, and to allow information to flow freely whether it was initially considered relevant or irrelevant, and to focus on reflection, which should reduce the current power differential in information between different groups and increase levels of trust and collaboration. In essence, the researcher attempted to refocus participants’ thinking processes on appreciating outcomes as opposed to activity and processes. For instance, if the manner in which a certain task is being completed is not ideal and hence, the outcome is lacking, improving this issue should focus on the outcome of the task itself. If the outcome improves, the researcher believes, based on the literature regarding adaptability discussed in Section 6.1, that the processes themselves will also self-adjust. Figure 6.1 presents an overview of the approach in adopting the concept of adaptability as presented by the researcher to participants from within the two departments.
Once the researcher was confident that participants understood and were aware of the changes required in their perceptions, mental modes, and treatment of information, as the foundation for adaptability, the presentation come to a close. The next step was to select two decision-based projects where both departments would need to work together. The researcher acted as an overt, but silent, observer during project

![Figure 6.1 Framework for Adaptability within UMR](image-url)
discussions to identify whether there were any changes apparent in social interactions, and to use this data to help confirm emergent results to be gathered from the participants. Meetings between the two groups took place over a period of two weeks, where the researcher joined as an observer twice.

Section 6.2.2 describes the results of the action initiated. Although the changes may be considered small or subtle in scope, the researcher believes they are instrumental in creating the necessary initial learning, understanding, and momentum for change, towards greater adaptability. Fully realizing the benefits of adaptability as an organization as well as fostering new mindsets, can be a lengthy endeavor as becoming more adaptable requires an organization to “learn how to cope with continually changing circumstances” (Staber, 2013, p.125).

6.2.2 Results of Short-Term Action

Short-term action results were derived from the research field using one instance of a three-hour interview that involved theoretical sampling, and two instances of observations. The interviews and observations structures were identical to those employed during the data collection and analysis procedures discussed in Chapters 3 and 4, although the interviews within this instance were more specific towards certain areas, namely, the three concepts of communication, trust, and resources, and their relationships. As the structured questions were addressed, a series of unstructured questions that expanded on the topics also emerged during the interviews. Table 6.1 highlights how the 9 emergent propositions were used to formulate relevant questions regarding short-term action.
<table>
<thead>
<tr>
<th>Propositions</th>
<th>Focus on:</th>
<th>Structured questions (to initiate the interview):</th>
<th>Ideal:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposition 1a.</td>
<td>Cognitive barriers, Importance of communication</td>
<td>Do you think the levels of communication increased, remained the same, or decreased? Can you explain how cognitive barriers were addressed, and whether it was effective?</td>
<td>Increasing communication and reducing cognitive barriers</td>
</tr>
<tr>
<td>Proposition 1b.</td>
<td>Level of communication, Level of perceptions</td>
<td>How do you see the relationship between communication and perceptions, and did it differ than before the changes?</td>
<td>Increasing communication and reducing the impact of perceptions</td>
</tr>
<tr>
<td>Proposition 2a.</td>
<td>‘Community’, Level of Trust</td>
<td>As two departments, how do you see yourself when working together, and how do you view trust within this context?</td>
<td>Increasing the level of trust and integrating higher levels of sense-making</td>
</tr>
<tr>
<td>Proposition 2b.</td>
<td>Decision resistance, Level of trust</td>
<td>Were there any problems that you felt arose when suggesting how decisions could be made, and do you think trust played a role?</td>
<td>Reduction of unnecessary decision resistance whilst increasing levels of trust</td>
</tr>
<tr>
<td>Proposition 3a.</td>
<td>Level of expended resources</td>
<td>This question relates to a more quantitative measurement such as cost and quality, but in your opinion, do you think that time was better utilized with less wastage?</td>
<td>Reduction of expended resources</td>
</tr>
<tr>
<td>Proposition 3b.</td>
<td>Personal benefits</td>
<td>Aside from the obvious benefits of completing the project, how would you describe your levels of personal satisfaction?</td>
<td>Increasing individuals’ level of personal satisfaction</td>
</tr>
<tr>
<td>Proposition 4a.</td>
<td>Communication</td>
<td>This question is closely related to...</td>
<td>No specific ideal - to...</td>
</tr>
</tbody>
</table>
Table 6.1 Short-Term Action Questions

The above table describes how the structured questions were formulated based upon the propositions derived from the emergent theory. The questions were aimed at understanding whether any benefits arose from the changes, even within the narrow test parameters of two projects. While the ideals were presented as references for the researcher, the short period for action was not expected to achieve those ideals. Coding procedures, as used within the contextual situation earlier in the thesis to derive the emergent theory, were not applied in this instance, but rather, the data was analyzed based on two approaches:

(i) positive or negative feedback (in relation to before the changes). In this case, sentiments were contrasted with each other to attempt to identify a pattern that would
either confirm improvements or identify no changes. Data collected was from interviews.

(ii) the frequency of adjective terms that described participants’ sentiments and answers to the questions were counted to attempt to understand how individuals felt after the changes. Data collected was from interviews.

