

**THE SIGNIFICANCE OF CENTRALISED COMMUNICATION
ON A DECENTRALISED ORGANISATION: A CASE ON
RAILWAY SAFETY REGULATOR**

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ABSTRACT

The rationale for the study was to explore the significance of centralised communication in a strategically decentralised organisation. Organisations either centralise or decentralise their functions as part of adapting to the external environment. Whether the organisation's strategic direction is centralised or decentralised, communication remains significant because it is the glue that holds the organisational functions together. To remain relevant to innovations and circumstances, organisations change strategies from time to time. Today's complex macro-organisations, such as the Railway Safety Regulator (RSR) have taken a strategic decision to decentralise to regions. This is done rightfully so, as regional functions are needed at regions for timely responsiveness. It is, however, critically important to amputate the uncertainty on whether the communications function should be decentralised or not. Although literature exists on centralised and decentralised communication, it does not respond to or inform entities that are challenged by uncertainty on whether the communication should be decentralised or not. The study, therefore, intended to highlight the importance of centralised communication as a prevailing model for decentralised organisations. The research study was cross-sectional and took on a mixed-method approach, which included both quantitative and qualitative methodologies. A survey questionnaire with employees, as well as qualitative in-depth interviews with management, were conducted. The researcher administered an online survey questionnaire to solicit all 140 employees of RSR across three regions and its head office with the aim of acquiring their perception of the importance of centralised communication. Online in-depth interviews were conducted with seven (7) senior management members of the organisation; this afforded the researcher an opportunity to engage the organisation's top structure employees and get a deeper understanding of the entity's challenges when it comes to the uncertainty on whether communication should be decentralised or not so that an appropriate highlight of the importance of centralised communication be presented at the end of the study. The deployment of these two research methodologies enhanced the validity and reliability of the study.

The results reveal that centralised communication is significant and beneficial as it ensures uniformity and seamless messages, which contribute to transparency and promotes a good image of an organisation. Since complex macro-organisations are facing the challenge of the uncertainties on whether to adopt a centralised communication approach or not, the study recommends that the management of these entities should endorse the centralised communication approach because it will help build their reputation, and it is a strategic mechanism of responsiveness.

Keywords:

Centralised communication, decentralised organisations, Integrated communication, corporate image, Railway Safety Regulator.

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CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

The basis for this study was to explore the significance of centralised communication in a strategically decentralised organisation. Organisations either centralise or decentralise their functions as part of adapting to the external environment. Whether the organisation's strategic direction is centralised or decentralised, communication remains significant because it is the glue that holds the organisational functions together (Angelopulo & Baker, 2006). Organisations change strategies from time to time; this is done to achieve strategic goals set by management to move the organisation forward. Change is often propelled by external forces that cannot be ignored, such as the Covid-19 pandemic, globalisation, and virtualisation. Often, however, a change of strategy comes with implications on how the organisation's machinery functions. Sukoco, Supriharyanti, Susanto, Nasution, and Daryanto (2022) explain organisational transformation as a process that involves changes in core features such as goals, authority relationships and organisational structure.

The Railway Safety Regulator (RSR) is a state entity which has taken a strategic decision to decentralise to regions to best service the rail sector across the country. In particular, the RSR's technical functions, such as the rail safety inspectorate, have been decentralised. This is done rightfully so, as these are the functions that are needed at regions to respond timely to any rail occurrences. It is, however, critically important to eliminate the uncertainty on whether the communications function should be decentralised or not. Although literature exists on centralised and decentralised communication, it does not respond to or inform entities that are challenged by uncertainty on whether communication should be decentralised or not. The study, therefore, intends to highlight the importance of centralised communication as a succeeding model for decentralised organisations.

As a regulatory body, it is sensible for the RSR to expand its footprint to regions; however, functions such as communications are more effective when centralised at the head office, even though communications personnel may be present at regions. This will ensure uniform messaging to both external stakeholders and employees internally (Yehezkeally & Schwartz, 2020). The last thing an organisation needs is to have conflicting messages out in the media, coming from different regions, aimed to address the same matter. An example of this will be two regions responding to the same rail occurrence, however, giving varying statements. Not only will this confuse the intended target market, but it will also dent the reputation of the organisation. Decentralised communication can also create unhealthy competition amongst the regional communication departments, particularly on territorial issues. This, in most cases, occurs when Region A perceives that Region B is exhausting communication efforts in a space that is not theirs. This may result in duplication of communication activities and fruitless and wasteful expenditure Eunson (2016).

The research study considered existing literature on various aspects of communication, with emphasis on centralised versus decentralised communication. The study was cross-sectional and took on a mixed-method approach, which includes both quantitative methodologies comprising survey questionnaires with employees as well as in-depth interviews with management. The researcher employed the use of an online survey questionnaire to solicit an employee's perception of the importance of centralised communication from employees, even those in the regions. Personal in-depth interviews were conducted virtually with senior management of the organisation. This afforded the researcher an opportunity to engage the organisation's top structure employees and get a deeper understanding of the entity's challenges when it comes to the uncertainty on whether the communication should be decentralised or not so that an appropriate highlight of the importance of centralised communication is presented at the end of the study. The deployment of these two research methodologies ensured that the study was well-balanced and included the voices of all employee levels within the RSR. This further enhanced the validity and reliability of the study.

The RSR was established in terms of the National Railway Safety Regulator Act No 16 of 2002 ("the Act") as amended to establish a national regulatory framework for South Africa and to monitor and enforce compliance in the rail sector.

The primary legislative mandate of the RSR is to oversee and enforce safety performance by all railway operators in South Africa, including those of neighbouring States whose rail operations enter South Africa. In terms of the Act, all operators are primarily responsible and accountable for ensuring the safety of their railway operations. In executing its legislative mandate, the RSR performs the following functions and duties:

- Issues and manages safety permits, conducts inspections, audits and investigates railway occurrences.
- Develops regulations, safety standards and related documents which form the basis of the regulatory regime.
- Issues notices of non-conformance and non-compliance as well as imposing penalties for non-compliance with the Act and safety standards adopted by the Board of Directors of the RSR.
- Safety and security are interconnected; the RSR plays a primary role in safe railway operations and a supporting role in occupational health and safety and security.
- The RSR must cooperate with relevant organs of state to improve safety performance and oversight functions.
- The RSR plays a leading role in the harmonisation of the railway safety regime of South Africa with those of the Southern African Development Community Railways (SADC).

The 2020/21 Annual Report of the RSR highlights that the organisation has six key departments, and one of them is the Operations Department. One of the units under Operations is the Research Unit, which is responsible for conducting research on rail pertinent issues. The researcher accentuates that even though the RSR has a dedicated research unit, the kind of research projects the organisation embarks on are industry-related. These include but are not limited to, the identification of psychological and physiological risk factors associated with train drivers and driver assistants who have struck people. There is little research done on communication issues in this entity. As a result, doubts exist in terms of which approach to use when it comes to communication during an organisational change, like decentralisation.

It, therefore, becomes overly important to conduct research of this calibre, with a focus specifically on communication, which RSR has never conducted before. This study aims to resolve the issues of uncertainties in adopting centralised communication in a decentralised organisation; the cause of this uncertainty is a lack of research on this topic within the organisation. The organisation is not knowledgeable about the desired communication method, and the study bridges that gap by creating awareness of which communication tactic to utilise within a strategically decentralised administration.

1.2 PROBLEM STATEMENT

The Railway Safety Regulator (RSR) is a state entity which has taken a strategic decision to decentralise to regions to best service the rail sector across the country. Inherently attached to the process of decentralisation at the RSR is an unnerving but necessary task of deciding which functions remain at the head office and which ones decentralise. The entity is challenged by uncertainty on whether communication should be decentralised or not. Departments such as Finance and Human Resources will remain centralised as they are the heartbeat of the organisation. Likewise, if not managed carefully, communication may result in a loss of credibility for the RSR. The study, therefore, intends to highlight the importance of centralised communication to the Railway Safety Regulator's management and employees through a mixed-method approach methodology. The study was conducted during the 2022/2023 financial year.

The successes of decentralised organisations are well documented internationally and domestically. Ozuem, Howell and Lancaster (2022) explored the relationship between integrated marketing communications and decentralised organisational structure in the U.K. and found that IMC works better in a decentralised organisation. Holtzhausen (2022) described the effects of a decentralised organisational structure on a formal internal communication function in a South African organisation and found that decentralisation has a negative effect on internal communication. When it comes to strategic organisational communication research, the focus on the significance of centralised communication in a decentralised entity is inadequate.

Mmutle (2021) focuses on social corporate responsibility as a communication strategy for reputation management; Pratono (2022) looks at the strategic innovation under information technological turbulence: the role of organisational resilience in competitive advantage; topic (2023) looks ta virtual communication and organisational reputation. The current body of knowledge is silent on centralised communication as a strategic approach in decentralised organisations specifically in South Africa. Therefore, the topic remains underexplored and the question of how can centralised communication help decentralised organisations with achieving their strategic goals remains unanswered. To resolve this challenge, the study will explore how the centralised communication strategy is applicable to a decentralised corporation.

1.3 OBJECTIVES OF THE STUDY

- To describe the significance of centralised communication in a decentralising organisation.
- To establish the benefits of centralised communication.
- To establish how centralised communication will deliver the RSR's strategic direction.

1.4 RESEARCH QUESTIONS

- What is the significance of centralised communication in a decentralising organisation?
- What are the benefits of centralised communication?
- How will centralised communication deliver the RSR's strategic direction?

1.5 SIGNIFICANCE OF THE STUDY

This study has both practical and theoretical significance. Practically, RSR is facing the challenge of uncertainties on whether to adopt a centralised communication approach or not, the study intends to highlight the importance of centralised communication to the Railway Safety Regulator's management and employees and create awareness for the management of the RSR to endorse the centralised communication approach because it builds reputations, brings about legitimacy and its strategically responsive.

Theoretically, the study bridges the gap in the current body of knowledge. The South African strategic organisational communication is silent on a communication model that decentralised organisations should adopt. Therefore, entities today, re operating with uncertainties of whether to centralise communication or not when they decentralised their functions to regions. This study intends to remedy those uncertainties, break the silence, and add insight to the current body of knowledge.

1.6 THEORETICAL FRAMEWORK

1.6.1 Systems theory

The systems theory was developed in the 1940s by biologist Ludwig von Bertalanffy. The theory describes how systems work, emphasising the interrelatedness and interdependence of components of a system (Karl Ludwig von Bertalanffy, 1941). Every system has causal boundaries, is influenced by its context, defined by its structure, function and role, and expressed through its relations with other systems. A system is "more than the sum of its parts" (Cutlip & Center, 2006). The systems theory has been criticised for being too abstract to be practical and does not specify any precise and specific relationships between the social systems and the organization. The study acknowledges the criticism; however, the argument is that the theory can be contextualised and made practical in any field. Hence the theory is used in this study as a practical guide of how the RSR is part of a macro system, and its head office and regions form part of a microsystem within which it operates. Therefore, the theory describes the context of this study and how RSR should function.

1.6.2 Network Theory

The Network Theory was developed by Bower in 1981. The theory states that patterns of communication exist within organisations that serve as a guideline to show who communicates with whom. As a result of communication, relationships form which establish the overall organisational networks (Littlejohn & Foss, 2011). Networks are social structures that are created by communication amongst individuals and groups within organisations. Networks are the lines of communication within an organisation.

The theory has been criticised for the idea that networks have replaced social structure and the other kinds of deep-rooted social relations characteristic of capitalist systems. The critique claim that if globalization theory often makes the claim for the 'hollowing out' of the state, so network theory has the effect of 'flattening out' society. Although this is a criticism, the 'flattening' approach is beneficial to the implementation of centralisation where a flat structure of communication is endorsed, the network theory, therefore, acts as a guide for centralised communication in a decentralised entity such as RSR. The theory, also, emphasises the issue of the connectedness of individuals through communication, meaning that stakeholders' sharing of ideas and communicating about issues and activities of the organisation should continue, although their organisation is decentralised. The theory also speaks of the control of information, which directly relates to the hierarchy of structure within an organisation and the flow of information (Littlejohn & Foss, 2011), therefore, the theory identifies networks and structure and the flow of communication that ought to exist in an organisation as to who is allowed to say what to whom within the organisation. The theory discusses both aspects of centralised and decentralised communication within an organisation, as it speaks of communication links as well as formal and personal networks that should exist.

1.7 LITERATURE REVIEW

1.7.1 The role of centralised communication in decentralised organisations

Van Riel (2005) suggests that organisations should combine all their communication disciplines under one corporate coordinating body consisting of the managers of the various communication departments. Tixier (2008), however, argues that corporate communication always requires a central department at the highest level. She contends that 'an integrated and centralised structure is generally perceived as the ideal way of generating synergy and consistency in terms of corporate image management'. Fourie (2007) states that a central and integrated communication department is crucial for creating synergy and consistency in communication and for optimising corporate image management in decentralised entities.

A central department is believed to strongly determine the success of corporate communication under all circumstances. White and Mazur (2016) argue that the issue of whether communication should be part of this central communication department in decentralised organisations is not addressed. The study, therefore, wishes to bridge that gap.

Previous studies, such as those conducted by Olims (2001) and Birkigt and Stadler (2004), looked at the importance of centralised communication in building a good image of the organisation. Floor (2005), Fil (2006), and Dozier and Grunig (2010) looked at the necessity of centralised communication for communication integration. Will, Probst, and Schmidt (2014) and Kammerer (2020) studied centralised communication as a key to building a brand commitment. The literature is silent when it comes to the necessity of centralised communication in a decentralised entity, specifically, a regulating institution like RSR. It is argued that if regulations are set and are supposed to be uniformly followed, then they should be uniformly communicated and uniformly monitored, investigated, and dealt with. That can be achieved through centralised communication, where one voice will present regulations, one voice will provide feedback on monitoring outcomes, and one voice will settle disputes about following regulations. For RSR's mandate of regulating railway safety, centralised communication is imperative, although the organisation operationally decentralises to other regions.

1.8 RESEARCH DESIGN AND PROPOSED METHOD

1.8.1 Research design

This study used the mixed methods research design. Mixed methods design is known as the design in which the researcher collects and analyses data, integrates the findings, and draws conclusions using both qualitative and quantitative methods in one study (Creswell & Clark, 2011; Wallace et al., 2012; Creswell, 2014; Wagner et al., 2012). Priority can be given to either the qualitative method, the quantitative method or both (Johnson & Christian, 2017).

It involves the combination of data at one or more stages in the research process (Creswell, 2014; Castro et al. & kopek, 2010; Johnson & Christian, 2017). In mixed methods research design, data can be collected sequentially or concurrently (Creswell, 2014; Creswell & Clark, 2011). The researcher explored qualitatively and then verified the exploratory data descriptively with larger quantitative data (Creswell & Clark, 2011; Wallace et al., 2012; Castro et al., 2010). The mixed method design allowed qualitative data to be gathered and analysed in the first phase, and then its results were used to identify items for a questionnaire that was tested further quantitatively in the second phase (Castro et al., 2010; Given, 2012, p. 527). This approach permitted a follow-up on the first exploratory findings (Creswell & Clark, 2011).

1.8.2 Data collection techniques

The data collection techniques that were used were self-administered questionnaires for the survey. The second technique was the in-depth interview. These were held individually with seven RSR's key Senior Managers. Information derived from the survey and the interviews, respectively, formed the basis of the primary data. The researcher then looked at findings from previous research on the same subject as secondary data.

1.8.3 Data analysis method

To analyse quantitative data, the researcher used a statistical program which helps determine the mean, median and mode. The researcher in this study used univariate analysis since the qualities of one variable are analysed at a time (Walliman, 2011, p. 117); moreover, descriptive statistics in the form of tables and graphics were also used. Descriptive statistics are a "mathematical summarisation of data" (Given, 2008, p. 209). The researcher took the large amounts of data collected through questionnaires, then summarised and converted them mathematically into a few numbers that were easier to interpret and explain. These descriptive statistics were useful to this study as they enhanced legitimacy, such as transferability reliability, among others. This means that the results of this study can be repeated or retested.

To analyse qualitative data, interviews were transcribed. After transcribing, the researcher had to familiarise himself with the transcripts; this was achieved by reading them over and over. This enabled the researcher to know what kind of information is available and where it will be found. When the researcher is fully familiar with the data, themes were induced by organising data into main themes and sub-themes. Then, the researcher continued by coding data, "coding is an important step of forming typologies as it facilitates the organisation of copious data" (Walliman & Baiche, 2001, p. 262). This is where the researcher identified interesting features and stages and distinguished them with labels. Labels enabled data to be easily identified as the researcher knew what type of data was found where. Labels also helped the researcher organise his material in that similar topics were categorised. Then, the researcher moved on to the elaboration stage, where the researcher checked if the data had been categorised well. Also, the researcher closely examined themes and elaborated on them until no new information surfaced.

1.9 POPULATION AND SAMPLING METHODS

Target population refers to the entire class or group of units, objects, or subjects to which the researcher wants to generalise the findings (Cresswell, 2012). In this instance, the research target population included all the employees of the RSR. The RSR employs a total of 140 employees across three regions and its head office. These are a variety of employees, both in terms of demographics and psychographics. A considerable number of employees consisted of middle-aged and young black professionals who mostly have previously worked for the government. a unit of analysis is the main subject that is being analysed in a study (Alsharari, 2016, p. 588; Terre Blanche et al., 2006). Senior Managers as management have been identified as individuals to be interviewed. The survey targeted employees in the lower ranks to middle management as they are the ones who are in the implementation phase of what is communicated to stakeholders. Therefore, individuals were the units of analysis. The research study used the purposive non-probability sampling method. This sampling method was purposely chosen because the sample population was selected based on the researcher's knowledge of the participant's ability to add value to the study.

