



Graduate School
of **BUSINESS**
UNIVERSITY OF CAPE TOWN

MPhil

Digital transformation in South African consumer packaged goods companies

A Dissertation

presented to

The Master of Philosophy (MPhil)

Graduate School of Business
University of Cape Town

In fulfilment
of the requirements for the Degree of
Master of Philosophy in Inclusive Innovation

by

Tshepo Ngaleka

NGLTSH003

Feb, 2025

Supervisor: Dr. Mundia Kabinga



The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.



Plagiarism Declaration

COMPULSORY DECLARATION:

1. This dissertation has been submitted to Turnitin (or equivalent similarity and originality checking software) and I confirm that my supervisor has seen my report and any concerns revealed by such have been resolved with my supervisor.
2. I certify that I have received Ethics approval (if applicable) from the Commerce Ethics Committee.
3. This work has not been previously submitted in whole, or in part, for the award of any degree in this or any other university. It is my own work. Each significant contribution to and quotation in, this dissertation from the work, or works of other people has been attributed and has been cited and referenced.

Student number	NGLTSH003
Student name	TSHEPO NGALEKA
Signature of Student	<input type="text" value="Signed by candidate"/>
Date:	03/02/2025

Acknowledgement

I wish to convey my heartfelt appreciation to my supervisor Dr. Mundia Kabinga for his guidance and support during the process of conducting this research till its completion. I am profoundly grateful to the twenty research participants who graciously dedicated their time, shared their knowledge and professional experiences. Without them, this study would have been impossible. Lastly, I appreciate my family, friends and particularly the social group "Fantastic 8", for their support and companionship throughout this demanding and fulfilling academic journey.

Dedication

To my dear wife, I am grateful for your unwavering support and continuous motivation during this academic endeavour. To my parents, I really appreciate your steadfast faith in me and the selfless sacrifices you have made, as they have served as the bedrock of this accomplishment. This work is also dedicated to individuals who actively seek to create a positive impact in the world by unleashing the power of digital transformation, making it an enabler of real human progress.

Abstract

Technology-driven consumer expectations and increasing market competition are compelling Consumer Packaged Goods (CPG) companies to integrate digital technologies into their processes and systems to remain competitive and thrive in the market. However, little is known about how digital technologies affects job losses, employee interactions, organizational strategies and digital transformation strategies in South African CPG companies. This study addresses these gaps by exploring three research questions using the theoretical frameworks, namely Resource Based View, Dynamic Capabilities View and Digital Business Ecosystem to understand the intricacies of digital transformation in the CPG industry in South Africa. The study employed a qualitative research approach and semi-structured interviews were used to obtain data from 20 industry professionals. The main findings showed that digital transformation changed employee roles and responsibilities over time, creating opportunities and challenges. It was also established that the adoption of digital transformation varied as some organizations employed inclusive practices that fostered cooperation and innovation, while others focused on efficiency and increasing productivity. Regardless of the approach, it was evident that excellent leadership based on communication and transparency was found as a crucial feature for successful digital transformation initiatives undertaken by these companies as it boosted employee morale and increased commitment to these initiatives.

Key words: Digital Transformation, Consumer Packaged Goods, South Africa

Table of Contents

Acknowledgement	3
Dedication.....	4
Abstract.....	5
Table of Contents.....	6
List of Abbreviations	8
List of Tables.....	8
List of Figures.....	8
Chapter 1: Introduction to the Study	9
1.0 Research introduction.....	9
1.1 Background to the study.....	14
1.2 Problem statement.....	18
1.3 Research questions	18
1.4 Objectivesof the study.....	19
1.5 Scope.....	19
1.6 Justification	20
1.7 Limitations	22
1.8 Overview of the dissertation.....	22
Chapter 2: Literature Review.....	24
2.0 Introduction to the literature review	24
2.1 Theoretical literature review	24
2.1.1. Resource-Based View (RBV).....	25
2.1.2. Dynamic Capabilities View (DCV).....	27
2.1.3. Digital Business Ecosystem (DBE)	30
2.2 Empirical literature review.....	33
2.2.1. Resource-Based View (RBV).....	33
2.2.2. Dynamic Capabilities View (DCV).....	35
2.2.3. Digital Business Ecosystem (DBE)	39
2.2.4. Types of digital transformation	42
2.2.5. Limitations of theoretical frameworks in the South African context	48
2.3 Summary of the literature reviewed.....	48
Chapter 3: Research Methodology	53
3.0 Methodology introduction	53
3.1 Research approach and strategy	53
3.2 Research design	53
3.3 Sampling	55
3.4 Data collection	60