The data collected from the interviews were also later contrasted to the researcher’s observations during the two projects on how individuals interacted. This data was aggregated and tabulated as is presented in Table 6.2 and Figure 6.3.

<table>
<thead>
<tr>
<th>Impact of Action</th>
<th>Verbatim quotations from participants’ speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Communication Increase</td>
<td>…there was better communication when we tried to focus on the project…</td>
</tr>
<tr>
<td></td>
<td>Communication improved once we looked beyond ‘groups’….</td>
</tr>
<tr>
<td></td>
<td>…communication was about the same, just individuals were more receptive…</td>
</tr>
<tr>
<td></td>
<td>I believe the new approach to communication was positive as everybody seemed more collaborative…</td>
</tr>
<tr>
<td></td>
<td>I do not think there was much of a difference in communication…</td>
</tr>
<tr>
<td>Reduced Cognitive Barriers</td>
<td>Cognitive barriers were definitely less prominent….</td>
</tr>
<tr>
<td></td>
<td>It was difficult to reduce perceptions but I think everyone tried …[with] some good results…</td>
</tr>
<tr>
<td>Improved communication based on perceptions</td>
<td>I think with reduced perception, communication definitely increased.</td>
</tr>
<tr>
<td></td>
<td>….I do not think there was a correlation between the two…</td>
</tr>
<tr>
<td>Increased Trust</td>
<td>Trust was a major issue that somewhat improved.</td>
</tr>
<tr>
<td></td>
<td>…while you [the researcher] mentioned trust as an issue, I think there is some level of trust, but it will take more time to improve</td>
</tr>
<tr>
<td>Resistance to decision-making reduced</td>
<td>There were no issues making decisions…</td>
</tr>
<tr>
<td></td>
<td>There were less arguments.</td>
</tr>
<tr>
<td></td>
<td>….it was surprising how quickly decisions were made, and could move on to other things…</td>
</tr>
</tbody>
</table>
Increased levels of personal satisfaction | It was a nice change to feel that decisions were completed quickly…
| …I don’t agree with increased satisfaction really…

Higher level of collaboration emerged | We collaborated well, despite some difficulties.
| Yes, I think there was some collaboration [once] we decided to work on the decision problem collectively…

Reduced time resources | …it didn’t take time at all
| Decisions were finished quickly…

Table 6.2 Feedback in Relation to before Short-Term Action Implementation

Table 6.2 presents actual participant verbatim quotes that have not been altered or changed by the researcher, and includes both, positive and negative statements made by participants. Given that the interview was conducted over a period of three hours with 16 participants from both departments, the above only represents the most pertinent and direct quotations from among hundreds of different statements. To better identify a pattern in the data, the frequency of certain adjectives in the participants’ speech were also counted (within their correct context). Terms such as ‘positive’ and ‘better’ reflected an improvement in decision-making while terms such as ‘negative’ and ‘worse’ reflected a reduced level of decision-making efficiency. The results as presented in Figure 6.2, indicate a higher level of satisfaction amongst participants regarding decision-making efficiency after the proposed changes were implemented evident in their language pattern, when compared to the data in the emergent theory. The researcher focused on language patterns based on the previously discussed notion of symbolic interactionism in Chapter 3, which formed an important component of this thesis’s contextual analysis of the empirical data. The relationship between language patterns and symbolic interactionism is supported by a number of different literature publications such as by Cossette (1998, p.1355) who states that “ascribing meaning and understanding language in the context of the interactive situation in which it occurs [helps] make the speaker's remarks meaningful".
Analysis of the data through an interpretative framework of discovering patterns indicates a potential improvement in reducing barriers to decision-making. With a total of 16 participants from both departments, it is important to note that the pattern was consistent across individuals from both departments, with data not skewed in favor of one department over the other. In total, 63 percent of the participants (10 participants) believed there was some improvement in the efficiency of decision-making, while just over 30 percent (5 participants) believed there was no change. The remaining 7 percent, or only 1 participant, believed that there were negative aspects to the change, most notably a feeling of group pressure to abide to the changes and a focus on a confirmatory attitude and avoiding contentions. However, those negative aspects were confined to the individual’s personal perspectives on the path to change and action as opposed to the actual eventual emergent results.
It is critical to note that the above results cannot be considered fully exhaustive or fully conclusive, as other unidentified variables may have had an impact, such as the researcher’s presence during observations. This is also especially important given that the action was undertaken on a small scale within an environment compounded with high levels of complexity and implicitness where variables are often not clear or realized. However, a definitive pattern in the data that indicates a potential level of improvement within the boundaries of efficiency in decision-making is clearly identifiable.

As previously discussed, short-term action focused on changing certain mechanistic elements that would facilitate the application and success of long-term action. While the short-term changes are considered positive, it is not expected that they would have any long-term benefits without a wider change involving the organization adopting greater adaptability. This is also in line with established literature, where small changes facilitate learning yet lack sufficient momentum as the rest of the environment is not progressing or changing (Van de Ven & Poole, 1995). Change that lacks momentum could also eventually lead to increased resistance and reduced motivation by organizational stakeholders as the small changes are too minute to garner sufficient notice or attention (Tushman & O’Reilly III, 1996). Hence, the short-term action approach was ideal in solely initiating a platform for learning and further progressive improvement. Furthermore, the positive results are extremely important in providing field-based empirical evidence that the initiated action and changes towards adaptability are appropriate within the emergent situational problem.