1.10 CONCEPTUALISATION OF KEY TERMS

Centralised communication: Centralised communication consists of a single large-scale communication system that is governed by a central party and assigns other stakeholder parties to join the communication process. Houston (2021) argues that centralised communication is a network in which one group member has access to more communication channels than any other and, therefore, tends to process more information than the peripheral group members. In this study centralised communication is when the communication of RSR is centrally managed by the head office and cascaded down to regions.

Decentralised organisations: According to (PeopleHum, 2021), decentralisation refers to a specific form of organisational structure where the top management delegates decision-making responsibilities and daily operations to middle and lower subordinates. The top management can thus concentrate on making major decisions with greater time abundance. Business units often feel the requirement of decentralisation to continue efficiency in their operation. In this study decentralised is when the RSR has various business units decentralised to regions to best serve the needs of rail operators.

1.11 STRUCTURE OF THE DISSERTATION

The study has the following chapters. **Chapter 1**, Introduction. This chapter introduces the study, containing the background, problem statement, objectives, brief literature, and an outline of the research methodology employed in this research. **Chapter 2**, The Literature and Theoretical Framework. This chapter discusses theories that explain centralised communication in a decentralised organisation. Also, the chapter presents what is in the current body of knowledge and what is missing when it comes to centralised communication in a decentralised macro organisations of today in South Africa. **Chapter 3**, Research Methodologies. This chapter presents in detail the methodologies adopted in this research. **Chapter 4** Presentation of Results. This chapter presents both qualitative and quantitative results of the study. **Chapter 5** Conclusion. This chapter presents this research's main findings and conclusions.

1.12 Summary

The research study aimed to magnify the significance of centralised communications in a decentralising organisation, particularly the RSR, in this context. The research was anchored on a systems theory, taking cognisance of the fact that the RSR does not exist in isolation. It is an open system that can be influenced by external and internal forces. The research design was a mixed method aimed at exploring and describing the topic at hand. The research method was cross-sectional. The following chapter presents the literature review.

CHAPTER 2

Literature and Theoretical Framework

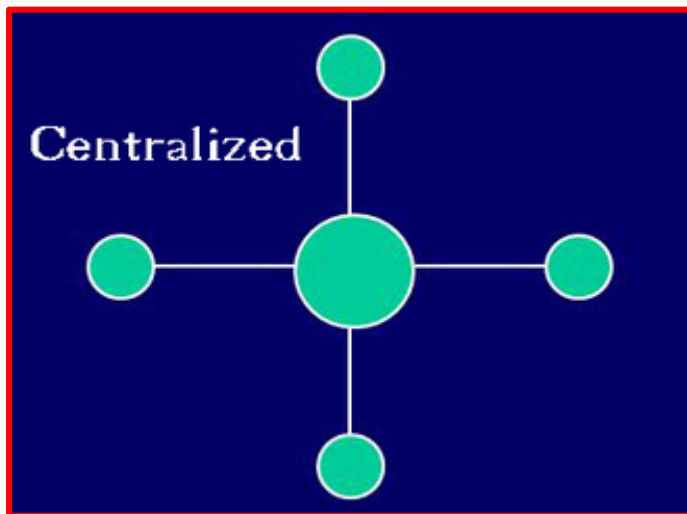
2.1 Introduction

The previous chapter outlined that as organisations grow, gain a competitive advantage and the demand for their services and goods increases, decentralising to different parts of the regions they operate in becomes a necessity. However, Eunson (2016) argues that within a decentralised organisation, functions such as communications are more effective when centralised at the head office, even though communications personnel may be present at regions. This ensures uniform messaging to both external stakeholders and employees internally. The Railway Safety Regulator (RSR) endeavours to always provide a quality regulatory service to rail operators. This was reaffirmed by the decision that the RSR's management in 2018 took to decentralise its organisational structure. The decision was triggered by the organisation's vision to expand its footprint across the country. The study intends to describe the entity's challenges of whether communication should be decentralised or not. In this chapter, the researcher reviews existing literature on centralised communications and decentralised organisations and then juxtaposes it against the RSR's context. This is segmented into four key concepts: centralised communications, decentralised organisation, the theoretical framework that grounds the study is discussed as follows: network theory and systems theory.

2.2 Centralised Communication

Centralised communication consists of a single large-scale communication system that is governed by a central party and assigns other stakeholder parties to join the communication process, as per Figure 2.1. The central party has the power to arrange the required macro-level changes for networking, such as providing the necessary infrastructure, supporting I.T. policy and law and so forth (Fourie, 2017). Houston (2021) argues that centralised communication is a network in which one group member has access to more communication channels than any other and, therefore, tends to process more information than the peripheral group members.

Figure 2.1: **Centralised communication**



Source: Researchers own compilation

According to Brass (2002), Centralised communication has served its purpose for many years, and at this present state, it has served as a useful tool within organisations when dealing with crises and effective decision-making. It provides organisations with a form of structure and contributes towards productivity within organisations.

Samson (2017) alludes that centralised communication is effective for large teams as it limits the number of people involved in decision-making. This subsequently results in faster decision-making, which is good for any organisation. For RSR, this means that although the organisation has a regional footprint across the country, the communications team sitting at the head office can solicit information from the regions and put together an operational plan. Once finalised and approved, the plan can, therefore, be cascaded down to regions and remain monitored at head office. Kakde (2009) conducted a study on the importance of centralised communication in government hospitals; Kakde (2009) explored a ruling that was made by the Supreme Court of India in 1996 to enhance the importance of centralised communication on the patients' right to life, amongst other issues, the court ruled that seriously injured patients cannot be denied admission on ground of non-availability of beds at government hospitals and accentuated that the state was bound to preserve human life at all costs.

In addressing this challenge, the court issued a couple of directions to the Indian government, and one of them was establishing a centralised communication system so that patients can be sent immediately to the hospital where beds are available in respect of the treatment which is required.

According to Langford (2019), centralised communication was a solution to an outdated irrigation system. After organising an audit on the initial irrigation system, it turned out that 25% of each water official's time was spent talking to the irrigators. Even though this established good relations between the Water Commission and the irrigators, it was also unnecessarily expensive for the commission. After introducing a centralised communication approach in the system, water orders could now be made over the centralised communication system. Improved information on the performance of the water distribution system and the productivity of the workforce was reportedly a major benefit gained from the introduction of centralised communication.

For an organisation such as the RSR, centralised communication is imperative to ensure that operators across the regions get the same message, especially when new regulatory tools are being introduced and implemented in the rail sector. Miles and Snow (2018) argue that to fully understand how the degree of centralised communication may influence performance, it is important to explore the combined effect of centralised communication and organisational strategy. The organisational strategy is therefore conceptualised in four “ideal types” of organisations: Prospectors, Defenders, Analysers, and Reactors. A detailed account of these types is mentioned below:

- Prospectors are organisations that continually search for market opportunities and regularly experiment with potential responses to emerging environmental trends. These organisations often pioneer the development of new products and services. Centralised communication is imperative for these organisations as it allows them to gather centralised information to strategically respond to external market trends instead of having to deal with diverse data to respond to (Miles & Snow, 2018).
- Defenders are organisations that take a conservative view of new product development. They typically devote primary attention to improving the efficiency of their existing operations, competing on price and quality rather than on new

services or markets. Centralised communication will help such organisations to make quick decisions on improving their goods and services according to the needs and development of the Market, unlike decentralised communication, which might affect the time lag in decision-making and make them implement changes late when they are not relevant anymore (Miles & Snow, 2018).

- Reactors are organisations in which top managers lack a consistent and stable strategy for responding to perceived change and uncertainty in their organisational environments. A reactor seldom makes adjustments of any sort until forced to do so by environmental pressures. Centralised communication allows these organisations to collect uniform information on environmental expectations and pressures so that when the time comes to respond to these pressures, the organisation is ready to do so (Miles & Snow, 2018).

In line with these types of organisations, according to Miles and Snow (2018), the researcher asserts that the RSR is a prospector. This is affirmed by the RSR's 2018/2023 Strategic Planning Document, where the Regulator introduced the Railway Management Maturity Model (RM3), which was benchmarked from the United Kingdom (U.K.). The RM3 was aimed at strengthening the regulatory regime, thus having a significant impact on the reduction of occurrences. The aim was to respond to market trends. For a prospector organisation such as the RSR, centralised communication is imperative; organisations that seek to respond to environmental trends need to first identify all different needs expressed by the Market, integrate these needs into one uniform need that they can respond to and keep abreast with market trends.

Bal and Berg (2017) conducted a study on the healthcare service and argued that healthcare falls under prospector organisations and that centralised communication is important for them. General Practitioners (GPs), for example, act as the gatekeepers between primary and secondary healthcare. GPs, moreover, need to be in mutual communication with care providers at the secondary care level, especially medical specialists. As family doctors, G.P.s need to know what happens to their patients when they go to the hospital, especially when they must continue a therapeutic plan after hospital discharge. In addition, secondary care providers need access to the hospitalised patients' medical records, such as medication data, from primary care to

provide quality care. The study argues that if central communication is essential for prospector organisations such as health care, it is also essential for RSR's functionality as it falls under prospector organisations. RSR provides safety permits to train operators, monitors adherence to rail regulations and investigates and enforces these regulations. Since all these are done in different regions, it is important that a centralised system of communication is used to ensure that all regions receive one regulation, one application process and one monitoring process.

The South African State is one of the entities that employs the use of centralised communications despite its multidisciplinary departments across the three spheres of government. Since the outbreak of the COVID-19 pandemic, all formal communications relating to the same have been centralised to the Government Communication and Information Systems (GCIS). These range from various Ministers communicating updates from their respective departments to safety and precautionary messages aimed at the public. Ecker-Ehrhardt (2018) defines centralisation of government communication as “the development of central administrative capacities tasked with regularly communicating with non-governmental audiences.” In the South African context, GCIS is the department that is tasked with regularly communicating with non-governmental audiences: the public. The RSR is no different; as far as central communication is concerned, the Media and Communications department can be located in the head office and remain the central source of information.

Mattias Le Cren (2016) asserts centralised communications can be used to avert confusion that can be caused by multiple communication channels. “With some information shared through instant messaging, while other files are sent via email, and yet further conversations completed with texts, it is easy to see how vital communications can get lost in transition,” says Le Cren (2016). Below is a discussion of the benefits of the use of centralised communications:

2.2.1 Increased Transparency

According to Le Cren (2016), a problem often experienced during projects is that the right-hand does not know what the left hand is doing. If there is any communication confusion, it means that the team is unclear as to the exact situation at any point in time.

Centralised communication removes that barrier. Centralised communication offers an opportunity to have access to all communication, plus all relevant files saved in one easy-to-access area. This advances transparency and ensures everyone is always on the same page. In the RSR context, information can be communicated to rail operators through the National Information and Monitoring System (NIMS). This is an online platform that ensures that operators have a central place where they can derive information pertaining to the Railway Safety Regulator.

2.2.2 Define Your Own Audience

Le Cren (2016) further identifies defining your own audience as a second benefit of using centralised communications. "With centralised communication, it is possible to communicate to the whole company, to a specific team, or a single person", says Le Cren, who continues to say depending on the task or the project, you can create custom audiences to pass specific information to. Only those who need information will receive it. However, you still have the option to communicate with anyone or everyone who is accessible or participating in any supporting role. This can fit well with the RSR's style of communication, in line with its Stakeholder Engagement Plan. According to the plan, which is centred on the Typology Model, stakeholders are categorised according to three attributes: Legitimacy, Power and Urgency. In this regard, the RSR can communicate with each stakeholder, particularly external ones, based on their attributes without conflating information.

2.2.3 Ease of Sharing Documentation

The third benefit is the ability to share documentation with ease. When a user shares a document via centralised communication systems, it remains on the system. If a newer version is added, both versions remain on the system for referencing and comparison if required. It becomes not only easier to share documentation but also to access the correct file for each task. It also means that everyone has the most up-to-date copies of all communications. With regards to the RSR, the intranet is the perfect tool that can be used to store and access information with ease. Each employee can access the intranet with their credentials and either upload or download information.

This intranet is managed by the communications department, which the study argues should remain centralised so that stakeholders access uniform messages on the intranet.

2.2.4 Improved Time Management

As Le Cren (2016) correctly points out, everybody's busy these days; too busy to waste time chasing emails, tracking down files, returning calls, and arranging meetings – just to ensure that the communication network is open and flowing. With a centralised system, those days are in the past. Everything can be stored on the intranet and can be accessed remotely by staff members. For external stakeholders, the National Information Management System (NIMS) is also available for all the required documents. Not only does this ensure that stakeholders access accurate information, but it also saves time, which can be attributed to other responsibilities.

It can be argued that central communication is an approach that permeates across sectors, and success is certain if this approach is employed. The researcher is adamant that for the RSR to constantly communicate with a uniform voice, the centralisation of the communication function is of paramount importance. However, few studies in South Africa address the issue of the railway industry adopting centralised communication. Studies in the railway field in South Africa focus on safety (Profillids, 2006; Givon, 2009; Silver, 2007); management (Patchl, 2002; Lomax, 2009; Pombo, 2007;); control systems (Gark, 2021; Bonnet, 2005; Kroon, 2007) and development (Pels, 2008; Reitveld, 2008; Bruinsma, 2009). Literature is silent on communication issues in the field of railways; the study intends to bridge that gap.

Since centralisation refers to the process in which activities involving planning and decision-making within an organisation are concentrated to a specific leader or location, in a centralised organisation, the decision-making powers are retained in the head office, and all other offices receive direction from the main office. The executives and specialists who make critical decisions are based in the head office. However, according to the Corporate Finance Institute (2020), centralised communication has disadvantages as well, these are discussed below:

Bureaucratic leadership

Centralised management resembles a dictatorial form of leadership where employees are only expected to deliver results according to what the top executives assign them. Employees are unable to contribute to the decision-making process of the organisation, and they are merely implementers of decisions made at a higher level. When the employees face difficulties in implementing some of the decisions, the executives will not understand because they are only decision-makers and not implementers of the decisions. The result of such actions is a decline in performance because the employees lack the motivation to implement decisions taken by top-level managers without the input of lower-level employees.

Delays in work

Centralisation results in delays in work as records are sent to and from the head office. Employees rely on the information communicated to them from the top, and there will be a loss in man-hours if there are delays in relaying the records. This means that the employees will be less productive if they need to wait long periods to get guidance on their next projects.

Lack of employee loyalty

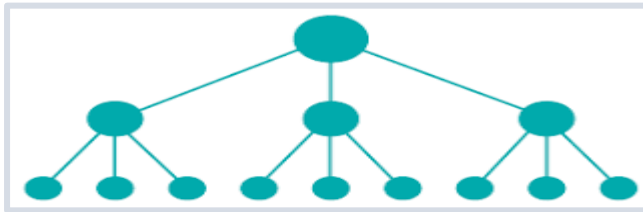
Employees become loyal to an organisation when they are allowed personal initiative in the work they do. They can introduce their creativity and suggest ways of performing certain tasks. However, in centralisation, there is no initiative in work because employees perform tasks conceptualised by top executives. This limits their creativity and loyalty to the organisation due to the rigidity of the work.

2.3 Decentralised Organisations

According to (PeopleHum, 2021), decentralisation refers to a specific form of organisational structure where the top management delegates decision-making responsibilities and daily operations to middle and lower subordinates, as shown in Figure 2.2. The top management can thus concentrate on making major decisions with greater time abundance.

Business units often feel the requirement of decentralisation to continue efficiency in their operation. The RSR is no different; various business units see the need to be decentralised to best serve the needs of rail operators.

Figure 2.2: **Decentralised organisation**



Source: Researchers own compilation

Taloo (2018) opines that decentralisation is the dispersal of power to make decisions amongst the officers and administrative officers at the subordinate level. It is therefore argued that a decentralised organisation is most effective in productivity and service delivery as decision-making takes place autonomously and, therefore, does not depend on a particular individual. Sutherland and Canwell (2008) attest to the effectiveness of decentralisation. They conducted a study on Tesco, a British multinational grocery and general merchandise supermarket, on what structure they use and how they have a decentralised structure. The chain of stores has a store manager at each outlet, and even though they all report to a regional manager, they are responsible for making decisions at the store level as they understand the local Market more than anyone else. Robbins (2021) conducted a study on what makes banks succeed and found that due to this decentralised approach, the banks in South Africa are the third largest banks when it comes to asset size. This demonstrates explicitly that decentralised organisations have the capability to prosper. To give more meaning to the term decentralisation, (PeopleHum, 2021) defines the four main forms of decentralisation as political, administrative, fiscal, and market decentralisation, discussed below.

Political decentralisation

Political decentralisation aims to give citizens or their elected representatives more power in public decision-making. Its goal is to introduce more participatory forms of governance by giving citizens, or their representatives, more influence in the formulation and implementation of health policies and plans. Political decentralisation often requires constitutional law reform as well as changes to other laws.