3.5 Data analysis	63
3.6 Research criteria.....	67
3.7 Ethical considerations	68
Chapter 4: Research findings.....	69
4.1 Introduction	69
4.2 Results	70
4.2.1 Impact of digital tools on employees.....	71
4.2.2 Employee engagement and organisational strategies	77
4.2.3 Digital Transformation strategies	83
4.2.4 Organizational culture and adaptability.....	88
Chapter 5: Research discussion and conclusion	97
5.1 Introduction	97
5.2 Discussion.....	97
5.3 Practical implications.....	105
5.4 Conclusion	108
5.5 Recommendations	111
5.6 Future research directions.....	113
References	115
Appendices	121
Appendix A: Participant Consent Form.....	121
Appendix B: Semi-structured Questions for Participants.....	122
Appendix C: Data Management Plan	124
Appendix D: Research Ethics Approval.....	126
Appendix E: Research participants.....	127
Appendix F: Summary of initials codes and themes	128
Appendix G: Summary of key insights on the impact of digital tools on employees.....	129
Appendix H: Summary of key insights on employee engagement and organisational strategies	134
Appendix I: Summary of key insights on Digital Transformation strategies	137
Appendix J: Summary of key insights on organisational culture and adaptability.....	141
Appendix K: Personal reflections on the research journey.....	145

List of Abbreviations

4IR – Fourth Industrial Revolution

AI – Artificial Intelligence

API – Application Programming Interface

CPG – Consumer Packaged Goods

DBE – Digital Business Ecosystem

DCV – Dynamic Capabilities View

DT – Digital Transformation

ICT – Information and Communication Technology

IoT – Internet of Things

RBV – Resource Based View

List of Tables

Table 1: Comparative analysis of theoretical frameworks

Table 2: Summary of research participants by job type

Table 3: Summary of research participants by experience

Table 4: Summary of insights and code

Table 5: Multinational vs local consumer-packed goods companies.

List of Figures

Fig 1: Industrial revolution map

Fig 2: Dissertation format

Fig 3: Framework for Resource Based View

Fig 4: Framework for Dynamic Capabilities View

Fig 5: Framework for Digital Business Ecosystem

Fig 6: Gender representation of participants

Fig 7: Tenure in current role

Chapter 1: Introduction to the Study

1.0 Research introduction

We are living in an era defined by unprecedented technological advancements that are reshaping industries and societies at an amazingly fast pace. The Fourth Industrial Revolution (4IR) marks this transformative phase, characterized by the fusion of digital and physical innovations that blur the boundaries between the virtual and real world (Anshari et al., 2022). To fully comprehend and appreciate this new world we live in, we must go back in time, starting with the First Industrial Revolution. The First Industrial Revolution commenced in the 18th century and it focused on mechanisation, steam locomotives and the textile industry. The mass production in industries, the invention of electricity and the internal combustion engine propelled us to the Second Industrial Revolution from the late 19th century into the early 20th century. Digital technologies such as computers and smartphones emanated in the Third Industrial Revolution towards the latter part of the 20th century. In the 21st century, the Fourth Industrial Revolution (4IR) builds upon the other three, but fundamentally differs in its scale, scope and rapid speed (Effoduh, 2016).