### 6.2.3 Further Recommendations, Long-Term Action, and Discussions

This section discusses and provides a narrative on further recommendations and long-term action based on this thesis’s emergent theory, theoretical constructs, results of short-term action, and the practicality of the final findings as they relate to UMR. To do so, the researcher builds on and extends on the short-term action presented earlier
within this chapter. Given that short-term action resulted in positive changes, this substantiated the proposed changes and created the necessary empirical support to plan the recommendations and long-term action strategy. The short-action framework highlighted the notion of adaptability in improving decision-making barriers within UMR’s informal environment by focusing on shifting individuals’ thought processes. This section brings change to full circle by presenting recommendations to management that are specific to the emergent theory with a framework that attempts to influence, but not directly change, identified weaknesses within the informal work environment. It is important to note that the aim of the recommendations to UMR’s management is to provide them with the necessary information to influence the work environment. Attempting to change the informal environment is, as discussed in Chapter 2, highly discouraged due to the high probability that changes are likely to be strongly resisted and the fact that ‘forcing’ change is unlikely to be a sustainable endeavor. Hence, the researcher strongly believes that these recommendations are meant to influence ideas, concepts, worldviews, processes, and operations, in order for change to be emergent rather than forced. Given the emergent nature of such changes, it is expected that their realizable benefit and implications are likely to occur over an extended period of time.

In order for UMR to appreciate the current situational problem, it may be helpful to conceptualize how it may have developed. The researcher believes, based on their own observations, experience within UMR, and the empirical data, that UMR’s rate of growth between 2000 and 2010 had a profound and direct impact on its internal operations, processes, structure, culture, and attitudes. Prior to 2000, UMR was considered a small organization, largely managed by its founder, who was responsible for day-to-day decisions and operations. There was a strong culture of micromanagement as employees learned to primarily rely upon the founder for leadership. As a result, and due to the fact that operations were relatively small, processes were largely organized and efficient. However, post-2000, the organization grew exponentially, expanding into new markets, developing its manufacturing units, and doubling its workforce year-on-year, requiring the founder to delegate significant areas of operations to other managers and employees. Given the rapid growth and strongly ingrained culture of
micromanagement and overreliance on the founder for all operations, this sudden shift was not fully successful. Growth appeared unmanaged and was often chaotic. Systems, behaviors, and processes, emerged with little consideration for their long-term sustainability or effect on the larger organization, rather, they rapidly emerged to fill gaps in operations and processes. Furthermore, given that UMR was growing within a market that lacked qualified human resources, this resulted in the organization often hiring engineers and managers who were under-qualified and lacked the necessary experience to understand and manage the organization's growth, which in turn often led to a high degree of employee turnover. Such a situation, according to the literature, is not uncommon, and is often to be expected within organizations that experience rapid or uncontrolled growth (Barringer, Jones, & Neubaum, 2005). However, the researcher believes the situation is more accentuated within UMR given the sudden poorly managed growth.

As the organization matured and growth slowed, weak areas that were previously imperceptible during the chaotic growth, started to appear more prominent, but more importantly, they had already become ingrained and well-established within the organization's culture and operational processes. To address those areas, the organization became managed through a reactionary process. For instance, products that lacked the required quality were addressed individually, as opposed to addressing the actual system that had led to the products being manufactured poorly in the first place. Similarly, poor decisions were addressed on a case-by-case basis without proper regard to the fact that decision-making processes lack the necessary framework to support consistency. In essence, this led individuals to 'react' to situations subjectively and make decisions based on their personal perceptions without being guided by a supportive structure. A supportive structure within this context is not meant to be understood as a rational decision-making model as discussed in Chapter 2, but a flexible framework that facilitate consistent and effective decision-making based on the needs and requirements of the organization.

As an informative narrative to the reader, the above presents the wider historical context
of how the researcher believes the current situational problem emerged within UMR. However, as the aim of this thesis is focused on decision-making discourses within UMR’s informal work environment, the following recommendations are limited to that context. Although they are likely to have positive effects beyond the contextual situation within UMR, such effects are beyond the scope and concern of this thesis.

Recommendations can be categorized as primary control, which in contrast to the short-term action’s secondary control discussed earlier, is “to proactively change the environment by persisting and exerting effort” (Hall, 2008). Figure 6.3 presents an overview of the core focus of the recommendations and long-term action in relation to short-term action presented in Sections 6.2.1 and 6.2.2.