Feinstein (2015) conducted a study on South Africa as one of the countries where the national government decentralised government responsibilities to provincial and regional spheres of government. The following were uncovered by the study as advantages and disadvantages of political decentralisation:

2.3.1 Advantages of political decentralisation

- Greater democratisation, where the government is closer and more accountable to the people it serves.
- More choice for voters as they can be more easily consulted and heard.
- More relevant information about the needs of a region rather than the whole country, thus resulting in greater efficiency.
- Improved checks and balances through greater involvement of the population and the ability to compare services with neighbouring regions.
- More innovation enhances development.
- Lower transactions costs
- Greater efficiency

2.3.2 Disadvantages of political decentralisation

- Expanded opportunities for corruption, patronage and “jobs for pals”.
- Greater inefficiency due to limited technical capacity.
- Increased costs due to a loss of economies of scale, including in procurement.
- Undermining of national macroeconomics stability
- Over-bureaucratisation

Feinstein (2015) concludes that every experience of decentralisation will be unique and result in different advantages and disadvantages.

Administrative decentralisation

Administrative decentralisation involves redistributing authority, responsibility, and financial resources for providing public services from the national government to local units of government agencies, sub-national government or semi-autonomous public authorities or corporations.

There are three major forms of administrative decentralisation: deconcentrating, delegation, and devolution. Each form raises different legal issues.

Deconcentrating involves redistributing decision-making authority and financial and management responsibilities among different levels of a national government. For example, it may involve shifting responsibilities from government officials working in the head office of a health ministry to ministry staff working in regions, provinces or districts. Deconcentrating does not usually involve any changes to existing laws. However, in some countries, changes to who may exercise legal power have to follow a specific legal procedure.

Nankyung (2011) indicates that in Indonesia, deconcentrating has long been chosen as an important policy instrument to manage governmental affairs in local areas. The policy was once employed dominantly when the regime of Law No. 5/1974 was implemented by emphasising uniformity, integrity, hierarchy, and dual roles for local government leaders. It has brought so many impacts, especially related to the local capacity and initiative to decide the best interest of the local community. The main problem was not the regulation or proportion between decentralisation and deconcentrating, but the practices employed by the central government to distribute the functions and tasks to local government were highly deconcentrated. One of the main factors was because of the political foundations of the New Order Regime in order to maintain and control all local governments in uniformity.

Delegation involves a national government transferring responsibility for decision-making and administration of public functions to semi-autonomous public sector organisations such as hospital corporations.

These organisations usually have separate legal statuses and have a great deal of discretion and autonomy around management decision-making. Delegation usually involves extensive legal changes, including passing laws to establish the new public sector organisations and specify their duties, powers, accountabilities and relationship to the national government. It also may involve introducing new regulatory controls. This is because independent decision-making may generate a need for state regulation to ensure that decisions made by autonomous bodies are made in line with the government's broader health policy objectives.

Devolution is where national governments devolve functions to sub-national governments. In a devolved system, sub-national governments often have clear and legally recognised geographical boundaries over which they exercise authority and within which they perform these functions. Devolution may involve constitutional law reform to formalise the devolution of powers, roles, and accountabilities.

Market decentralisation

Market decentralisation involves shifting responsibility for health functions from the public to the private sector, including businesses and non-government organisations. Market decentralisation may involve constitutional law reform as well as the passage of new laws to:

- Allow the private sector to perform functions that had previously been performed by the government.
- To regulate the performance of those functions.

Of the four forms of decentralisation, the RSR practices the Delegation form of decentralisation. Even though the RSR regional offices are independent in the execution of their mandate, they are still required to report to the head office. While operations such as occurrence investigations and train inspections are carried out at regional offices, each region is allocated its own budget, which is, however, managed at the Head Office level. Johnson et al. (2008) outlines that decentralisation allows and encourages rapid managerial response to local or product-specific problems. In the RSR's context, this essentially means that the regional offices would be able to respond rapidly to enquiries or challenges launched by respective regional stakeholders without escalating to the Head Office. Over the years, the model has proven to be a success, as regional offices understand regional challenges more than the head office. To emphasise this good practice, the RSR periodically hosts stakeholder engagements at its three regions, and while these have head office personnel attending them, they are normally facilitated by regional staff members to ensure consistency.

According to Park (2016), research that was conducted in 2012 by the Economic Intelligence Unit of an international audit firm called Deloitte revealed that by 2020, the impact of new technology in the workplace will force a new era of decentralisation.

The research foretold a shift towards a more decentralised business model with responsibility for business decision-making moving from centralised management to divisional leaders. In 2016, Park indicated that Deloitte conducted a Third-Party Governance and Risk Management (TPGRM) global survey that further suggested that most global organisations (75.5% of respondents) are increasingly moving towards a more decentralised structure with increasing degrees of autonomy across their various operating units. RSR has followed this global trend of decentralisation and autonomy of the regions. To this point, the regional inspectorate teams have their respective operational plans, which feed into the organisation's annual performance plan. These operational plans were developed to respond to the unique demands of each region. To further accentuate the importance of decentralisation, The researcher looks at the advantages of decentralisation, as described by (PeopleHum, 2021) in the following section.

(i) Quick decision-making: Decision-making becomes quicker and better at the same time by pushing down the power to make a decision to the operational level, which is nearest to the situation. In this regard, the RSR's Regional Technical Managers are able to make decisions quicker, as they understand their regional stakeholders more than the national executive committee at the head office.

(ii) Executive development: It encourages self-sufficiency and confidence amongst subordinates, as and when the authority is delegated to lower levels, they must rely on their judgement. By such delegation, the regional officials are constantly challenged, and they must find solutions for the problems they face in the day-to-day operations. This ensures that regional employees of the RSR rise to the occasion whenever they are faced with challenges. They grow and develop doing that.

(iii) Development of managerial skills: In a decentralised structure, subordinates get an opportunity to prove their abilities, and management also gets a pool of competent manpower, which can be placed in more challenging and responsibility-prone situations by way of promotions. The RSR has "excellence" as part of its core values. In line with this value, continuous skills development and training are always at the heart of employee relations. In this regard, regional colleagues are always empowered and upskilled to measure up to what is expected of them.

(iv) Relieves top management: It reduces the extent of direct supervision over subordinates by the supervisor, as they are given the liberty to decide and act accordingly, within limits set by the superior. As a result, the top management gets more time to make policy decisions. With the decentralisation of functions to the regions, the national EXCO members have more time to focus on policy and governance matters and not micro-manage regional staff. This allows the regional colleagues a space to grow.

(v) Facilitates growth: It confers greater independence to the lower management levels, along with the heads of departments, divisions, units, etc., as it lets them perform functions in the way that is most appropriate for their department or division. It propagates a sense of competition among various departments to outperform others. This ultimately results in an increased production level and generates more returns for the enterprise. As per the organisational culture of acknowledging performance, the decentralisation ensures that regions are afforded a fair opportunity to compete against each other. This has proven to bear results, as the organisation (RSR) achieved a 100% performance rate and a clean audit in the 2020/21 Financial Year.

(vi) Better control: The performance of each level can be measured, and the departments are also held accountable separately for their results. The extent to which organisation goals are achieved and the contribution of each department is determined. As mentioned in section (v), the regions are afforded an opportunity to compete against each other and are equally held accountable for their performance. In instances where there are challenges, each region is evaluated based on its own merits.

2.4 The role of centralised communication in decentralised organisations

Van Riel (2005) suggests that organisations should combine all their communication disciplines under one corporate coordinating body consisting of the managers of the various communication departments. Tixier (2008) argues that corporate communication always requires a central department at the highest level. She contends that 'an integrated and centralised structure is generally perceived as the ideal way of generating synergy and consistency in terms of corporate image management'.

Fourie (2007) states that a central and integrated communication department is crucial for creating synergy and consistency in communication and for optimising corporate image management in decentralised entities. In fact, a central department is believed to strongly determine the success of corporate communication under all circumstances. However, the issue of whether communication should be part of this central communication department in railway organisations is not addressed.

Previous studies, such as those conducted by Olims (2001) and Birkigt and Stadler (2004), looked at the importance of centralised communication in building a good image of the organisation. Floor (2005), Fil (2006), and Dozier and Grunig (2010) looked at the necessity of centralised communication for communication integration. Will, Probst and Schmidt (2014) and Kammerer (2020) studied centralised communication as a key to building a brand commitment. The literature is quiet when it comes to the necessity of centralised communication in a regulating institution like RSR.

It is argued that if regulations are set and are supposed to be uniformly followed, then they should be uniformly communicated and uniformly monitored, investigated and dealt with. That can be achieved through centralised communication, where one voice will present regulations, one voice will provide feedback on monitoring outcomes, and one voice will settle disputes pertaining to following regulations. For RSR's mandate of regulating railway safety, centralised communication is imperative, although the organisation operationally decentralises to other regions.

2.5 The disadvantages of decentralised communication in decentralised entities

- **Lack of market orientation**

Market orientation is regarded as one of the effective perspectives organisations use within competitive economies. This is an approach whereby organisational key stakeholder needs are a priority in all activities taking place within the organisation. The interactive and two-way symmetrical nature of communication enables organisations to be market-orientated and maintain that state. Two-way symmetrical communication grants organisations an opportunity to learn about their clients, stakeholders, or audience's needs, enabling them to align their solutions and processes in response to stakeholder needs.

This process is better explained by Slater and Narver (2000), where Market-oriented businesses are regarded as those that gather customer intelligence on current and future needs and about competitors' capabilities and strategies, share that intelligence throughout the organisation and take coordinated action to create superior customer value. Decentralised organisations, according to Jansens (2012), lack market orientation as different sub-divisions respond to different sub-groups of individuals; this results in market segmentation instead of market orientation. The Market ends up perceiving the organisation as not treating them equally.

- **Lack of integration**

When the communication of RSR is decentralised, every region will have its message that is sent out to its stakeholders; that would mean that uniformity in messaging will be lost, as every region will be communicating a different message to its environment of operation. One region would be saying this, the other region saying that stakeholders might end up confused and lacking trust in the organisation due to ununified messaging.

- **Lack of marketing of the corporate mission**

An organisation's mission benefits only if it is incorporated into every communication within the organisation. The organisation's involvement in philanthropic and sponsorship activities that reflect the mission of the organisation enables a strong stakeholder commitment. When stakeholders trust who the organisation is, they are likely to trust their brand and the messages that accompany those brands. When communication is decentralised, according to Smith (2019), organisations are likely to market their services instead of the mission, while the key is to market the mission that will attract stakeholders to brand loyalty.

2.6 Theoretical Framework

2.6.1 Network Theory

The Network Theory was developed by Bower in 1981. The theory states that patterns of communication exist within organisations that serve as a guideline of who ought to communicate with whom. As a result of communication, relationships form which establish the overall organisational networks (Littlejohn & Foss, 2011).

Networks are social structures that are created by communication amongst individuals and groups within organisations. The theory has been criticised for the idea that networks have replaced social structure and the other kinds of deep-rooted social relations characteristic of capitalist systems. The critique claim that if globalization theory often makes the claim for the 'hollowing out' of the state, so network theory has the effect of 'flattening out' society. Although this is a criticism, the 'flattening' approach is beneficial to the implementation of centralization.

Networks are the lines of communication within an organisation. There are five types of networks, namely: formal networks, emergent networks, personal networks, group networks and organisational networks (Littlejohn & Foss, 2011). Formal networks are prescribed by organisational rules and form part of the structure of an organisation. Emergent networks are informal channels that are formed by regular, daily contact among members (Littlejohn & Foss, 2011).

Personal networks refer to individuals having a connection with others. Group networks occur when certain members communicate more frequently with others, which ultimately results in organisational networks, whereby a variety of smaller groups are formed (Littlejohn & Foss, 2011). The main concept of the Network theory is surrounded by connectedness, as presented in Figure 2.3. Connectedness looks at the idea that there are relatively stable pathways of communication among individuals who communicate with one another and are linked together into groups that are, in turn, linked together into an overall network (Littlejohn & Foss, 2011).

Figure 2.3: **Network theory**



Source: Researchers own compilation

The basic unit of an organisation is the link between two individuals. Links in organisations can be direct or indirect (Littlejohn & Foss, 2011). The links may overlap in functions and could pertain to authoritative or friendship links. Links can also be characterised by several qualities, such as size, which refers to the number of people involved. Connectedness refers to the degree of the ties between members and centrality, which refers to the degree to which individuals and groups are connected (Littlejohn & Foss, 2011). Networks function in various ways within an organisation; namely, networks control information flow, networks bring people with common interests together, networks build common interpretations, networks enhance social influence, and networks allow for an exchange of resources (Littlejohn & Foss, 2011).

The Network theory acts as a guide for decentralised entities such as RSR as it speaks of the connectedness of individuals, meaning that stakeholders' sharing of ideas and communicating about issues and activities of the organisation should continue, although their organisation is decentralised. The theory speaks of the control of information, which directly relates to the hierarchy of structure within an organisation and the flow of information (Littlejohn & Foss, 2011). Therefore, the theory identifies networks and structure and the flow of communication that ought to exist in an organisation as to who is allowed to say what to whom within the organisation. The theory discusses both aspects of centralised and decentralised communication within an organisation. It emphasises connectedness; for this study, it means that decentralised offices should be connected by communication.

The theory also emphasises the issues of structures, that there must be a structure of communication; for this study, that structure is centralised communication. The Network Theory has been used in studies mostly to understand networks that should be implemented in organisations for effective communication; Motloutsi (2019) used the theory contextualise networks that should be fostered by local government in public participation activities; Nnachi (2020) use the network theory to explain how air pollution campaigns can be communicated while Sokana (2023) use the theory to contemplate how insurance companies can achieve integrated communication. The study wishes to use the theory differently by using it as a guide to how decentralised organisations can manage centralised communication.

2.6.2 Systems Theory

The systems theory was developed in the 1940s by biologist Ludwig von Bertalanffy. Cutlip and Center (2006) define a system as a set of interacting units that endures through time within an established boundary by responding and adjusting to change pressures from the environment to achieve and maintain goal states. The systems theory has been criticised for being too abstract to be practical and does not specify any precise and specific relationships between the social systems and the organization. The study acknowledges the criticism; however, the argument is that the theory can be contextualized and made practical in any field. Hence the theory is used in this study as a practical guide of how the RSR is part of a macro system, and its head office and regions form part of a microsystem within which it operates. Therefore, the theory describes the context of this study and how RSR should function.

Almaney (2016) defines the term "system" as any set of interrelated elements that form a unified or complex whole. In this sense, the systems concept applies practically to every phenomenon, whether biological, physical, or social. The molecule, for instance, may be considered a system of atoms. The human body is an organised whole consisting, among other things, of arms, legs, a skeleton, a nervous system, and a circulatory system. An automobile, a business firm, a city, a factory, or a school are all systems consisting of several components put together in a way that provides the object or the process with some unique features. Similarly, language is a system since it is made up of such elements as letters, words, phrases, and clauses whose structure or arrangement determines the nature of the language itself.

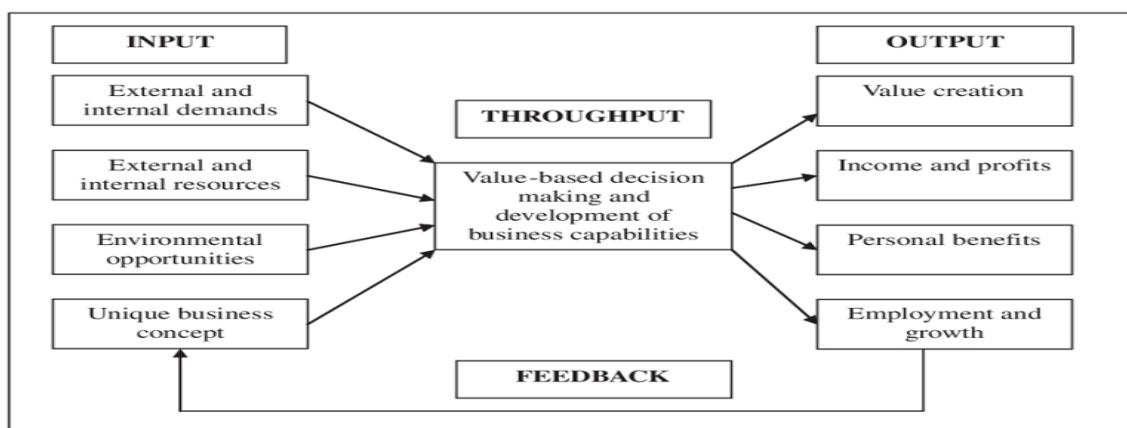
Similarly, Almaney (2016) further mentions that any system is comprised of subsystems and is fully dependent on them to function effectively. An employee, for instance, may be considered a subsystem of a workgroup that is a subsystem of a department. The department may be considered a subsystem of a division that, in turn, is a subsystem of a larger system, which could be the industry in which it's involved, the local community, the total society, or the world at large. The importance of the subsystem derives from its constant and dynamic interaction with the other subsystems and with the larger system. A change in one of the subsystems could produce far-reaching reverberations in the other subsystems and, consequently, in the larger system.

Similarly, a change in the larger system could affect the operations of one or more of the subsystems. In the RSR's context, the organisation is a system that is comprised of subsystems that are various departments within the regional offices. These subsystems have their subsystems, which are employees within each department and region. It is quite imperative that all these subsystems are always aligned to the supersystem, that is, the RSR. The study argues that they can be aligned through centralised communication.