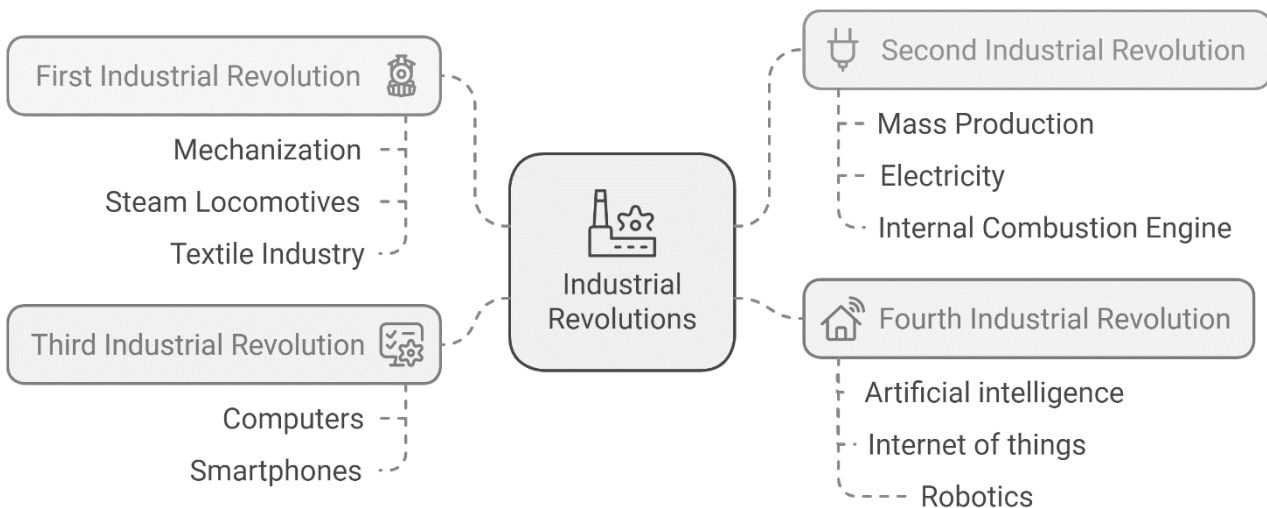


Fig 1: Industrial revolution map

Adapted source (Azionya,2023)

The 4IR is distinguished from its predecessors by the integration of physical, digital and biological systems, which are still potentially and radically transforming industries and communities. This revolution is propelled by technologies such as artificial intelligence (AI), the Internet of Things (IoT), robotics, blockchain and sophisticated data analytics. All these innovations are reshaping company operations, value creation and delivery. These technological improvements are likewise accelerating processes and promoting innovation, hence enhancing interconnectivity and efficiency within industries (Anshari et al., 2022). The 4IR is not confined to affluent economies as it has a capacity to stimulate growth and tackle social issues worldwide. Nonetheless, its influence tends to differ across geographies due to variations in digital infrastructure, legal frameworks and available investment. This worldwide disparity underscores both opportunities and challenges, with places such as Europe and Asia in the forefront, while others, including Africa and Latin America encounter various challenges in harnessing the complete advantages and benefits of the Fourth Industrial Revolution (Azionya, 2023).

As European nations have made significant investments in their digital infrastructure, the 4IR is therefore viewed in this region as a catalyst for innovation and development, hence the adoption of cutting-edge technologies in industries like manufacturing, healthcare, finance and security. (Effoduh, 2016; Azionya, 2023). Its neighbour, Asia, similarly sees the 4IR as a force that is changing the economic landscape of the continent. Technologies like robotics, IoT and AI are being adopted at a rapid pace by countries like China, Japan and South Korea. To keep their competitive edge, these nations are also investing in research and development of advanced chip making technologies to ensure they have advanced components, which are essential for electronic devices (Chen et al., 2021).