![Diagram](image)

**Figure 6.3 Core Focus of Recommendations and Long-Term Action**
As discussed earlier, UMR has adopted a reactive strategy to emerging issues. It is proposed that UMR reverse this strategy by adopting a proactive approach to addressing issues. A proactive approach is an emergent behavior that is challenging to pre-specify, standardize, or place within a specific framework, and cannot be imposed on individuals but requires individuals to have it adopted (Griffin, Neal, & Parker, 2007; Grant & Ashford, 2008). What it would broadly entail is for UMR to avoid a defensive and a reactionary stance or to base their imperatives on opportunities or threats, but rather, to proactively attempt to influence, change, and shape, their environment based on their own strategies and capabilities in order to create and foster a more positive environment (Crant, 2000; Sharma & Vredenburg, 1998). Within the context of proactivity, the researcher believes it is also possible to adopt the concept of self-designing organization discussed earlier, where UMR’s “members continually redesign their organization and its processes, [...] define their own problems, generate their own solutions, and evaluate and revise their own solution-generating processes” (Arthur, Hall, & Lawrence, 1989, p.314). Hence, UMR would need to create a context that would encourage proactivity to emerge. It is important to note that the concept of proactivity is not considered synonymous with proficiency or efficiency. UMR’s previous and current attempts to impose a rational decision-making framework is considered an imposition with the ultimate aim of building proficiency and efficiency. Rather, proactivity within this context emphasizes the creation of self-initiated change that attempts to actively change the current situational problem.

Taking into consideration the earlier discussion on the weaknesses that emerged as a result of UMR’s rapid and uncontrolled growth, one may argue that these weaknesses are seen as threats by the organization, which as part of its reactionary approach, resulted in ‘tightening’ of processes such as decision-making discourses, particularly within its informal work environment. These controls could have potentially resulted in selective perception developing as a response mechanism by individuals. This argument is being made by the researcher based on the notion and knowledge that UMR has traditionally attempted to emphasize efficiency through mechanistic control of decision-making. Emphasizing efficiency and control can result in affected individuals
adopting a ‘defensive stance’ towards the perceived threat or loss of control over their own immediate environment (Flamholtz, 2012). This is also supported by Rugman (2002, p.74), who states that the “nature of the [organizational] response may […] influence subsequent interpretations and perceptions as selective attention is paid to congruent evidence”. This further supports the importance of adopting and maintaining a proactive strategy by UMR in order to reduce the impact of negative selective perception.

Part of a proactive strategy could also include, as per the emergent theory, a particular focus on the three peripheral emergent concepts communication, trust, and resources. These areas, where change is likely to be tangible and realizable, would require UMR understanding and appreciating how to proactively influence their positive development. Communication emerged as an important concept, where a lack of effective processes and systems that could relate information effectively were lacking. The researcher believes this was due to UMR’s rapid growth at a time when the necessary skills to create reliable foundational systems to support effective communication were lacking. Given that the three concepts are interrelated, it is not suggested that UMR focus on each concept individually, as addressing one concept area is likely to have an effect on another concept. For instance, improving communication is likely to have a positive impact on trust, as highlighted in Proposition 4c in Chapter 5. When viewing the emergent theory collectively and taking the interrelation of concepts into consideration, it is proposed that UMR focus on four central themes:

i. Job descriptions: A striking feature of the informal work environment within UMR, as discussed in Chapter 5, is the lack of clear job descriptions, with overlapping responsibilities. This resulted in friction and the emergence of trust issues that impacted perceptions. Hence, it is recommended that UMR improve job descriptions and ensure that individuals are clear regarding their roles and responsibilities within their department and within the overall organization.

ii. Building trust: As noted earlier, UMR has consistently experienced high degrees of
employee turnover. This may have contributed to a ‘defensive’ stance by remaining employees as they find comfort and support within their own emergent groups, and may have also contributed to the emergence of selective perception as a concept. For instance, a succession or flow of new employees who do not know each other, and the exist of employees who may have already developed relationships, will often result in groups emerging based on a ‘us vs. them’ mentality (Maurer, 2010). The researcher believes this was likely further compounded by the increased strain witnessed by UMR’s rapid growth.

One way to influence the emergence of trust which is relevant to UMR’s context is suggested by Inkpen & Tsang (2005), and involves encouraging and proactively building a stable employee base. In other terms, appreciating the importance of having employees who are consistently interacting and building shared experiences with minimal turnover and change. This is likely to require time, as argued by Poppo et al. (2008) who state that trust is built incrementally as individuals learn about each other’s interests, develop expectations and perceptions regarding behaviors, and understanding each other’s capabilities and competencies.

iii Developing lateral relationships. Creating the necessary context for lateral relationships that go beyond the compartmentalized processes within emergent groups can also help dissipate current barriers between different groups. This was most evident in Propositions 1a and 1b where selective perception and cognitive barriers were highly intertwined with communication processes. The lack of effective communication, due to the lack of relationships between individuals within the same organizational level, eventually contributed to decision-making barriers. Hence, lateral relationship building could help increase or facilitate communication between individuals and eventually reduce selective perception and cognitive barriers. This could also reduce reliance on line relationships within an already highly overloaded environment (Galbraith 1977).