According to Almaney (2016), once one of the subsystems becomes disengaged, this can have an adverse impact on the bigger system. An example of this can be a regional office that is operating in silos from the rest of the regions and head office. This might result in reputational damage to the organisation, as well as the RSR not being able to effectively execute its mandate, given the misalignment in pursuing the strategic goal.

Looking at the environment within which the RSR operates, the researcher asserts that the RSR operates within the realms of an open system. According to Chin (2015), "An open system is the one that permits maximal interaction with the environment. It involves the importation of input, the transformation of this input, and its exportation as output back into the environment". Below is a graphical representation of an open system, as explained by Deacon et al. (1998):

Figure 2.4: **The relationship of an open system theory**



Source: Deacon (1998):

Figure 2.4 above depicts the relationship of an open system theory. A classic example of this phenomenon is when the Republic of South Africa went into lockdown.

Various Directions and Regulations were communicated by National Ministers through the GCIS. As custodians of rail safety, the RSR was responsible for engaging with the Ministry of Transport on relevant and applicable Regulations on the rail industry. In the same vein, the RSR was responsible for communicating these to the rail operators, who had to develop COVID-19 Response Plans and submit them to the RSR.

Since the pandemic was a new reality to everyone, the RSR had an unprecedented task working together with various operators to ensure that their response plans were adequate. As and when the country would be moved to different alert levels, the RSR would communicate regulations that are relevant to that alert level and ensure that operators are compliant not only with the COVID-19 regulations but also with existing regulations on rail safety. This is evident enough that the RSR is an open system; it is impacted by the environment it exists within and communicates the same to its subsystems. On the same note, feedback is derived and communicated to external forces within the environment.

While the researcher is of the view communication should be centralised at the head office, he is not oblivious to the fact that regions are autonomous when it comes to implementing the RSR's mandate. Such autonomy is what will influence the communication coming from the head office. The theory guides the study to bring out the importance of wholeness and unity of communication, which can be achieved through the centralisation of communication while other functions are decentralised.

2.6.3 Knowledge Synthesis Theory

The knowledge synthesis theory focuses on how knowledge can be synthesised. Following prior research, the study defines knowledge synthesis, or synthesised knowledge, as an amalgamation of "individuals' specialised knowledge into situation-specific systemic knowledge" (Alavi & Tiwana, 2002, p. 1030). Synthesised knowledge, or knowledge synthesis, also refers to "the purposeful combination of specialised and complementary knowledge to achieve specific tasks" (Tell et al., 201:5). Fundamentally different from simply restating or attaching previous knowledge contributions, knowledge synthesis features mutual understanding, collective co-creation, and perceptual exchanges among collaborators (Alavi & Tiwana, 2002; De Boer et al., 1999; Burnett, 2009).

Synthesised knowledge components can help bridge informational gaps, identify areas of conflicts or inadequacies, and fuel more creative interactions (Alavi & Tiwana, 2002; Harvey, 2014). Knowledge synthesis has been well studied in a wide range of knowledge management contexts and from various levels of perspectives.

Kraaijenbrink and Wijnhoven (2008), for example, took an organisational perspective to demonstrate the function of knowledge synthesis in organisational development. They found that the way organisations successfully manage knowledge heterogeneity is to synthesise external knowledge not possessed by the internal innovation team. Moreover, Zhang et al. (2015), by taking a team-level point of view, showed that factors such as strong social ties, mutual trust and shared vision constructed amongst team members jointly lead to successful knowledge synthesis. Continuous synthesis of various knowledge paves the way for the emergence of innovation through facilitating active knowledge sharing (Bergman et al., 2004; Darroch, 2005; Gold et al., 2001; Matusik & Heeley, 2005). When knowledge is shared explicitly, it acts as the foundation for creating new knowledge (Sabherwal & Becerra-Fernandez, 2003; Wathne et al., 1996), hence collective decision-making and problem-solving can be fostered by members' synthesis of insights, skills, mental models, and specialised expertise (Burnett, 2009).

In the dynamic knowledge management system, knowledge collaborators can synthesise others' knowledge (Alavi & Tiwana, 2002; Majchrzak et al., 2013; Natalicchio et al., 2017; Robert et al., 2008). For example, a synthesised knowledge contribution can be made when an idea is generated based on thoroughly and reflectively examining previously shared knowledge, and the collaborator usually contributes thoughts such as the above-mentioned three business models that can be synthesised as they complement each other. The idea is that the business model should change without referring to previously shared knowledge. Through recombining, reframing, and evolving others' knowledge, collaborators are collectively creating a conversational and interactive context (Sharratt & Usoro, 2003). In such a context, synthesised knowledge contribution comprehensively incorporates various perspectives, bridges existing and new knowledge contributions (Gruber et al., 2013; Nonaka & Konno, 1998), as well as creates dynamic interactions of sufficiently high quality to generate innovative outcomes at the collective level (Kane & Fichman, 2009; Mehta & Bharadwaj, 2015; Tiwana & Mclean, 2005) taken together.

Previous research, such as Brown and Duguid (2000:28), has indicated that interconnected or networked members of a community "share a great deal of insight and implicit understanding" and, therefore, new ideas "circulate on the back of similar practice and indirect communications". As such, knowledge collaboration can be viewed as a common practice that participants undertake to support their collective idea generation. The collaborative process enables passionate members to obtain more knowledge through active participation (Holtom et al., 2006; Moran, 2005); however, it may also lead passionate members with heterogeneous knowledge backgrounds to clash with one another (Hinds & Bailey, 2003; Jehn et al., 1999), inhibiting the generation of innovative solutions.

Occupying a centralised position in collaborative knowledge communication often leads to a high level of embeddedness (Uzzi, 1997), which is a greater possibility of possessing connections that are interlinked or overlapping with each other. For example, social media users who are embedded in their online social networks may find some of their new friends have connections with some existing friends of theirs. Embeddedness can cause knowledge homogeneity and redundancy due to the similar or repeated information spread across overlapping connections, resulting in low-level collective creativity (Uzzi & Spiro, 2005).

Therefore, the study believes that as collaborators increasingly rely on familiar, overlapping and repeated information sources, they tend to apply an existing framework when understanding new knowledge, thus decreasing the likelihood of the emergence of innovation within the community. A dominant communication position in knowledge collaboration implies a preference for homogeneous and redundant information obtained from a high proportion of closely linked connections; hence, the knowledge they share is inclined to repeat existing knowledge rather than exploring unknown but innovative domains (Leenders et al., 2003). Such a process gives rise to a lack of variety in points of view, which brings about blindness, isolation, or closed communication (Kautonen et al., 2010; Reagans & Zuckerman, 2001). As a result, over-socialised collaborators are less likely to contribute creative ideas.

Members occupying a centralised or dominant position in an organisation often need to manage an excessive amount of social connections and thus are experiencing psychological pressure or emotional exhaustion, which leads to a decrease in motivation to innovate (Hur et al., 2016; Karatepe, 2012). Excessive stress also hampers creativity, especially when the stress arises from “relationships with others” (Talbot et al., 1992, p. 183). Likewise, in collaborative teamwork, a distracting working environment may decrease a team's creativity (Dayan & Di Benedetto, 2011). Accordingly, as collaborators become increasingly embedded in back-forth interactions, they need to make an effort to maintain and manage social connections; hence, they will have less time to devote to thoroughly considering the content during communication.

Dominant participants tend to express their opinions more often and with larger ranges compared to nondominant participants (Dunbar & Burgoon, 2005). In communicative knowledge collaboration, collaborators who dominate the interaction are at the nexus of information flow. Dealing with an enormous amount of information, knowledge collaborators who occupy a central position in their communication may experience a cognitive overload. Cognitive overload occurs when collaborators are experiencing anxiety engendered by various types of distraction during communication and an increasing need for a decision on categorising information (Kirsh, 2000). Cognitive overload decreases collaborators' creativity by hindering the benefits of synthesising knowledge and preventing collaborators from thinking thoroughly about the nuances of shared knowledge. To comprehensively decode shared knowledge and generate innovation requires a cognitive capacity for comprehensive thinking and analysing; nevertheless, when knowledge collaborators are cognitively overloaded, such a capacity tends to decline.

The knowledge that generates a high cognitive load may cause uncertainty, complexity, and ambiguity, and therefore, collaborators tend to unconsciously avoid high-load knowledge, making the knowledge that generates a low cognitive load more likely to prevail. For collaborators dominating the communication, this implies a tendency to only embrace superficial knowledge and a decreased motivation to digest knowledge that demands deep thinking.

Drawing upon the increasing critique of centralised communication in organisations, the study seeks to examine the effects of contributors' knowledge synthesis and the communication position of centralisation. In doing so, the study views centralisation as a dynamic knowledge management system where various knowledge is posted with the possibility of being continuously synthesised (Alavi & Tiwana, 2002; Yates et al., 2010). Dynamic knowledge management system provides many advantages over the conventional static knowledge management system (McInerney, 2002).

It is dynamic not only in the knowledge content contributed but also in the process that new knowledge is developed and existing knowledge is revisited and reused. As such, the innovation process is intrinsically associated with knowledge management, which is configured by knowledge creation, acquisition, evaluation, recombination, and application (Law & Gunasekaran, 2009; Luecke & Ralph, 2003). For an organisation such as the Railway Safety Regulator that intends to centralise communication, measures have to be put in place to ensure that information coming to officials occupying dominant positions within the organisation is categorised so it can be easily deciphered. This can be done through the Knowledge Synthesis Theory, where external knowledge not possessed internally is synthesised. It was also stated by Zhang et al. (2015) that factors such as strong social ties, mutual trust and shared vision constructed amongst team members jointly lead to successful knowledge synthesis.

2.7 Summary

The literature that was reviewed in this chapter presents that centralised communication is pertinent to the success of any organisation. This form of communication ensures that the organisation communicates with uniformity without any conflating information that might project the organisation in a bad light. The literature has also outlined that even though communication should be centralised, it is still imperative for an organisation to decentralise operational functions to ensure that the footprint is expanded. This also brings positive "growth" results for the colleagues who are stationed in regional offices, as they are afforded an opportunity to express themselves when dealing with regional challenges.

As mentioned on section 2.1 of this chapter , the topic of communication in the rail safety industry is a topic that has not been adequately researched. This affords the researcher a unique opportunity to take the route less travelled and unscramble the topic of rail safety. The establishment of the RSR marked the end of an era where rail operators were both players and referees. However, over time, it became increasingly important for the RSR to expand its footprint to service its stakeholders effectively. Lastly, the researcher made a case that the RSR does not exist in silos. It exists within an environment, which makes it an organisation within an open system. It is impacted by external elements and, similarly, responds to the same. Once completed, the research will address the vacuum that exists amongst centralised communication in decentralised organisations of rail and safety. The next chapter explains how this vacuum will be empirically addressed; it presents the methodologies followed in this study.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The preceding chapter presented the literature review where elements and concepts influential to the study were discussed, such as centralised communication and decentralised organisations. The literature revealed that decentralising is beneficial for organisations to serve their stakeholders' needs better and respond to their market's needs. However, communication is better when centralised for an entity to preserve speaking in one voice. Based on this literature and the empirical evaluation guided by the approaches discussed in this chapter, the study will inform the Railway Safety Regulator (RSR) on how to keep communication centralised in their decentralised organisation because the entity is challenged by uncertainty on whether communication should be decentralised or not.

This chapter provides a detailed description of the research design, method, and the research process. It will highlight different research approaches and underlines the mixed-method research approaches. It will further render the population and sampling, data collection approach and methods used. Ethical considerations are also accentuated, and the study's overall trustworthiness, validity and reliability are critically evaluated.

3.2 Research design

This study used the mixed methods research design. Mixed methods design is known as the design in which the researcher collects and analyses data, integrates the findings and draws conclusions using both qualitative and quantitative methods in one study (Creswell & Clark, 2011; Wallace et al., 2012; Creswell, 2014; Wagner et al., 2012, p. 162). Priority can be given to either the qualitative method or quantitative method or to both (Johnson & Christian, 2017). It involves the combination of data at one or more stages in the research process (Creswell, 2014; Castro et al., 2010; Johnson & Christian, 2017).

In mixed methods research design, data can be collected sequentially or concurrently (Creswell, 2014; Creswell & Clark, 2011). The researcher first explored qualitatively and then verified the exploratory data descriptively with larger quantitative data (Creswell & Clark, 2011; Wallace et al., 2012; Castro et al., 2010). The mixed methods design allowed qualitative data to be gathered and analysed in the first phase, and then its results were used to identify items for a questionnaire that was tested further quantitatively in the second phase (Castro et al., 2010; Given, 2012, p. 527). This approach permitted a follow-up on the first exploratory findings (Creswell & Clark, 2011).

An exploration is required when variables are not known or when no guiding framework is available (Wallace et al., 2012). As such, the qualitative approach helped to establish the variables that are unknown, which were tested through the quantitative approach (Johnson & Christensen, 2017). Therefore, a sequential mixed methods design was chosen to develop better instruments to measure the phenomenon as the exploration of the study qualitatively first and further testing it quantitatively helped to confirm qualitative findings with those of quantitative. This research approach led to better validity of the research as it allowed the study to collect data that was supposed to be collected and led to reliability by using the same data collection instrument in the same context but with different population groups to yield the same result.

By employing sequential mixed methods, interviews and questionnaires were used in this study for the following reasons: The research purpose and the research questions required the use of interviews and questionnaires to provide an in-depth description and quality measurement of the topic under investigation (Castro et al., 2011). Therefore, one has to say that with the interview, which uses the qualitative method, rich and in-depth information was gathered to establish an understanding of the participants' experiences by capturing various subjective realities and knowledge of the participants regarding the phenomenon. The questionnaire used a quantitative method and enabled accurate description and quality measurement of the construct and discovery of objective reality and knowledge by empirical testing of the respondents using the scientific method.

With the design being a mixed method and a combination of both qualitative and quantitative techniques, surveys, which are quantitative, were targeting employees on the ground and middle management to ascertain if there is uniformity of information across the organisation and if they are happy with the status quo. On the other hand, interviews, which are qualitative, were targeting senior management to establish if they understand the concept of centralised communication and fully support it. When combined, both research methods allowed the researcher to have an in-depth understanding of how communication could be centralised at RSR.

Advantages of mixed methods research

The reason the researcher used both qualitative and quantitative research is because they both have different kinds of strengths and weaknesses, which were used to complement each other. Qualitative research through interviews enabled the researcher to be deeply involved in the study, and issues were studied as they transpired. Through interviews, the researcher was able to give a comprehensive picture and life experiences of those studied; this allowed the researcher to give a subjective stance on the matter. On the other hand, quantitative research collected through questionnaires allowed for the researcher to provide an objective stance; this is because the researcher must use only logic to conclude findings, which is why statistics were used to analyse data. This means that mixed methods research enabled the researcher to capitalise on the strength of both methods while at the same time helping to ameliorate their weaknesses to provide an integrated and comprehensive understanding of the research topic (Halcomb & Hickman, 2015, p. 3). These methods are useful in that they enable the researcher to attain crucial legitimisation goals such as increased transferability (De Lisle, 2011, p. 113). Mixed methods research helps increase interpretability and meaningfulness. This is because one method's results can be used to clarify the results of another method (Rodrigues et al., 2016, p. 167). Moreover, using both methods in one study enabled the researcher to explore more complex aspects (Malina et al., 2011, p. 6). Using mixed methods, research allowed the researcher an in-depth discovery of traditional patterns and practices while at the same time enjoying the benefits of large-scale generalisation (De Lisle, 2011, p. 112). To add to that, the mixed methods research added value to this study by increasing the validity of research findings (Mckim, 2017, p. 203).

Disadvantages of mixed methods research

However, there are disadvantages to using these methods; one of those is that mixed methods research is demanding. While other researchers may use one method and fully concentrate on that method, the researcher of this study must concentrate and pay attention to the two methods, meaning it becomes a double effort of collecting data and analysing and interpreting it. It is, therefore, important for researchers to be aware of their skills and whether they will be able to handle the demands of using mixed-methods research (Almalki, 2016, p. 291). Moreover, mixed methods research has the disadvantage of "combining and multiplying threats to validity and trustworthiness" (De Lisle, 2011, p. 110). When using both methods, the researcher in this study will be at risk of dealing with threats from both methods instead of one. More than that, mixed methods research is costly and requires more resources than using just one kind of research method (Mckim, 2017, p. 202). A researcher may need extra funding and extra space for interviews; he or she may also require extra assistance in collecting and analysing data. The researcher in this study encountered the disadvantage of collecting data twice and analysing two sets of data.

3.3 Research paradigm

Every researcher has his or her own tradition of what comprises truth and knowledge; these traditions shape the way the researcher thinks, believes, and assumes about society and about themselves. It also models the way they view the world around them, and this is called a paradigm (Wagner *et al.*, 2012, p. 51). Paradigms can be of a positivist stance or interpretivism stance. A positivist paradigm is used in quantitative research, while an interpretivist paradigm is used in qualitative research. For this study, both the positivist and interpretivist approaches were used because this study is a mixed-method research study. A positivist paradigm enabled the researcher to objectively come to conclusions (Shah & Al-Bargi, 2013, p. 254). An interpretive paradigm explored the subjects of the study's individual perceptions and shared meanings. Unlike positivists, Interpretivists do not believe in a cause-and-effect relationship (Shah & Al-Bargi, 2013, p. 257). These paradigms helped the study achieve its objectives, both subjective and objective.