Encouraging lateral relationships involves focusing on building relationships through extensive coordination mechanisms such as “integrated use of resources, high
interaction between individual actors and efficient coordination of activities” (Huiskonen & Pirttila, 2002, p. 180). Such coordination requires increased lateral communication, which leads to improved flexibility and decision-making processes as individuals build on greater interaction and focus efforts on sharing information that facilitate decision-making (Ostrof, 1999).

v. **Controlling slack resources:** Resources is one of the peripheral categories to be identified in the emergent theory and a factor within the empirical data. Although not directly identified as a problematic area, particularly financial resources, it is nonetheless a highly influential notion within the emergent propositions. It influences and is influenced by all of communication, trust, and selective perception. UMR’s growth and success has created significant financial slack resources, which the researcher believes when uncontrolled and not effectively budgeted, can lead to inefficiencies, as highlighted in the emergent theory. Despite the increased resource expenditure due to decision-making inefficiencies, participants in the empirical data did not seem concerned regarding wasted resources. It is possible that as slack resources are restricted and better managed, efficiency could improve in order to meet work demands that no longer have access to unlimited resources. This principle is supported by researchers, such as Baker, Miner, & Eesley (2003), who state that slack resource constraints change the behavior of managers by forcing them to focus on greater allocative efficiency.

The researcher believes that an example of a positive outcome as a result of restricted slack resources is improved communication as the effects highlighted in Section 5.2.5 in Chapter 5 would need to be reversed in order for work demands to be met by individuals within UMR’s informal work environment.

The recommendations above can be characterized based on two notions. The first is that they are intentionally left broad in order for UMR to have them contextualized and adapted based on their own specific variables. The aim is not to dictate specific change discourses as this would naturally defeat the purpose of adaptability and proactivity, but rather to appreciate the need for continuously measuring, analyzing and refining,
internal processes. UMR would need to ‘fit’ the recommendations to their work environment as well as take into consideration their short- and long-term strategic outlooks, as well as self-regulate their internal processes. More importantly, it is expected that these recommendations will eventually lead to further changes that may not be currently anticipated, based on their level of success and acceptance within the organization’s informal work environment. The second is that they can be considered long-term endeavors, and as previously discussed, are likely to require extended periods of time in order to become realizable and ingrained within the organization's internal operations and processes. Hence, the focus should not be on expecting immediate results, but on being continuously proactive and continuously searching for areas of improvement. The intention of these recommendations is to ultimately influence mindsets and introduce a new thinking process that allows UMR to better anticipate and manage their decision-making discourses within their informal environment as well as the broader organization.

6.3 Implications for Practice

As the emergent theory is based on empirical evidence grounded within UMR’s organizational research field, it is intended to retain relevance to practitioners within the organization as well as potentially to practitioners within similar organizational environments, particularly environments that can be defined as informal.

The implications for practice are as follows:

i. It provides an understanding of the dimensions of an informal work environment where notions such as socially-constructed perceptions can impact internal processes in an implicit manner. It allows an organization to go beyond ‘surface’ indicators to potentially understand the interplay of underlying issues.

ii. The emergent theory puts forth a series of arguments based on empirical data that
allows practitioners and organizations to analyze their environment and understand the impact of various interrelated concepts such as communication, trust, and resources. Presented as propositions, these concepts provide a framework that would allow practitioners to understand the complexity of their informal environment using theoretical conceptualizations, which ultimately serve as an explanatory tool.

iii. It provides practitioners with an understanding of how to employ an informal environment’s characteristics as a competency, as it highlights how socially-based environments can be leveraged through adaptability and proactivity. The theory uses empirical data, and support of the literature, which highlight that mechanical or functional change of individual concepts or variables within an informal environment can be counterproductive. Hence, by using the emergent theory to formulate a change strategy, it provides practitioners with a new approach to addressing potential weaknesses within their organization.

### 6.4 Implications for Research

Using grounded theory principles to discover a data-emergent theory as well as creating a discourse for short- and long-term action has created a number of implications for research. These implications include:

i. The emergent theory creates a new theoretical platform that explains how decision-making is impacted by notions and concepts ingrained within an informal environment. It addresses the literature gap highlighted in Chapter 2, by specifically grounding the research within an informal environment and drawing theoretical propositions regarding its impact on decision-making.

ii. It places the informal environment as a potentially data-rich research environment for organizational theory research by highlighting its uniqueness relative to formal organizational environments from which it emerges.
iii. It presents the discovered core category of selective perception as a central point of behavior for social issues within organizations. This broadens its implications to potentially include various areas within an organizational environment. As a socially-based and contextually formulated concept, selective perception is a basic social process that provides theoretical depth, which could be used as a starting point for researching other organizational theory concepts such as leadership, marketing, and even potentially functional areas such as finance and accounting.

iv. Action within this thesis has argued for adaptability and proactivity as potential areas of focus for resolving inadequate systems within an organizational environment as a result of rapid and uncontrolled growth. This provides a building point within current literature to research and analyze case studies on how organizations have resolved or improved their inadequate systems and the extent and parameters of successful adaptability and proactivity integration.

6.5 Research Limitations

This section discusses the limitations identified during this thesis’s research process. By bringing those limitations to the forefront, this allows one to reflect on the potential impact they may have had on the research. Three main limitations were identified, which include:

i. The level of generalizability when discovering the emergent theory is considered limited given that the theory is grounded within a specific situational context. Although the theory is considered internally valid as a result of grounded theory framework’s emphasis on data collection and rigor, it cannot be claimed to be generalizable or transferable beyond the research site. While the discovered core phenomenon of consistent barriers to decision-making is likely to occur within other informal work environments, such a claim cannot be considered conclusive without further research within those informal environments.
ii. Although grounded theory’s data analysis procedures are designed to limit researcher bias through its emphasis on theoretical sensitivity, bias could still have been introduced given the interpretative nature of the methodology and the researcher’s close proximity to the empirical data. The researcher’s previous understanding of adaptability and proactivity and their advantage for organizations may have influenced the researcher’s predisposition to highlight them as a course of action during this research. It is possible that other researchers could interpret and develop a different course of action for UMR that would also yield positive results. Furthermore, researcher bias could have potentially been introduced during the theoretical coding stage, which although is reduced given the researcher’s emphasis on reading within a wide range of literature, there is always the possibility to expand the literature even further. This bias can potentially be less realizable if more than one researcher was analyzing the data.

Hence, it is fully recognized that researcher bias could be considered a relevant limitation within this thesis.

iii. The empirical data was limited to only one research site, where theoretical sampling was utilized. As a result, this could theoretically have limited the breadth of the data, as other departments or sites could have contained other information relevant to this thesis’s research topic. It is possible that increasing the sample size would have discovered new data patterns and themes that would have enriched the emergent theory. However, the researcher does not believe that this limitation decreases the credibility of the theory, as the literature was utilized to substantiate the contextually emergent data.

6.6 Future Research

Maintaining a high level of efficiency is a decisively advantageous competency for organizations in today’s rapidly changing and increasingly competitive business environments. The emergent theory shows that achieving efficiency in decision-making
within informal environments is possible, yet complex and requires an organization to adopt adaptive and proactive approaches to resolution. This section presents how future research could potentially broaden, modify, and further develop the emergent theory.

i. The emergent theory is considered broad as it presents a basic social process that interrelates four concepts. It is proposed for future research that each of those relationships be researched independently of the other concepts and tested within separate parameters. For example, the relationship between trust and resources could potentially form a new framework for future research.

ii. This thesis formulated short-term action and placed long-term action within an actionable framework. Future research could involve developing an appropriate research design that tests the impact of long-term action using similar parameters within organizations facing comparative situations.

iii. This thesis was grounded within a medium-sized organization that is situated within a highly influential external culture, which was beyond the scope of this research. Future research could expand on the emergent theory through research that involves the external culture and environment grounded within either small- or large-sized organizations. Furthermore, future research could expand the theory by grounding the research within different organizational environments.

iv. Given the modifiability of the generated theory, it is proposed that future research could increase its scope through further sampling, whilst modifying notions or concepts within the theory to reflect other contextual situations, and comparing results to the theory presented in this thesis.


Houpt, Gilkey, & Ehringhaus, (2015) Learning to Lead in the Academic Medical Center, Switzerland: Springer International Publishing AG.


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Appendix A
UMR as an Informal Organizational Environment

The informal environment forms the context upon which this thesis aims to understand how decision-making processes are impacted, and sets the stage for the organizational complexity upon which decision-making is viewed as an integrated process and a characteristic of the organizational system. The appended table presents the various elements that characterize UMR as an informal organization. It builds upon the framework presented in Chapter 2 on how informal organizations are defined and characterized in the literature. It presents the characteristics of informal organizations, as presented by Chitale, Mohanty, & Dubey (2012, p.232), which are then contrasted to UMR’s characteristics as discovered in the empirical data.

<table>
<thead>
<tr>
<th>Characteristics of the Informal Organization</th>
<th>Characteristics of UMR</th>
<th>Level of each characteristic within UMR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structure</strong></td>
<td>Lacks a solid organizational structure, with little to no predetermined workflow path.</td>
<td>High</td>
</tr>
<tr>
<td><strong>Position terminology</strong></td>
<td>Individuals view their positions within the organization as playing a certain role within the overall organizational context. Positions are not viewed as jobs.</td>
<td>High</td>
</tr>
<tr>
<td><strong>Goals</strong></td>
<td>On an organizational level, the aims and goals are profitability and not member satisfaction. However, member satisfaction is the prime goal of the individuals within groups in the lower levels of the organization. A contrast between both goals is visible within the organization - a characteristic leading to reduced overall cohesiveness.</td>
<td>Low</td>
</tr>
<tr>
<td>Influence</td>
<td>Base: <strong>Personality</strong></td>
<td>Power is largely reserved based on personalities, and can often be bottom-up. Upper management can frequently lack direct influence within the organization.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Type:</strong> <strong>Power</strong></td>
<td><strong>Flow: Bottom-up</strong></td>
<td></td>
</tr>
<tr>
<td>Control Mechanism</td>
<td><strong>Physical or social sanction (norms)</strong></td>
<td>Bureaucratic control mechanisms exist, but are difficult to enforce. Socially-based control mechanisms exist within informal individual groups.</td>
</tr>
<tr>
<td>Communication</td>
<td><strong>Channels:</strong> <em>Grapevine</em></td>
<td>Strong evidence of grapevine communication with no preset networks for information flow.</td>
</tr>
<tr>
<td><strong>Networks:</strong> <em>Poorly-defined cut across regular channels</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Individuals included: <em>Only those accepted</em></td>
<td>UMR operates within a context of socially-based interactions, where individuals form their own support groups based on personality and acceptance within the group.</td>
</tr>
<tr>
<td></td>
<td>Inter-personal: <em>Arise spontaneously - personal</em></td>
<td>No formal leadership exists. Informal leadership exists within groups.</td>
</tr>
<tr>
<td></td>
<td>Leadership role: <em>Result of membership</em></td>
<td>Certain mechanisms are officially in place to control behavior, however, management lacks the direct power to enact those mechanisms when necessary.</td>
</tr>
<tr>
<td></td>
<td>Basis for interaction: <em>Personal characteristics</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basis for attachment: <em>Cohesiveness</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control on behavior: <em>Non-management controlled</em></td>
<td></td>
</tr>
</tbody>
</table>