3.3.1 Positivist paradigm

The positivist paradigm accentuates real facts; the truth about a phenomenon is based on logic and rationality; that is, it should be proven by science, and if it cannot, then it does not exist (Wagner *et al.*, 2012, p. 53; Walliman, 2011, p. 175). The researcher in this study drew conclusions on how RSR centralises its communication in its decentralised organisation based on the logic drawn from the scientific method. The scientific method entails observing, defining the problem, forming a hypothesis, conducting the experiment, and deriving a theory (Ryan & O'Callaghan, 2002).

These scientific methods allowed the researcher to be objective and obtain results that were not biased (Barbie, 2013, p. 4). The positivist ontological assumption believes that there is one tangible reality that is constant across time and setting that should be discovered by a researcher (Morehouse, 2011; Wagner *et al.*, 2012, p. 53). The positivist epistemological assumption holds that knowledge is built in the natural science and is those statements of truths and beliefs that can be empirically tested, verified, confirmed, or disconfirmed and are constant and can be generalised (Wagner *et al.*, 2012; Arghode & Vishal, 2012, p. 157). The positivist assumption also holds that knowledge is objective and does not depend on the researcher's interests and feelings (Wagner *et al.*, 2012:53). Based on the positivist ontological assumption, one can say that employing the scientific method will help in discovering an objective reality in this research which can be generalisable. In terms of the positivist epistemological assumption on what counts as knowledge, one has to say that the use of the scientific method through empirical testing of the research helps to achieve objective knowledge and reality of the phenomenon without the researcher's interest and feelings. Therefore, the positivist approach was used to investigate the phenomenon scientifically to discover a single objective truth and knowledge about the research and to ensure that accurate inferences are drawn from the results of the research.

3.3.2 Interpretivist paradigm

With the interpretive paradigm, meaning is "disclosed, discovered, and experienced. The emphasis is on sense-making, description, and detail. For the anti-naturalistic interpretive researcher, human action constitutes subjective interpretations of meanings.

Therefore, meaning-making is underscored as the primary goal of interpretive research in the understanding of social phenomena" (Cresswell, 2012). Within qualitative research, interpretive paradigms focus on understanding meaning and making meaning as the main reason of research. Interpretivism "focuses on people's subjective experiences, on how people construct the social world by sharing meanings and how they interact with or relate to each other" (Wagner *et al.*, 2012, p. 127). Unlike positivists, Interpretivists are of the opinion that reality is subjective and not objective. Saks and Allsop (2013) argue that interpretivists believe in the principle that all knowledge derives from people's perceptions and, therefore, research must consider how human subjects understand the world. The interpretive believes that statements on what is reality or false are bound by culture, context and historically dependent, though some may be universal (Saks & Allsop, 2013; Wagner *et al.*, 2012, p. 55).

The interpretive ontological assumption about "the nature of reality holds that there are multiple intangible realities constructed by people and that reality is socially constructed and depends on the mind of the individual (Morehouse, 2011; Wagner *et al.*, 2012, p. 56). Therefore, based on the interpretive ontological stance, there were multiple realities that were discovered about the research topic based on social construct and on the individual minds or experiences of the participants and cannot be generalised into a single common reality. On the question of what counts as knowledge, the interpretivist epistemological assumption holds that knowledge is subjective, is a social construct and depends on the mind of the individual (Wagner *et al.*, 2012; Arghode & Vishal, 2012, p. 155). Therefore, the study discovered subjective knowledge constructed by the participants based on their personal constructs and experiences. The reason for employing the interpretive approach in this study was to understand the participants' multiple perspectives or experiences of the phenomenon as well as the subjective meaning constructed by the participants, as communication should serve to transmit meaning.

3.4 Data collection techniques

The data collection techniques that were used were the self-administered questionnaires for the survey. The questionnaire used the Likert scale. The second technique was the in-depth interviews.

These were held individually with seven RSR's key Senior Managers. Information derived from the survey and the interviews, respectively, formed the basis of the primary data. The researcher then looked at findings from previous research on the same subject as secondary data.

3.4.1 Questionnaires

Questionnaires are "a very flexible tool that has the advantages of having a structured format; it is easy and convenient for respondents and is cheap and quick to administer to a large number of cases covering large geographical areas" (Walliman, 2011, p. 97). The researcher in this study administered the questionnaire to 140 employees of RSR who are knowledgeable about the decentralisation process and the centralisation effort of communication in the organisation. The questionnaire was convenient as the researcher did not need to talk to each of the employees individually. Furthermore, respondents had ample time to give truthful responses as they each answered in their own privacy and comfort; this was beneficial in cases where embarrassing questions were encountered.

The design of the questionnaires included Likert-type questions and demographic questions; the questions were close-ended. A Likert-type scale format questionnaire is where respondents show the level to which they agree or disagree with the items. This format allowed for closed questions because responses are restricted to the researcher's list of options (Wagner *et al.*, 2012, p. 108). In this study, a scale of 1-5 was used: (1) strongly agreeing, (2) agree, (3) neither agree nor disagree, (4) disagree and (5) strongly disagree. To add to that, demographic questions which were asked at the beginning demonstrated the inverted funnel approach because the researcher asked questions from the general moving to specifics. The questionnaire in this study began with easy demographic items and then moved to more personal items (Wagner *et al.*, 2012, p. 104).

The researcher administered the questionnaire through an online method; that is, questions were created on an online site, and then a link was sent to respondents via an invite email, inviting them to participate in the study.

The researcher approached the management of RSR to obtain permission to conduct the study and asked them to introduce him to the respondents and organise a debriefing session with respondents to explain to them the purpose of the study, how they need to participate and what their results be used for so that they can respond correctly when they receive the link.

3.4.2 Interviews

Interviews are a "conversational practice where knowledge is produced through the interaction between an interviewer and an interviewee or a group of interviewees" (Given, 2008, p. 470). It is a form of consultation where the researcher seeks to know more about the interviewee's opinion on a certain issue (Adhabi & Anozie, 2017). Simply put, interviews are interactive processes where the interviewer asks questions, and the interviewee answers them. Through interviews, the researcher collected descriptive qualitative data; moreover, they enabled the researcher to see the world through the interviewee's frame of reference (Wagner *et al.*, 2012). Through interviews, the researcher got to know interviewees quite intimately and, therefore, knew how they felt and thought (Terre Blanche *et al.*, 2006). Unlike questionnaires, where respondents are restricted to the list and require closed answers, interviews allow for the flexibility of participants as questions require open answers since the questions are open-ended. Again, interviews "require probing to obtain adequate information" (Walliman, 2011, p. 99). The researcher conducted interviews with seven employees who are senior managers, the number of participants was determined by data saturation. Participants were chosen in a specific manner where the goal was to access those who were more knowledgeable and could give the most relevant data. The researcher was also able to correct incorrect and misinterpreted questions since interviews were conducted in the researcher's presence. There are different types of interviews; the three common types of interviews are structured interviews, semi-structured interviews, and unstructured interviews (Adhabi & Anozie, 2017, p. 88). The study adopted a semi-structured interview, which is discussed in the next section.

3.4.2.1 Semi-Structured interviews

Semi-structured interviews are those that facilitate a more flexible approach during the interview process; although an interview schedule where questions are pre-determined

may be used, these interviews enable unanticipated responses because of the open-ended questions used (Ryan et al., 2009, p. 310). In this study's interviews, there was no fixed range of responses, and questions did not have to be asked in the same order. Therefore, semi-structured interviews were flexible (Given, 2008, p. 810).

Since in this kind of interview, there is no consistency in the way questions are asked, the researcher in this study was able to collect more in-depth information from participants who narrated the information according to the way they see fit. Nonetheless, this does not mean the researcher did not oversee the interview. The researcher still led the whole process so that the same general data was collected from each participant.

An example of a semi-structured interview is an in-depth interview; this is where participants are free to express themselves and give in-depth information. They do so by taking the interview in a new but related direction, and yet the researcher is still in control of the whole process (Given, 2008, p. 422). The researcher in this study used semi-structured interviews. The researcher formulated an interview schedule or guide; this allowed the researcher to set an agenda and yet still leave room for the participants to answer in a descriptive way (Adhabi & Anozie, 2017, p. 89). Like the questionnaire, demographic questions were asked at the beginning; therefore, the funnel approach was used, whereby RSR employees were asked questions moving from general questions to specifics (Wagner *et al.*, 2012, p. 104). In addition, because the interview schedule allows for open-ended questions, RSR employees answered questions in their own words; this enabled the researcher to get information on the significance of centralised communication in a decentralised RSR entity. Interviews were conducted via an online platform called Microsoft Teams; that is, the researcher met with respondents on the platform to share and exchange information.

3.4.3 Pilot Study

A pilot study is one of the most important stages in any research project (Hassan et al., 2006, p. 70; Hazzi & Maldaon, 2015, p. 53). It is a study that precedes the main study. It is a small investigation to examine the feasibility of research instruments before the main study is conducted (Gumbo, 2014, p. 386; Ismail et al., 2018, p. 1).

It is important for researchers to first conduct a pilot study so that they know beforehand whether the study they intend to embark on is worth spending time and resources on rather than waiting to find out in the middle of the study.

Through a pilot study, the researcher tries all research techniques and methods to see whether they are feasible or not; if they are, then the researcher will encounter no problems during the main study. However, if problems are discovered during the pilot study, then the researcher will be able to modify them accordingly; this will ensure that the main study encounters no problems. Pilot studies are useful in that they help improve the efficiency and the quality of the main study (Hazzi & Maldaon, 2015, p. 53; Doody & Doody, 2015, p. 1076). Nonetheless, researchers should bear in mind that pilot studies do have some limitations and might not always be successful (Van Teijlingen & Hundley, 2001, p. 2). Even though researchers may complete a pilot study successfully, this is not a guarantee that the main study will also be completed successfully. Some problems may only surface during the larger study, which did not surface during the pilot study. Apart from that, there might be confusion when the same people who participated in the pilot study participate in the main study, and yet new information is collected from them (Van Teijlingen & Hundley, 2001, p. 2). However, these limitations do not surpass the fact that pilot studies are useful and that researchers should always make use of them.

The researcher in this study conducted a pilot study on the employees of RSR. The pilot study tested the feasibility of the research methods that were used in this study. According to Hazzi and Maldaon (2015:53), the pilot sample may be derived from 10-20% of the main population; therefore, the researcher in this study conducted two interviews and administered 14 questionnaires for pre-testing with participants and respondents that were not form part of the population of the actual study.

3.5 RELIABILITY AND VALIDITY AND TRUSTWORTHINESS

Research differs in many ways; in social science, intangible constructs are being measured, that is, the things that cannot be touched or physically seen, such as behaviour, perceptions, attitudes, personality, and emotions (Heale & Twycros, 2015; Wagner, 2012). Due to this, social scientists depend on interviews, drawings, questionnaires, and other abstract forms of data gathering to conduct research.

Reliability and validity, which are mainly linked with quantitative research, as well as credibility and trustworthiness, which are associated with qualitative research, must be considered in research to ensure truthful, accurate and dependable measurement (Heale & Twycros, 2015, p. 66; Middleton, 2019).

In quantitative research, data is collected through measuring scales and observations, but it depends on whether the methods of collecting data are gathering the data that is intended to be gathered and whether the data will yield the same results every time it is used under the same situations with the same respondents. This is about research reliability and validity in quantitative research. (Wagner et al., 2012:80; Heale & Twycros, 2015; Drost, 2011:67).

Reliability is concerned with consistency of measurement and/or the degree to which findings are repeatable. A measurement can be considered reliable if the same result can be consistently achieved by employing the same methods under the same situations (Middleton, 2019; Wagner et al., 2012, p. 80; Walliman, 2011, p. 179). This applies both to entire outcomes of the study and to scores on measures of individuals. Reliability is a very valued criterion that shows the conclusiveness and accuracy of results in relation to the positivists who believe in studying a constant and unchanging truth (Drost, 2011, p. 105).

Validity focuses on measuring what is supposed to be measured and the extent to which research conclusions are sound (Heale & Twycros, 2015, p. 67; Middleton, 2019; Wagner et al., 2012, p. 80; Drost, 2011, p. 105). It is concerned with the accuracy of measures. Middleton (2019) asserts that research that has high validity shows that it yields results that correspond to true characteristics and properties variations in the social or physical world.

Experimentalists and quantitative researchers usually plan studies by recognising a set of certain validity threats in advance and then adjusting for these. Such researchers usually employ experimental arrangements, tested and tried measures and statistical methods to ensure that truthful inferences can be drawn from the findings of the research (Middleton, 2019; Drost, 2011). Two different types of validity which were relevant to this study are discussed further: internal validity and external validity. Internal validity is the extent to which observed findings represent the facts in the population studied (Patino & Ferreira, 2018, p. 183).

It is also the degree to which causal inferences can be drawn (Blanche et al., 200:90). The study achieved internal validity by having no errors in the research methodologies. The research was planned very well; this included the appropriate selection of data collection techniques, data analysis methods and appropriate selection of sampling size. Also, the internal validity of the questionnaire was ensured through the content of the items in the questionnaire being compared with the relevant content domain for the construct being measured and by the literature review that has been conducted on the related topic of this study, a relevant population was also studied.

External validity is the degree to which it is possible for research results to be generalised from the context of the study and from the data to the larger populations and settings (Pandey & Patnaik, 2014, p. 5743). This study ensured a larger inclusion criterion of the sample that can represent the population to increase the generalisability of the findings to the population. The study included all 140 employees of RSR.

Regarding credibility and trustworthiness of the research, qualitative researchers focus on accurate measurement and use the terms credible and trustworthy rather than valid and reliable. In qualitative research, the main criteria that ensure credibility and trustworthiness are credibility, dependability, transferability, and confirmability (Noble & Smith, 2015, p. 34; Wagner et al., 2012, p. 137).

Qualitative researchers argue that some studies are better than others, and the researchers propose that research can be assessed according to its credibility. Credibility uses persistent observation, peer debriefing, and prolonged engagement and triangulation (Wagner et al., 2012). Credible research yields results that are believable, convincing, dependable and transferable to other contexts and people (Heale & Twycros, 2015, p. 67; Middleton, 2019). To ensure the credibility of this research, peer debriefing was conducted.

Dependability on qualitative research refers to different strategies used to ensure that what the study presents as the findings of research are credible and trustworthy. It considers the use of different sources of information, various data collection instruments and different researchers to measure the same thing to increase the trustworthiness and credibility of the research findings (Wagner et al., 2012; Anney, 2014, p. 278).

Therefore, to ensure the dependability of the research, the researcher held a discussion with other researchers and colleagues about the research findings; this helped to identify things not covered in the study.

Confirmability focuses on making sure that results are grounded in the data and assessing the degree of biases present to prove that the data and results were obtained from events and not from the construction of the researcher (Wagner et al., 2012). Confirmability can also be ensured through an audit trail. This enables a researcher to trace the findings of the research step by step and record all the things that are done from the start to the end of the research (Shenton, 2004, p. 72). Therefore, all the materials, raw data and records are kept very well as a confirmation that the findings are not the researcher's construction nor the researcher's judgement.

Transferability refers to the degree to which one set of results can be applied to another context (Saks & Allsop, 2013; Moon et al., 2016, p. 3). Qualitative research focuses on understanding certain phenomena and then looks at the potential transferability of these understandings to another context. It also focuses on providing a thick description and maintaining all versions of the data in their original forms (Wagner et al., 2012, p. 243). The transferability of this study was maintained to its original form, and a thick description of the data was presented. The stance of this study concerning validity and reliability, as well as the credibility and trustworthiness of the research, are discussed below:

The use of a mixed method enhanced the validity and reliability as well as the credibility and trustworthiness of this study. In the first place, employing mixed methods helped to confirm qualitative results with those of quantitative results. Therefore, the results of the study were retested, and the same result was found. Moreover, the reliability and validity of the quantitative instrument of this study were achieved through a pre-test of the questionnaire in the form of a pilot study that was administered to a smaller group of respondents before the actual questionnaire administration.

Since the interpretivists believe in subjectivity in discovering the social world, the qualitative instruments helped to provide in-depth information about the situation being studied depending on the experiences and subjective meaning of the participants, thereby increasing the credibility and trustworthiness of the research findings.

Also, questions were treated like a conversation during the interviews and participants were made to feel a greater degree of anonymity online and probably responded to questions with honesty, which ensured the credibility, transferability, confirmability, and dependability of the research findings. Furthermore, the interpretivist believes in the existence of multiple subjective truths. Therefore, this study employed the subjective stance in gathering the qualitative information, and the findings relied on multiple individual constructs, opinion and experiences, which was presented and analysed in a way that the results were credible, dependable, confirmable, and transferable to another context. The trustworthiness and credibility of the qualitative instrument were well achieved through a pilot study with few participants before carrying out the actual interviews.

3.6 POPULATION AND SAMPLING METHODS

Target population refers to the entire class or group of units, objects, or subjects to which the researcher wants to generalise the findings (Cresswell, 2012). In this instance, the research target population included all the employees of the RSR. The RSR employs a total of 140 employees across three regions and its head office. These are a variety of employees, both in terms of demographics and psychographics. A considerable number of employees consist of middle-aged and young black professionals who mostly have previously worked for the government.

Accessible population refers to the units of analysis in the target population to which one has access (Creswell, 2012). In this case, the accessible population was all RSR employees a total of 140 employees across three regions and its head office; the reason all employees formed part of the sample is because Gay, Mills and Airasian (2011) outline that in a quantitative study, when the population is 100 or fewer, sampling should not be done, rather take the entire population as a sample.