There are clear, and mostly high levels of characteristically informal elements within UMR. According to Chitale, Mohanty, & Dubey (2012), organizations are rarely fully informal, but rather, informality always exists to varying degrees. UMR is considered an informal organization as the different areas that define the organization fall within the realm of informality. Furthermore, as indicated in the above table, informal elements generally supersede any existing formal characterizations.
Appendix B
Authorization Letter

The following letter is the authorization letter presented by UMR to the researcher granting permission to conduct research within the organization.

UMR Emeco Ltd. Headoffice

Permission to Conduct Research at UMR Industries
August 2014

This letter grants permission to Mr. Ibrahim Abdellah, a student at the University of Liverpool, to conduct research relating to his DBA thesis entitled ‘A Grounded Theory Study of Decision-Making within Informal Organizations’, at UMR Industries - our manufacturing facility located at 25A Badr City, Cairo, Egypt.

Permission has been granted to conduct interviews, observations, and access to historical documents for a period of no more than 3 years from the above mentioned date. Permission does not extend to details relating to clients, employees, or customer, names or their business or personal details.

We wish him the best of success as he undertakes his thesis.

Best regards,

Hossam Mohamed
Human Resources Manager
UMR Industries

Dr. Mohammed Ali
CEO / UMR Group Ltd.
Appendix C
Participant Information Sheet (PIS)

The following is the English language version of the Participant Information Sheet provided to all potential interviewees for this thesis’s research.

Title of Study:

A Grounded Theory Study of Decision-Making within Informal Organizations

The above study forms part of the student’s (Ibrahim Abdellah) Doctorate of Business Administration degree.

Please read the following guidelines carefully.

If you have any questions or concerns, please contact me directly. My contact information is enclosed in this guidelines sheet.

Researcher:

Ibrahim M. Abdellah

Version 401 (English)
Arabic version is also available
You are being invited to take part in a research study on your organization (UMR Emeco / UMR Industries). Participation in this study is optional, however, before you decide to participate, it is important for you to read the following information, which provides you with the details on the nature of the study, its purpose, and what it will involve.
1 - What is the purpose of this study?

The purpose of this research study is to explore how individual perceptions impact strategic decision-making. The goal is to understand how your individual perceptions are formed and how they impact how your decisions are made within the organization. As the research progresses, a clearer understanding will emerge, which will be analyzed and used to develop a new practical theory that can be used by the organization in order to improve its overall operations.

2 - Who is conducting this study?

As the researcher, I will be conducting this study. This study and its results will be used for my doctorate thesis.

3 - Why have I been chosen for this study?

You have been chosen for this study because you work in the environment that is of interest to the study, and therefore, your opinions are extremely important. You are in a position to provide information that will help understand the area being studied.

Up to a total of 45 of your colleagues may also take part in this study. This study is not available to individuals outside of the organization. Your information was provided by the Human Resources Department.

4 - Is participation optional?

Yes, your participation is completely voluntary. If you decide to participate and then later change your mind, you are free to withdraw at any time. You can withdraw without providing any reason and there are no disadvantages or repercussions for doing so.

5 - What is my role if I decide to participate?

If you chose to participate, you will be taking part in interviews and be part of observations. The interviews and observations will be scheduled in a manner that minimizes disruption to your normal work schedule. Interviews will usually take place on Thursday afternoons since Thursdays are the last workday in the week. The interviews
will usually last about 2 hours, after which you will be permitted to leave work for the
day. Throughout the research, you can expect interviews to occur up to six times.

Observations will not require any active participation on your part. You will be made
aware in advance that observations will take place, the time they will take place, as well
as the location(s). Observations will take place during your work hours and as there is
no active participation, they will not impact your work schedule. Throughout the
research, you can expect observations to occur up to six times.

6 - What about my work schedule and any conflict?

This has been discussed in detail with management. Management will afford you the
time during your regular work schedule to take part in this study. You will not need to
work additional time to cover any time spent participating in the study.

If you decide not to participate in the study, you will continue your work schedule as
normal.

7 - Is there any monetary compensation for taking part in the study?