A unit of analysis is the main subject that is being analysed in a study (Alsharari, 2016, p. 588; Terre et al., 2006). Members of the Senior Management have been identified as individuals to be interviewed; the survey targeted employees in the lower ranks to middle management as they are the ones who are in the implementation phase of what is

communicated to stakeholders. Therefore, the unit of analysis for the study was individuals.

The research study used the purposive non-probability sampling method. The sample population was selected based on the researcher's knowledge of the participant's ability to add value to the study. With a staff complement of 140, the research included all employees for the quantitative part of the study and 140 of the population, including all employees of RSR, who will be administered with the survey. The reason they are all included is because they are a small size population, and including them, all ensured the reliability and validity of results. Depending on data saturation, seven in-depth interviews were conducted with individuals who were in managerial positions and who were also purposively sampled.

3.7 Data analysis

To analyse quantitative data, the researcher used a statistical program which helps determine the mean, median and mode. The researcher in this study used univariate analysis since the qualities of one variable are analysed at a time (Walliman, 2011, p. 117); moreover, descriptive statistics in the form of tables and graphics were also used. Descriptive statistics are a "mathematical summarisation of data" (Given, 2008, p. 209). The researcher took the large amounts of data collected through questionnaires, then summarised and converted them mathematically into a few numbers that were easier to interpret and explain. These descriptive statistics were useful to this study as they enhanced legitimacy, such as transferability reliability, among others. This means that the results of this study can be repeated or retested.

The researcher in this study categorised descriptive statics in two ways: numerically using the three measures of central tendency and graphically using tables and graphics. The central tendency was measured through the mean, median and mode. To get the mean, the researcher summarised all scores and divided them by the number of test scores. To get the medium, the researcher calculated the middle score of all achieved scores. Lastly, to get the mode, the researcher looked at the most common achievement score (Given, 2008, p. 210).

When analysing quantitative data, firstly, the researcher took the raw data, which was the completed questionnaires, and transformed them into an electronic format. Then, the researcher continued to prepare data through coding, entering, and cleaning. During the coding process, the researcher transformed information from one form to another. Data from the questionnaire was changed to a numerical format that was understood by the analysing program (Terre Blanche *et al.*, 2006, p. 189). For instance, when using a Likert-type scale in a questionnaire, strongly agree was coded number '1' while strongly disagree was coded number '5'. Here, words were replaced by numbers. The researcher then entered the numerical codes into the computer. Rows were labelled according to cases, while columns were labelled according to scores on specific variables. The last step of preparing data was the cleaning stage; during coding and entering data, there would be errors, which are dangerous as they render the results of the study invalid.

Therefore, it is of utmost importance that the researcher checks and rechecks the data for errors, which will be corrected when found to produce valid and conclusive results (Terre Blanche *et al.*, 2006, p. 192). The data which the researcher collected was just raw data that reflects little meaning. So, the researcher took that raw data and summarised it through a process referred to as descriptive data in tables and graphics with the aim of improving the meaning that could link to it (Trochim, 2006).

3.7.1 Descriptive statistics of demographical data

The biographical data was summarised with tables and graphics. Findings within these tables or graphics.

3.7.2 Descriptive statistics of measuring instrument

Firstly, the frequency distribution of the research questionnaire was calculated. Secondly, descriptive normality statistics of the research questionnaire were conducted using the following methods (Pallant, 2016): *The mean* is "the average, calculated by adding together all the scores and then dividing this total by the number of individual scores" (Wagner *et al.*, 2012, p. 271).

Median: The median is the “mathematical middle between the highest and lowest value” (Walliman, 2011, p. 117). *Mode:* The mode is "the most common, or highest frequency, achievement score" (Given, 2008, p. 210). These three measures of central tendency gave the researcher a general idea of how the numbers are clustered. This enabled the researcher to be able to present research findings in tables and graphs.

Standard deviation: Standard deviation is "the average distance that scores are from the mean" (Given, 2008, p. 210). When values are more dispensed, then the standard deviation becomes larger. The standard deviation enabled the researcher to see how much each value in the data set deviated from the mean, which allowed for a better description that the researcher needed when presenting research findings.

Skewness: Skewness "is a measure of distributional asymmetry." It describes which side of a distribution has a longer tail. If the distribution tails off to the right, the distribution is positively skewed; if it tails off to the left, it is negatively skewed (Lovric, 2010, p. 1). This enables the researcher to calculate the degree of asymmetry in the distribution and deduce conclusive results.

Kurtosis: Kurtosis is the number that measures "the height and sharpness of the peak relative to the rest of the data." Higher values indicate a higher, sharper peak; lower values indicate a lower, less distinct peak (Brown, 2011, p. 8). Through Kurtosis, the researcher of this study will be able to determine how scores are concentrated in the distribution, which helped present the findings correctly.

Factor analysis to confirm the questionnaire's underlying constructs

Factor analysis is "a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables". The goal of a factor analysis is to reduce the number of variables to explain and interpret the results (DeCoster, 1998, p. 1). The researcher was able to explain and interpret research results using factor analysis.

Reliability analysis of the extracted factors

Reliability analysis was conducted on the extracted factors or scales to ensure they complied with the inferential statistics requirement that they need to yield an internal consistency reliability Cronbach's alpha of .70 or higher (Pallant, 2007, p. 95).

Normality Tests

The type of statistical methods to be used is determined by the normality distribution of the data. The reason is that this is a requirement for some of the statistical tests, for example, two-way ANOVA (Pallant, 2007, p. 62).

The Kolmogorov-Smirnov test (K-S) and Shapiro-Wilk (S-W) are designed to test normality by comparing the data to a normal distribution using the same mean and standard deviation as the sample (Pallant, 2007, p. 62). Any significant value above 0.5 indicates normality and parametrical inferential statistical methods can be used in the analysis; non-parametrical inferential statistical methods need to be used.

Inferential statistics

As the normality test is significant, the following non-parametrical inferential statistical methods were used (Leedy & Ormrod, 2015; Pallant, 2016): *Spearman correlations*: Spearman's correlation "measures the strength of association of two variables" (Lani, 2010, p. 1), *Mann-Whitney U test*: The non-parametric Mann-Whitney U test was used to test for differences between two independence groups on a continuous measure by comparing mean ranks (Pallant, 2016, p127).

Kruskal-Wallis H Test: The rank-based non-parametric Kruskal-Wallis H Test, as an alternative to ANOVA, was conducted to determine if there are statistically significant differences in the mean rank between two or more groups of an independent variable on a continuous dependant variable (Pallant, 2016).

To analyse qualitative data, interviews were transcribed. After transcribing, the researcher had to familiarise himself with the transcripts; this was achieved by reading them over and over. This enabled the researcher to know what kind of information is available and where it will be found. When the researcher is fully familiar with the data, themes are induced by organising data into main themes and sub-themes. Then, the researcher continued by coding data, "coding is an important step of forming typologies as it facilitates the organisation of copious data" (Walliman & Baiche, 2001, p. 262). This is where the researcher identified interesting features and stages and distinguished them with labels. Labels enabled data to be easily identified as the researcher knew what type of data was found where.

Labels also helped the researcher organise his or her material in that similar topics were categorised. Then, the researcher moved on to the elaboration stage, where the researcher checked if the data had been categorised well. Also, the researcher closely examined themes and elaborated on them until no new information surfaced. Lastly, the researcher assembled the interpretation and double-checked if the information was objective and if there were no contradicting points. The qualitative data collected for this study was analysed with a thematic analysis with the support of the Qualitative Data Analysis (QDA) miner software program.

Thematic analysis

The thematic analysis consists of a 6-step process that entails the following:

Step 1: Develop an understanding of the data: The data collected with the interviews was transcribed into MS Word documents and uploaded into the QDA software program.

Step 2: Generation of initial codes: The research objectives of the study were used to generate initial coding from the base of the analysis.

Step 3: Searching for patterns of meaning: The documents were loaded into a software program called QDA Miner. Patterns of meaning were identified and linked to the code. New codes were created for new patterns of meaning that were identified.

Step 4: Reviewing themes: Similar patterns of meaning were grouped into themes.

Step 5: Define and name themes: These themes were named, and a thematic map was created.

Step 6: Creation of findings report: The thematic map structure was used to write the findings report. Analysis findings were supported by quotes from the participants (Clarke & Braun, 2013).

3.8 Ethical Issues

The researcher had solicited permission to use the Railway Safety Regulator as a basis for his research study. All the employees of the RSR who participated in the study did so knowingly and voluntarily. The research was used for academic purposes only. The ethical issues considered for the purpose of this study are informed consent, deception, privacy, confidentiality and anonymity.

In terms of informed consent, participants were informed of being involved in the study without force, and the aim, method and potential uses of the study were made known to the participants (Wagner et al., 2012, p. 64). Participants were made aware of the purpose of the research through the consent form and that it was for degree purposes.

Regarding privacy and confidentiality, the researcher ensured that the identity of participants and any information disclosed by participants that may harm or embarrass participants were not revealed in any way (Richards & King, 2014, p. 393). Regarding accuracy, this study ensured that data was reported factually. In terms of anonymity, this study ensured that the personal identities of participants were omitted, especially during the writing up of the findings (Bahri, 2018, p. 265). Data was gathered online to ensure participants were protected from the covid harm. Further, to ensure that these ethical issues are maintained, approval was obtained from UNISA. The study also adhered to UNISA's code of ethics and guidelines.

3.9 Summary

The research design was mixed method, exploratory and descriptive, following the interpretivism and positivism paradigm. The research was cross-sectional with the population of RSR employees. In-depth interviews were held with senior management, while a questionnaire was sent to staff. The data collection techniques that were used were self-administered questionnaires for the survey and online interviews. The following chapter presents results that were obtained by employing the methodology in this chapter.

CHAPTER 4:

PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 INTRODUCTION

In the previous chapter, the research methodology used in this study was presented. The presentation and interpretation of results chapter starts with the presentation of biographical and demographical data collected with the semi-structured interviews with the senior management of the Railway Safety (RSR), followed by the biographical and demographical data collected through the questionnaire with all employees of RSR. Secondly, the chapter presents the results of the qualitative data analysed thematically, followed by the quantitative results descriptively analysed.

The semi-structured online interviews were conducted with seven officials from the senior management of the organisation. The notes that were taken during the interviews were transcribed, coded, categorised, and analysed using Atlas. Ti software.

Online questionnaires were administered to 140 employees of RSR, with only 132 returned, yielding a response rate of 94%. The questionnaire data, which was captured using Microsoft Forms, was coded, categorised, and presented using normal distribution parameters, mean, mode and standard deviation. Prior to conducting the interview and the administration of the questionnaires, a pilot study was conducted with 14 participants and all respondents. There was no problem found with the research items.

Table 4.1 Descriptive statistics of the biographical and demographical groupings of the interview participants.

Qualification	Age Groups	Gender	Position		
			Manager	Assistant Manager	Grand Total
Diploma	31 -40 years	Male	3	1	4
B-tech	41-60 years		Female	1	3

The age and position group findings, as presented on Table 4.1 above, show that the interview participants are between 31 and 60 years of age.

All in the position of a Diploma or a B-tech qualification. The study was able to include an equal population size of males and females.

Table 4.2 Descriptive statistics of the biographical and demographical groupings of the questionnaire respondents.

Gender	Frequency	%	Cumulative %
Male	65	49,2	49,2
Female	67	50,8	100,0
Total	132	100,0	
Race	Frequency	%	Cumulative %
Black	88	66,7	66,7
Whites	44	33,3	100,0
Total	132	100,0	
Age	Frequency	%	Cumulative %
18-28 Years	36	27,3	27,3
29-49 Years	82	62,1	89,4
50-60 Years	14	10,6	100,0
Total	132	100,0	
Occupation	Frequency	%	Cumulative %
HR office	20	15,2	15,2
Legal office	10	7,6	22,8
Risk and Strategy office	40	30,3	53,1
Communications Office	15	11,4	64,5
Operation office	47	35,5	100,0
Total	132	100,0	
Education	Frequency	%	Cumulative %
Diploma	37	28,0	28,0
Degree	40	30,3	58,3
Honours	38	28,8	87,1
Masters	17	12,9	100,0
Total	132	100,0	

The biographical and demographical data of the survey participants, as reflected on Table 4.2, reveals that 50.8.% of the participants are female and 49.2.% are male. 66.7% was made up of the black population, while 33.3% comprised of the white population. Of these participants, 62.1% are middle age. This seems to be a very young labour force.

All directorates of the organisation have been included in the study, and all the respondents hold a tertiary qualification, putting them in a better position to understand the concepts of the study.

4.2 PROCESS OF QUALITATIVE FINDINGS

Interviews were conducted with seven employees in a managerial positions within the RSR. Seven interviews, which lasted for about 30-45 minutes with each participant, were conducted in two consecutive days after permission was granted. An interview guide, which comprised five questions, was developed in line with the research questions and used to ensure that the interviewees were asked similar questions. Data was transcribed and thematically analysed. Transcripts were coded to find the recurrent patterns and themes in the responses. The qualitative instruments used in this study ensured that rich and in-depth information was gathered from the participants, which enhanced the understanding of the phenomenon and the transferability of the qualitative findings.

4.3 PRESENTATION AND INTERPRETATION OF QUALITATIVE FINDINGS

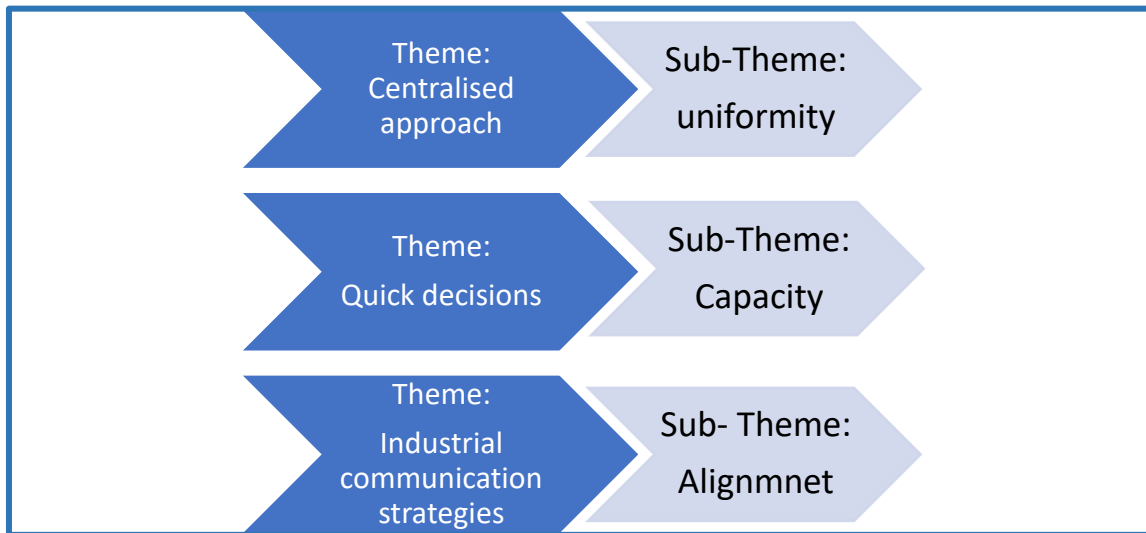
To gain an understanding of whether to adopt centralised communication in a decentralised organisation, the following research questions that are linked with the Questions from the interview guide were defined:

- What is the significance of centralised communication in a decentralising organisation?
- What are the benefits of centralised communication?
- How will centralised communication deliver the RSR's strategic direction?

The Thematic Map for the Study

The data collected was analysed using a thematic analysis. Based on similarities within the collected data, the following thematic map, as presented in Figure 4.1 below, was created that forms the structure of the thematic findings of the study:

Figure 4.1: The study thematic map



4.3.1 Theme: Centralised approach

The thematic analysis revealed a centralised approach to communication as the theme that emerges on Table 4.3 below.

Table 4.3 A representation of the significance of centralised communication themes per research Question 1

Codes	Category	Emerging Theme
Seamless messages	Uniformity	Significance of Centralisation
Transparency		
Effective communication		

The main theme of the significance of centralised communication is presented in one sub-theme that measures how important is centralised communication in a decentralised organisation. It was important to explore the significance of centralised communication in a decentralised entity, and the result revealed important factors of centralised communication as uniformity discussed below.

Sub Theme: Uniformity

It was found that centralised communication is significant in a decentralised organisation as it creates uniformity, integrated communication, and seamless messaging.

When participants were asked the significance of centralised communication in a decentralised entity, the following is what they articulated:

“KG, for me, centralised communication, I think, ensures that communication is seamless. It's in line with the strategic objectives and vision of the organisation, and it's coordinated. The RSR has four main offices: the head office, the Central Region, the Coastal Region and the Eastern region. Because communications are managed or facilitated by the media and Communications department, it just makes it less cumbersome.” – Participant 1.

“Basically, It's really important because what it actually does is it enables fast and effective communication across all the regions, and also it's important for the whole organisation to get the same message so that is there's no ambiguity, and it also establishes what I call a central locus of control because everybody is away as from we actually the, the, the organisation within itself is being managed and controlled.” – Participant 2.

“it ensures that messages are similar to everyone; it enables communicating in one voice, one language. Every member of every employee of the organisation carries themselves in the same manner, which creates consistency, uniformity, and surety for everybody that they meet who is from the other side. They'll tell me the same thing”. – Participant 4

“The significance from me is that when communication is centralised, we have one source for all the RSR-related communication, whether it be is communicated to our investors or the employees or the, you know, the public, it influences how they perceive the RSR because the information is uniform when it comes from a centralised source and also this creates uniformity as well to avoid ambiguity and any confusion”. – Participant 6

“Its significance is that it aligns to the organisational strategy in such a way that now and then you know the organisation has a moment or an opportunity to then integrate every office to be in one and able then to issue out any instruction or communicate. The platform is always there, for the organisation to ensure that its strategic intents are done even though you know you have this centralised versus decentralised.” – Participant 5

“one of the key elements within the mandate of safety is actually communication and clear and transparent communication. So, our vision includes a safe, reliable and sustainable railway operator and to be recognised globally. So, so. So, from that perspective, just from the mere fact that we are focused on safety, centralised communication is key. So basically, our values are one. One of our values is transparency, and it actually includes clear and open communication. Also, if we want to be free, we need to communicate openly and from a centralised base. Also, what I like about centralised communication is that it is really fast, so it also aligns with the value of timely and accountable delivery. No one can say that they got different messages inside.” – Participant 3

Results reveal that centralised communication is significant in decentralised entities for its offering of transparency and seamless messages. It was also mentioned by participants that centralised communication aligns with the RSR strategy of promoting transparency. The literature by Le Cren (2016), on the other hand, reveals that a problem often experienced during projects is that the right hand does not know what the left hand is doing. If there is any communication confusion, it means that the team is unclear as to the exact situation at any point in time. According to Le Cren, centralised communication removes that barrier; the scholar emphasises that with centralised communication, people have access to all communication, plus all relevant files saved in one easy-to-access area. This offers increased transparency and ensures everyone is always on the same page. Fourie (2007) argues that centralised communication creates synergy and consistency in communication and optimises corporate image management in decentralised entities.

Therefore, it can be concluded that centralised communication is deemed as significant in a decentralised organisation by the management of the RSR, and their response aligns with the literature, which also advocated for centralised communication and the benefits it has in an entity.

4.3.2 Theme: Quick decisions

The thematic analysis revealed quick decisions as a theme that merged when the benefits of centralised communication were explored, as per the presentation on Table 4.4 below.

Table 4.4 A representation of quick decisions resulting from centralised communication within the organisation themes per research Question 2

Codes	Category	Emerging Theme
Immediacy	Capacity	Quick decisions

The main theme of quick decisions in centralised communication is presented in one sub-theme, namely, capacity. It was necessary to explore the benefits of centralised communication; one of the benefits was that it allows decisions to be made quicker and respond to the call of immediacy and urgency.

Sub Theme: Capacity

When ask to explain the benefits of centralised communication in a decentralised entity, participants reported that centralised communication has the capacity to allow entities to make quick decisions.

“Centralised communication allows quick, fast decisions to be made. And this builds the good image of an organisation. In this century, people want quick results, and centralised communication allows few people to be involved in decision-making processes, which make the process and the delivery of the outcome quick.” - Participant 1.

From my own perspective, I would actually say centralised communication. One of its benefits is that it can service a decentralised entity very fast without compromising the independence of regions because my view is that all of the regions are able to support the overall mandate of the RSR. Centralised communication does not keep our clients waiting for decisions and responses for long. It makes the time for planning and implementing. - Participant 2.

‘Centralised communication can service RSR by heeding to the call of immediacy and urgency - Participant 6

From the results, it is evident that centralised communication can serve regions and allow regions to exercise some dependency. These results align with the argument raised by existing literature on centralised communication; Samson et al. (2017) allude that centralised communication is effective for large teams as it limits the number of people involved in decision-making. This subsequently results in faster decision-making, which is good for any organisation.

For RSR, this means that although the organisation has a regional footprint across the country, the communications team sitting at the head office can solicit information from the regions and put together an operational plan. Once finalised and approved, the plan can, therefore, be cascaded down to regions and remain monitored at the head office. This practice saves the company time and allows it to respond to the needs of stakeholders timely.

4.3.3 Theme: Industrial communication strategies

The thematic analysis revealed industrial communication strategies within the railway sector as the theme emerges on Table 4.5 below.

Table 4.5 A representation of the Industrial strategies for communication themes per research Question 3

Codes	Categories	Emerging themes
Credibility	Alignment	Industrial communication strategies
Participation		
Seamless		

The main theme of industrial communication strategies reveals that the railway industry aligns its communication strategies with the centralised communication initiative. It was imperative to explore how centralised communication will deliver the RSR’s strategic direction. It was found that it will deliver as the approach used in the railway industry, RSR, similar to the approaches of centralised communication.

Sub Theme: Industrial communication strategies

When asked how centralised communication fits into the RSR strategic communication approach, participants reported that the Rail industry's communication strategies align with the centralised communication approach.

“Yes, I think the industry aligns to centralised communication, uh, centralised communication gives a sense of credibility, I think, to the organisation because, for example, there's one spokesperson, the Chief Executive Officer, the official spokesperson being the executive of communications, Media and Communications. So, it does give it a sense of credibility. It also makes it easier for our stakeholders, even our staff, to know what is the point of reference or point of call in regards to any communications matter or information matter”. – Participant 1

“The industry is inclined to this kind of communication. Centralised communication, that is why I would say yes, definitely there are receptive, especially based on the story, because I remember in the past you actually had one sort of National Rail operator which was now, let's say you, your old SATA, that African transport services and typically and this very sort of what I would call even diversity within the industry and for that reason very similar technologies are being employed. So, the message in itself doesn't have to change across different, let's say, operators' events. So there is definitely a need for one. What I would pull is a seamless message, and you need to get the same message across, especially when you're talking about it. Typically, how our regulatory tools, such as new standards and regulations and so forth, and even based on my own experience when I worked for, for example, PRASA and Transnet, they actually and employees centralised communication across the country within themselves, so, forth, forth name woman, organisational, cultural perspective, they have very, very receptive to the same format of communication.”. – Participant 4

Results reveal that centralised communication has the same aims as the railway industry, and therefore, the industry is receptive to centralised communication. The study intended to advocate for a centralised communication approach in a railway safety entity. Since the railway industry is receptive to centralised communication and shares the same aims, the study can recommend the adoption of Centralised communication to RSR since it will drive the strategic go of the organisation.

4.4 PROCESS OF QUANTITATIVE FINDINGS

An online questionnaire was administered to 140 employees of RSR, with 132 responding, yielding a response rate of 94%. The completion of the questionnaires took about 10-15 minutes. A broad inclusion criterion was used where all the employees were included in the study, which enabled the study findings to be generalisable to the total population. That is to say that the results may be representative of the population. The statistical methods used ensured the reliability and validity of the research findings.

4.5 PRESENTATION AND INTERPRETATION OF QUANTITATIVE FINDINGS

In this section, the findings of the quantitative analysis are presented. Findings present the significance of centralised communication in a decentralised organisation. Seven questions were administered to respondents. Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree. The normal distribution parameters, the mean, mode, and standard deviation were used to describe the data distribution of the selected questions.

4.5.1 The suitability of Centralised communication for a decentralised organisation

The descriptive statistics of the suitability of Centralised communication for a decentralised organisation are reflected on Table 4.6 below.

Table 4.6 Descriptive statistics of the suitability of Centralised communication for a decentralised organisation (n = 132)

	N	Mean (\bar{X})	Median	Mode (<i>Mo</i>)	Std. (<i>SD</i>)	Skew	Kurt
Centralised communication is best suited for a decentralised organisation	132	4,2	4,0	5	1,58	-0,15	-1,62

Strongly agree	73
Agree	38
Disagree	9
Neutral	9
Strongly disagree	3
Grand Total	132

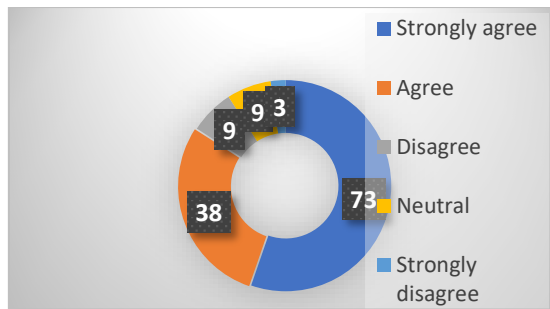


Figure 4.1: Result summary on the suitability of Centralised communication for a decentralised organisation

Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree. As reflected on Table 4.6, the mean score for the item of the suitability of centralised communication in a decentralised organisation ranges from agree to strongly agree (4– 5). Seventy-three people, which brings us to 55% of the respondents, strongly agree with the statement that centralised communication is suitable for a decentralised organisation (\bar{x} = 4.2, Mo = 5).

The results reveal that centralised communication is suitable for a decentralised organisation. Van Riel (2005) suggests that organisations should combine all their communication disciplines under one corporate coordinating body consisting of the managers of the various communication departments. Tixier (2008), however, argues that corporate communication always requires a central department at the highest level. She contends that ‘an integrated and centralised structure is generally perceived as the ideal way of generating synergy and consistency in terms of corporate image management’. Fourie (2007) states that a central and integrated communication department is crucial for creating synergy and consistency in communication and for optimising corporate image management in decentralised entities. In fact, a central department is believed to strongly determine the success of corporate communication under all circumstances.

White and Mazur (2006) argue that the issue of whether communication should be part of this central communication department in railway organisations is not addressed. Therefore, the results bridge this gap in the literature pertaining to railway entities; employees in the organisation believe that centralised communication is suitable for RSR as a decentralised organisation as per the argument of the literature on other industries.

The Network theory also attests to the results of centralised communication being suitable for decentralised entities such as RSR as it speaks of the connectedness of individuals, meaning that stakeholders' sharing of ideas and communicating about issues and activities of the organisation should continue, although their organisation is decentralised. The theory speaks of the control of information, which directly relates to the hierarchy of structure within an organisation and the flow of Information (Littlejohn & Foss, 2011). Therefore, the theory identifies networks and structure and the flow of communication that ought to exist in an organisation as to who is allowed to say what to whom within the organisation. The theory discusses both aspects of centralised and decentralised communication within an organisation, as it speaks of communication links as well as formal and personal networks.

4.5.2 Centralised communication ensures integrated communication.

The descriptive statistic of Centralised communication ensures integrated communication, as reflected on Table 4.7 below.

Table 4.7 Descriptive statistics of Centralised communication creates integrated communication (n = 132)

	N	Mean (\bar{X})	Median	Mode (Mo)	Std. (SD)	Skew	Kurt
Centralised communication ensures integrated communication	132	4,0	4,0	5	1,38	-0,05	-1,02
Centralised communication creates alignment and synergy among decentralised offices	132	4,3	5,0	5	1,42	-0,02	-0,09

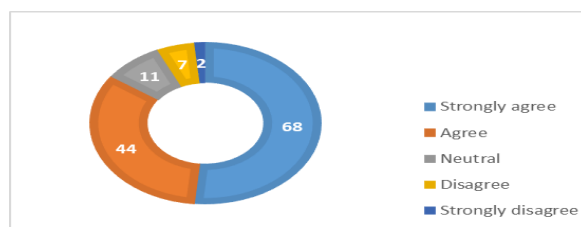


Figure 4.2 Results summary of centralised communication ensuring integrated communication

Field1	Count of Field1
Strongly agree	69
Agree	46
Neutral	8
Disagree	7
Strongly disagree	2
Grand Total	132

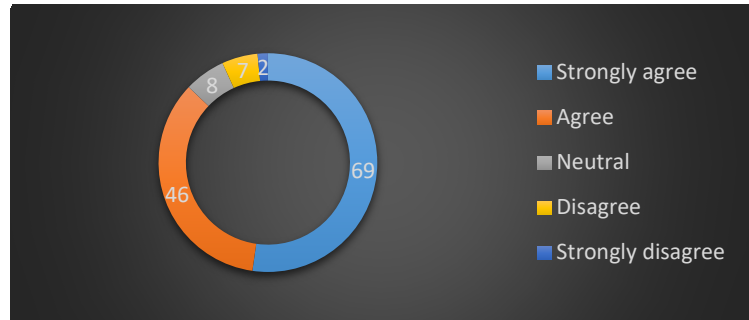


Figure 4.3 results summary of centralised communication creates alignment and synergy amongst decentralised offices.

Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree.

As reflected on Table 4.7, the mean score for the item of centralised communication ensuring integrated communication ranges from neutral to agree (3.5 – 4.0). 52% of the respondents strongly agree with the statement that centralised communication ensured integrated communication ($\bar{x} = 4.0$, $Mo = 5$). The mean score for the item of centralised communication creates alignment and synergy amongst decentralised offices ranges from agree to strongly agree (4.0-5.0). 53% of the respondents strongly agree with the statement that centralised communication ensures alignment and synergy amongst decentralised offices. ($\bar{x} = 4.3$, $Mo = 5$).

The results reveal that centralised communication ensures that messages of the organisation align, integrate or are uniform and that centralised communication creates alignment and synergy amongst decentralised offices. Mattias Le Cren (2016) asserts that centralised communications can be used to avert confusion that can be caused by multiple communication channels. "With some information shared through instant messaging, while other files are sent via email, and yet further conversations completed with texts, it is easy to see how vital communications can get lost in transition," says Le Cren (2016). Therefore, the literature attests to what the results allude to by outlining that centralised communication prevents confusion in the organisation; if it prevents confusion, then it brings about uniformity in messages, which is integrated communication and synergy.

The knowledge synthesis theory views centralisation as a dynamic knowledge management system where various knowledge is posted with the possibility of being continuously synthesised (Alavi & Tiwana, 2002; Yates et al., 2010). Dynamic knowledge management system provides many advantages over the conventional static knowledge management system (McInerney, 2002). The theory emphasises collaboration in knowledge creation, which often leads to a high level of embeddedness (Uzzi, 1997), which is a greater possibility of possessing connections that are interlinked or overlapping with each other. Embeddedness can cause knowledge homogeneity and redundancy due to the similar or repeated information spread across overlapping connections, resulting in low-level collective creativity (Uzzi & Spiro, 2005). The theory emphasises homogenous communication, and that aligns with the results as the theory suggests that centralised communication promotes homogenous communication, and this argument aligns with the results that articulate that centralised communication ensures integrated communication and creates alignment and synergy amongst decentralised offices.

4.5.3 The capacity of the centralised Communications Department to service all decentralised regions and the head office.

The descriptive statistics of the capacity of the centralised Communications Department to service all decentralised regions and the head office are reflected on Table 4.8 below.

Table 4.8 Descriptive statistics of the capacity of the centralised Communications Department to service all decentralised regions and the head office (n = 132)

	N	Mean (\bar{X})	Median	Mode (Mo)	Std. (SD)	Skew	Kurt
The centralised communications department has the capacity to service all decentralised regions and the head office.	132	3,5	4,0	5	1,48	-0,01	-1,52

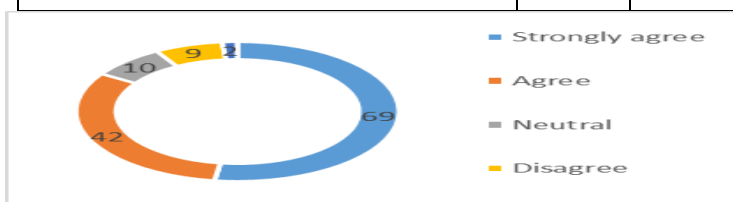


Figure 4.4 summarises the capacity of the centralised communications department to service all decentralised regions and the head office.

Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree. As reflected in Table 4.8, the mean score for the item of the centralised communications department has the capacity to service all decentralised regions, and the head office ranges from neutral to agree (3.5 – 4.0). 52% of the respondents strongly agree with the statement that the centralised communications department has the capacity to service all decentralised regions and the head office. (\bar{x} = 3,5, Mo = 5).

Samson et al. (2017) allude that centralised communication is effective for large teams as it limits the number of people involved in decision-making. This subsequently results in faster decision-making, which is good for any organisation. For RSR, this means that although the organisation has a regional footprint across the country, the communications team sitting at the head office can solicit information from the regions and put together an operational plan. Once finalised and approved, the plan can, therefore, be cascaded down to regions and remain monitored at the head office.

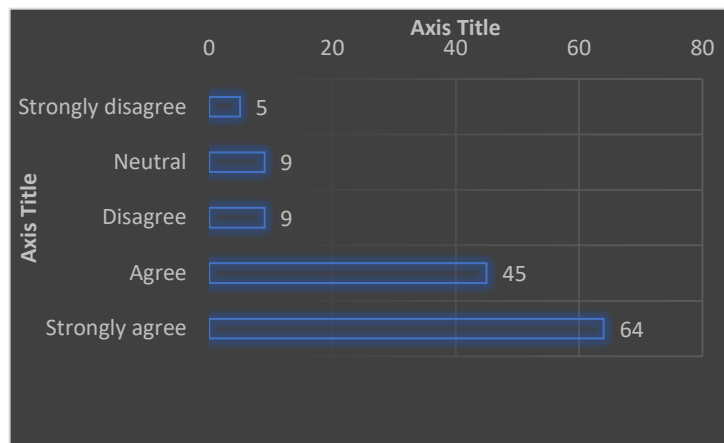
4.5.4 Centralised communication promotes transparency.

The descriptive statistics of centralised communication promoting transparency are reflected on Table 4.9 below.