No, there is no monetary compensation for taking part in the study, nor any other
compensation of any kind. This applies to all participants.

8 - Are there any costs to taking part in the study?

No, you will not have to incur any costs for taking part in the study. This applies to all
participants.

9 - Are there any risks in taking part in the study?

There are no risks in taking part in the study. Your participation is optional and voluntary
and there are no disadvantages in deciding not to participate.

10 - Can I withdraw from the study once it starts?

Yes, you can withdraw from the study at any time without cause and without any
repercussions or penalties. To withdraw from the study, please contact me and you will
be withdrawn immediately.
11 - What should I do if there is a problem or an issue?

If a problem or an issue arises, please let me know by contacting me directly and I will try to resolve the problem or issue. If you feel the problem or issue still remains unresolved, you can contact the Research Governance Officer at the University of Liverpool. If you do contact the Research Governance Officer, please provide the study’s necessary details such as the title of the study, my name, and the details of your complaint.

12 - What are you going to do with the information gathered during the study?

The information gathered for this study will be used solely for this study. The information will not be shared with any other parties and will not be used for other studies. Upon conclusion of the study, the raw information will be destroyed.

There is a possibility that the research study becomes published. If so, you will be informed on how to access the published study. Whether the study becomes published or not, you will not be identifiable from the research and therefore, will always remain anonymous. The information will be presented in the aggregate and will not identify any specific individuals.

13 - Are there any privacy issues I should be aware of?

Your privacy is extremely important. During your participation, no identifying information will be gathered or recorded. Data will be gathered in the aggregate, so your name will not form part of the study. If you have any further questions or concerns regarding privacy, please contact me before or during the study.

The information and data gathered will be securely stored on a password-protected drive and will be destroyed upon completion of the study. The data will be stored for 5 years as per the University of Liverpool's regulations.

14 - How will data be gathered during the study?

The data will be gathered in two ways.
The first will involve interviews. These will be group interviews where I will be asking some general questions and you will be able to participate and provide your opinions and thoughts. The interviews will be informal and structured in a discussion manner. This will take place in the general conference room.

The second will involve observations. The purpose is to observe interactions and identify the processes most within your work environment. No covert observations will take place and you will be made aware of the time and place that observations will take place.

15 - Who else will be present during the interviews and observations?

A member from the human resources department will be present during the interviews and observations to ensure that all procedures are being followed.

16 - Who can I contact if I have further questions?

If you have any further questions, you can always contact me directly and I will be happy to help answer any questions you may have. My contact details are in the attached Contact Sheet.
Contact Sheet

My contact information:
Ibrahim Abdellah
E-mail: Ibrahim.abdellah@my.ohecampus.com
Phone numbers: (2) 012-2472477 (local)
(778) 350-9555 (Canada)

Research Governance Officer contact information:
The University of Liverpool
Email: ethics@liverpool.ac.uk
Telephone: 0151 794 8290

Research Participant Advocate contact information:
The University of Liverpool
Email: liverpoolethics@ohecampus.com
Telephone: 001-612-312-1210
Appendix D
Informed Consent

The following is the participant consent form that was distributed to all participants who agreed to take part in the interviews and observations for this thesis.

Committee on Research Ethics

PARTICIPANT CONSENT FORM

Title of Research Project: A dialectic examination on the impact of individual perceptions on strategic-decision making within informal organizations: Notions from Complex Adaptive Systems

Researcher(s): Ibrahim Abdellah

1. I confirm that I have read and have understood the information sheet dated [ ] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected. In addition, should I not wish to answer any particular question or questions, I am free to decline.

3. I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me in any of the publications.

4. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide and I can also request the destruction of that information if I wish.

5. I agree to take part in the above study.

Participant Name __________________________  Date ______ Signature ______

Name of Person taking consent __________________________  Date ______ Signature ______
**Optional Statements**

- The information you have submitted will be published as a report; please indicate whether you would like to receive a copy.

- I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me in any publications [or explain the possible anonymity options that you are offering participants and provide appropriate tick box options accordingly].

- I agree for the data collected from me to be used in future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee.

- I understand and agree that my participation will be audio recorded /video recorded (please delete as appropriate) and I am aware of and consent to your use of these recordings for the following purposes (which must be specified)

- I agree for the data collected from me to be used in relevant future research.

- I would like my name used and I understand and agree that what I have said or written as part of this study will be used in reports, publications and other research outputs so that anything I have contributed to this project can be recognised.

- I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

- I understand and agree that once I submit my data it will become anonymised and I will therefore no longer be able to withdraw my data.
Appendix E
Observation Sheet Example

Observation Sheet: UMR

Date:                      Start time:                        End time:

Department:

<table>
<thead>
<tr>
<th>Evaluator Observations</th>
<th>Key Areas of Importance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>All participants present?</td>
<td></td>
</tr>
<tr>
<td>Sufficient interactions present?</td>
<td></td>
</tr>
<tr>
<td>All participants are aware they will be observed (overt)</td>
<td></td>
</tr>
<tr>
<td>Main purpose of observation today:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Researcher Comments</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Areas of Focus</th>
</tr>
</thead>
</table>

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