Table 4.9 Descriptive statistics of the centralised communication promotes transparency (n = 132)

	N	Mean (\bar{x})	Median	Mode (Mo)	Std. Dev. (SD)	Skewness	Kurtosis
Centralised communication promotes transparency	132	4,2	4,0	5	1,67	-0,9	-1,47

Field1	Count of Field1
Strongly agree	64
Agree	45
Disagree	9
Neutral	9
Strongly disagree	5



	N	Mean (\bar{x})	Median	Mode (<i>Mo</i>)	Std. (<i>SD</i>)	Ske w	Kurt
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Grand Total **132**

Figure 4.5 Summary of the centralised communication promoting transparency.

Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree. As reflected in Table 4.9, the mean score for the item of centralised communication promotes transparency ranges from neutral to agree (3.5 – 4.0). 52% of the respondents strongly agree with the statement that centralised communications promote transparency. (\bar{x} = 3,5, *Mo* = 5).

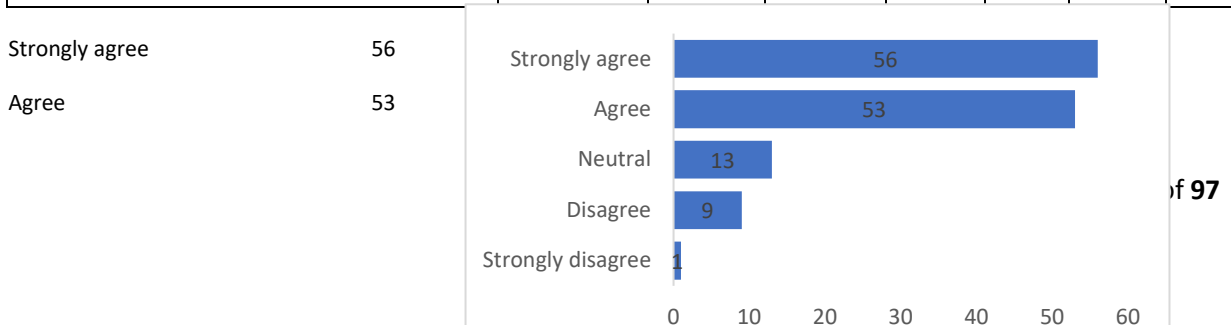
The results reveal that centralised communication promotes transparency. According to Le Cren (2016), a problem often experienced during projects is that the right-hand does not know what the left hand is doing. If there is any communication confusion, it means that the team is unclear as to the exact situation at any point in time. Centralised communication removes that barrier. With centralised communication, people have access to all communication, plus all relevant files saved in one easy-to-access area. This offers increased transparency and ensures everyone is always on the same page.

4.5.5 Information is tailor-made to targeted audiences through central communications.

The descriptive statistic of information that is tailor-made to targeted audiences through central communications is reflected on Table 4.10 below.

Table 4.10 Descriptive statistics of information is tailor-made to targeted audiences through central communications (n = 132)

	N	Mean (\bar{x})	Median	Mode (<i>Mo</i>)	Std. (<i>SD</i>)	Skew	Kurt
Information is tailor-made to targeted audiences through central communications	132	3,5	4,0	5	1,48	-0,01	-1,52



	N	Mean (\bar{x})	Median	Mode (Mo)	Std. (SD)	Skew	Kurt
Neutral	13						
Disagree	9						
Strongly disagree	1						
Grand Total	132						

Figure 4.6 summary of the information is tailor-made to targeted audiences through central communications.

Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree. As reflected in Table 4.10, the mean score for the item of information is tailor-made to targeted audiences through central communications and ranges from neutral to agree (3.5 – 4.0). 40% of the respondents strongly agree with the statement that information is tailor-made to targeted audiences through central communications (\bar{x} = 3,5, Mo = 5).

The results reveal that centralised communication allows information to be tailor-made for a specific target audience. Le Cren (2016) further identifies defining your own audience as a second benefit of using centralised communications. "With centralised communication, it is possible to communicate to the whole company, to a specific team, or a single person", says Le Cren, who continues to say depending on the task or the project, you can create custom audiences to pass specific information to. Only those who need information will receive it. However, you still have the option to chat with anyone or everyone who is accessible or participating in any supporting role.

4.5.6 Centralised communication is time efficient.

The descriptive statistics of centralised communication being time efficient are reflected on Table 4.11 below.

Table 4.11 Descriptive statistics of the capacity of centralised communication is time efficient (n = 132)

	N	Mean (\bar{x})	Median	Mode (Mo)	Std. (SD)	Skew	Kurt
Centralised communication is time Efficient	132	4,3	4,0	5	1,48	-0,01	-1,52

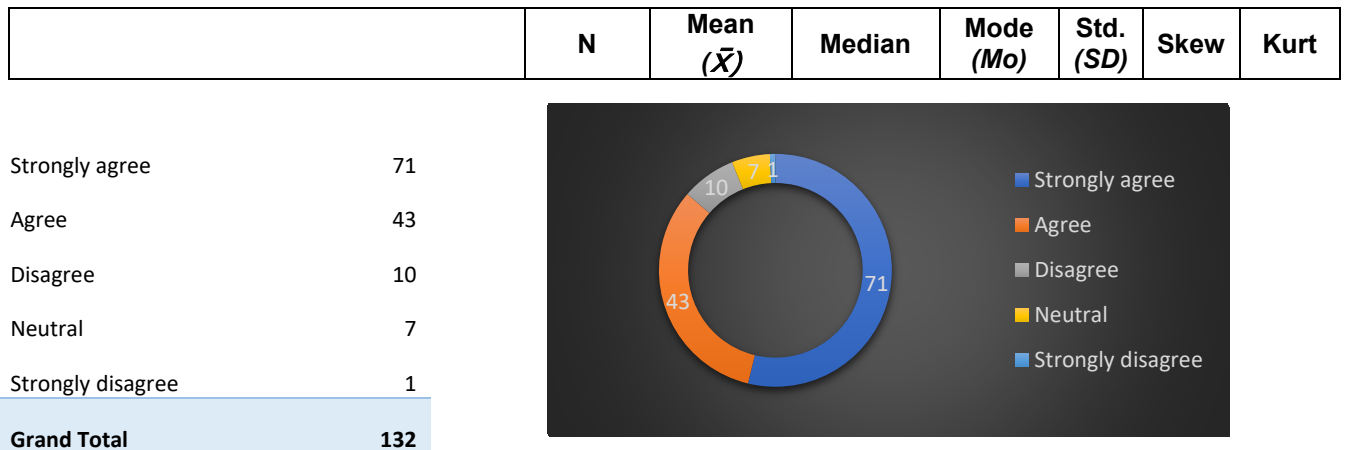


Figure 4.7 Centralised communication is time-efficient

Respondents were asked to indicate their level of agreement with different items using a five-point Likert scale (1 to 5) where one = Strongly Disagree, 4= Agree, and 5 = Strongly Agree. As reflected in Table 4.11, the mean score for the item of centralised communication is time efficient and ranges from neutral to agree (4.0– 5.0). 54% of the respondents strongly agree with the statement that centralised communication is time efficient. ($\bar{x} = 4.3$ *Mo* = 5).

Results reveal that centralised communication saves time. Samson et al. (2017) allude that centralised communication is effective for large teams as it limits the number of people involved in decision-making. This subsequently results in faster decision-making, which is good for any organisation. The literature aligns with the results that centralised communication is time efficient.

Factor analysis of strategies used.

The suitability of the inter-correlation matrix for factor analysis was confirmed with Kaiser-Meyer-Olkin (KMO), which measured 7,1, i.e. above the recommended value of 6 (Hair, Black, Babin & Anderson 2010). Bartlett's Test of Sphericity Chi-square value was statistically significant (χ^2 (561) = 3907.25; $p \leq .001$), therefore indicating the appropriateness of the data for factor analysis.

Four factors that explained about 86.18% of the variance in the factor space were postulated according to Kaiser's (1970) criterion and extracted by means of Principal

Axis Factoring. The rotated and sorted factor matrix was rotated and sorted by means of a varimax rotation. Six factors (suitability, integrated communication, serving decentralised regions, transparency, tailor-made messages and time efficiency) were extracted.

The results obtained from the iterative reliability analysis of the extracted factors are as follows: Factor 1, centralised communication is suitable for a decentralised organisation (measured by 1 item), yielded a Cronbach Alpha of .90, indicating an acceptable reliability. Factor 2, centralised communication ensures integrated communication (measured by two items), yielded an acceptable Cronbach Alpha of .79. Factor 3, centralised communication department can serve decentralised regions (measured by 1 item), yielded a Cronbach Alpha of .70, indicating an acceptable reliability. Factor 4, centralised communication promotes transparency (measured by 1 item), yielded a Cronbach Alpha of .90, indicating an acceptable reliability. Factor 5, centralised communication ensures tailor-made messages (measured by 1 item), yielded an acceptable Cronbach Alpha of .79. Factor 6, centralised communication is time efficient (measured by 1 item), yielded a Cronbach Alpha of .70, indicating an acceptable reliability. There were some cross-loadings between items of the sub-scale depersonalisation and emotional exhaustion.

Reliability analysis of the channels used

The measurement accuracy is a function of two things: (a) the extent to which the items measures what it set out to measure (defined as validity), and (b) the precision with which the variable is measured (defined as reliability) (Malholtra, 2010; Blumberg et al., 2011, p. 344). A summary of the factor analysis procedure and iterative reliability analysis results is presented on Table 4.9 below.

Table 4.9 Summary of the factor analysis and iterative reliability analysis procedure

Item per dimension	Cronbach's Alpha if Item Deleted	Dimension reliability
Centralised communication is best suited for a decentralised organisation	,936	suitability Cronbach's Alpha 0,93
	Cronbach's Alpha if Item Deleted	

Centralised communication ensures integrated communication	,926	Uniformity Cronbach's Alpha 0,92
Centralised communication creates alignment and synergy among decentralised offices	,891	
	Cronbach's Alpha if Item Deleted	
The centralised Communications Department has the capacity to service all decentralised regions and the head office	,989	Serving decentralised regions Cronbach's Alpha 0,99
	Cronbach's Alpha if Item Deleted	Dimension reliability
Centralised communication promotes transparency	,936	Transparency Cronbach's Alpha 0,93
	Cronbach's Alpha if Item Deleted	
Information is tailor-made to targeted audiences through central communications	,926	Tailor-made messages Cronbach's Alpha 0,92
	Cronbach's Alpha if Item Deleted	
Centralised communication is time Efficient	,989	Time efficiency Cronbach's Alpha 0,99

As reflected on Table 4.9, the results obtained from the iterative item reliability analysis of the four scales yielded the following Cronbach Alphas. Suitability Cronbach's Alpha 0,93; integrated communication Cronbach's Alpha 0,92; serving decentralised regions Cronbach's Alpha 0,99; transparency Cronbach's Alpha 0,93; tailor-made messages Cronbach's Alpha 0,92; time efficiency Cronbach's Alpha 0,99 indicating acceptable internal consistency reliability (Pallant, 2016).

4.6 Summary

This chapter presented the results of the qualitative and quantitative data collected. Qualitative data was collected by interviewing seven senior managers from the head office and regions of RSR. Quantitative data was collected through survey questionnaires. One hundred And forty employees of RSR were given the questionnaire, and only 132 were completed and submitted, making the response rate 94%. The main findings that were obtained from this study were presented. Descriptive statistics of biographical and demographical data were presented. This was followed by a presentation on qualitative results using thematic analysis.

Then followed the presentation on quantitative results, which were presented through the frequency distribution table. The results outlined that different age groups and different expertise have been included in the study, giving the results various perspectives in the presented results. The study intended to look at the significance of centralised communication in a decentralised organisation in the Railway Safety Regulator. The results revealed that centralised communication is significant in a decentralised organisation as it creates uniformity, saves time, promotes transparency, and contributes to building a positive image of an entity. The results allowed the achievement of all the objectives of the study, making the study a success. The next chapter presents the conclusion, which is the summary of the entire study, the research findings, and recommendations.

CHAPTER 5:

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this study was to highlight the importance of centralised communication as a winning model for decentralised organisations. This purpose was driven by the problem of complex macro-organisations like the RSR facing a challenge of uncertainty on whether communication should be decentralised or not when their functions decentralise. Theories and literature emphasise the importance of uniformity and seamless functioning of an entity which emanates for a centralized approach. The results also, attest to the arguments made in the current body of knowledge. Results revealed that centralised communication is significant and beneficial as it ensures uniformity and seamless messages, which contribute to transparency and promote a good image of an organisation. Therefore, this chapter presents the summary of the main conclusions derived from the research findings of the empirical study. It presents conclusions derived from interviews as well as survey findings. It also presents the recommendations of the study, followed by the study limitations and possible directions for future research. The following is the summary of the conclusions from both qualitative and quantitative findings, which focused on the main research questions.

5.1.2 The significance of centralised communication in a decentralising organisation.

This research objective required participants and respondents to indicate the significance of centralised communication in a decentralising organisation. The findings revealed that centralised communication plays a significant role in a decentralised organisation. The participants maintained that centralised communication ensures uniformity and seamless messages, which contributes to the good image of an organisation. It was further outlined by participants that centralised communication promotes transparency and is time-effective. The findings are supported by the literature, which states that a central and integrated communication department is crucial for creating synergy and consistency in communication and for optimising corporate image management in decentralised entities.

In fact, a central department is even believed to strongly determine the success of corporate communication under all circumstances (Fourie, 2007). Therefore, the results align with the literature; respondents believe that centralised communication is suitable for RSR as a decentralised organisation as per the argument of the literature. The results of the participants were verified with the results from survey respondents, who found centralised communication to be significant in a decentralised entity.

The mean score for the item of the suitability of centralised communication in a decentralised organisation ranges from agree to strongly agree (4– 5). 55% of the respondents strongly agree with the statement that centralised communication is suitable for a decentralised organisation ($\bar{x} = 4.2$, $Mo = 5$).

5.1.3 The benefits of centralised communication

This research objective required participants and respondents to indicate the benefits of centralised communication in a decentralised organisation. The findings revealed that centralised communication is beneficial to a decentralised organisation. The participants presented that centralised communication saves decentralised organisations time in terms of strategic planning and decision-making of messages that should be communicated; centralised communication enables the organisation to speak in one voice, which eventually builds the integrity of an entity, and centralised communication promotes accessibility to information.

The findings are supported by the literature, which states that centralised communication removes the barrier of confusion that emanates from multiple sources of information; it allows access to all communication, plus all relevant files saved in one easy-to-access area. This offers increased transparency and ensures everyone is always on the same page (Le Cren, 2016). Therefore, the results align with the literature; respondents believe that centralised communication is beneficial to RSR as a decentralised organisation as per the argument of the literature.

The results of the participants were verified with the results from survey respondents, who found that centralised communication benefits a decentralised entity. The mean score for the item of information is tailor-made to targeted audiences through central communications and ranges from neutral to agree (3.5 – 4.0). 40% of the respondents strongly agree with the statement that information is tailor-made to targeted audiences through central communications ($\bar{x} = 3,5$, $Mo = 5$). The mean score for the item of centralised communication is time efficient, ranging from neutral to agree (4.0– 5.0). 54% of the respondents strongly agree with the statement that centralised communication is time efficient. ($\bar{x} = 4.3$ $Mo = 5$). Lastly, the mean score for the item of centralised communication promotes transparency ranges from neutral to agree (3.5 – 4.0). 52% of the respondents strongly agree with the statement that centralised communications promote transparency. ($\bar{x} = 3,5$, $Mo = 5$).

5.1.4 How centralised communication will deliver the RSR's strategic direction

The research question measured how centralised communication can best serve RSR as per question 3. Participants reported that the Rail industry's communication strategies align with the centralised communication approach. Therefore, the centralised communication strategy can deliver the strategic direction of RSR since the centralised approach is similar to the strategic direction of communication employed in the rail safety industry.

5.2.1 Recommendations

This study made the following recommendations:

The study recommends that RSR adopt centralised communication as their communication approach since it aligns with their strategy and is beneficial to their mandate.

5.2.2 Future research directions

The following are the directions for future research:

The significance of centralised communication has been explored; it is imperative that a framework of how centralised communication can be managed in a decentralised be created and suggested in the rail and safety industry.

5.3 Limitations of the study

The following limitations are presented regarding the study's qualitative and quantitative phases.

The researcher aimed to obtain huge amounts of data from both qualitative and quantitative data. However, due to the inclusion of only experts in management positions at RSR, the interview results cannot be representative of the entire population and, therefore, cannot be generalisable.

The researcher embarked on the interview and the distribution of the questionnaire; it would have been a good idea to conduct a document analysis that should further be confirmed with that of the interview and questionnaire. The researcher could not involve himself in the interview setting nor had complete control over interviewees as the interview was online due to South African COVID-19 regulations of social distancing and Unisa COVID-19 research ethics regulations. The researcher also distributed online questionnaires because of COVID-19 regulations instead of paper-based questionnaires, which should have resulted in a high response rate.

5.4 Conclusion

The purpose of this study has been to investigate the significance of centralised communication in a decentralised entity. This study has extensively reviewed the literature on the study topic, indicating that centralised communication can benefit the organisation's integration of communication, save time and contribute to the building of the organisation's image. The main findings of the study were presented. Recommendations were made for RSR, in particular, and organisations globally that might want to embark on adopting the centralised communication approach. The study limitations were also presented as possible future research directions.

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