In Africa, the 4IR is viewed as an opportunity to outpace conventional development approaches and radically accelerate economic growth. This view has not however materialised for most African

countries due to a lack of digital infrastructure, capital and skills, thereby leaving only a few African nations to have adopted sophisticated technologies (Effoduh, 2016). According to Moloko (2021), South Africa is well placed to benefit from the Fourth Industrial Revolution, but the country also has unique challenges that require special solutions given its history and the economic disparities across the different races. Although the country's digital infrastructure is advanced compared to most African countries, a substantial portion of the population in rural areas still lack access to reliable internet, which is key to connectivity in this digital age (Moloko, 2021). In a country with high unemployment rates, there is another concern about how automation and the adoption of robotics in industries that employ a substantial proportion of the population will affect employment and the economy at large (Mkansi & Landman, 2021). While concerns around job displacement remain valid, digital transformation also brings promising opportunities. New job categories such as cyber security analysts, eCommerce specialists and automation technicians are emerging. Furthermore, digital transformation facilitates greater workplace flexibility, enhances safety through automation in hazardous tasks and introduces efficiencies that support business sustainability (Mkansi & Landman, 2021).

The concerns on how changes and the integration of technology will affect employment have not stopped various companies from implementing digital tools in their business processes and systems. According to Moloko (2021), South Africa's private sector has pioneered sophisticated and novel digital technologies in banking, telecommunications, healthcare and mining amongst other industries. For instance, customers can easily log into their banking application and transact without the need to visit a bank branch. Quick commerce is also another notable example of how digital transformation (DT) has evolved in South Africa. For example, in a click of a button, groceries and takeaway food can be delivered to a customer within an hour and the user experience is very seamless, as the customer has full visibility of the entire fulfilment and delivery process on their mobile application (Mkansi & Landman, 2021; Moloko, 2021).

The financial industry has also accelerated the rate they use data and analytics to evaluate customer behaviour, detect fraud and make data-driven marketing and product development decisions (Accenture, 2020). This industry has also seen a surge in fintech innovations and the rise of startups, offering digital banking services, mobile payments and blockchain technology systems. All these innovations are enhancing transaction efficiency and security. Similarly, the healthcare industry has embraced digital tools such as telemedicine, electronic health records and AI-driven diagnostics to improve patient care and streamline administrative processes. The adoption of digital tools in these sectors also drive the rapid rate of innovation as organisations compete to stay ahead of the curve and continuously innovate (Sutherland, 2020).

On the other hand, the consumer-packaged goods (CPG) companies have implemented digital transformation initiatives at a slower pace. For example, Unilever South Africa has created a pilot project for using digital route to market tools using AI powered forecasting to optimize delivery schedules, while Tiger Brands is piloting blockchain for product traceability in its supply chain (Moloko, 2021). Whilst these are spearheading the industry in the right direction, Moloko (2021) also argues that when compared to the use of technology in other industries, these CPG companies are still in their infancy on digital maturity.

Most of the systems are still built on legacy systems instead of modern cloud-based systems and the rise of using digital tools powered by the 4IR is slowly gaining traction (Mkansi & Landman, 2021). One avenue where this industry has enhanced DT initiatives is in their route to market operations driven by eCommerce, however it can also be argued that without the eCommerce platforms that enable this, the pace of adoption might be slow (Mkansi & Landman, 2021). This highlights the dependency of DT progress in the CPG sector on external technological advancements and infrastructure, suggesting that the industry's ability to adapt may lag without significant investment in

foundational digital capabilities. According to Moloko (2021) the integration of these tools often requires significant cultural and organizational shifts, which can present further challenges to accelerated adoption.

Digital transformation (DT) is defined as the integration of digital technology into all areas of business, fundamentally altering operations, customer engagement and value creation (Westerman et al., 2014). It entails not just technological change but a cultural and strategic shift across the organisation. In the last five to seven years, DT has become more important in all industries and the CPG industry is not exempted from this. According to Moloko (2021), companies are trying to adapt to changing consumer needs and behaviours in this digital age with the aim of being competitive, gaining market share, improving processes and connecting more with consumers through several digital touch points. This study focuses on Consumer-Packaged Goods (CPG) companies operating in South Africa that produce products that are used by consumers on a daily and consistent basis. This includes products such as cosmetics, household items, beverages and food. Companies that produce CPGs tend to have extensive and diverse brand portfolios that are supplied through numerous distribution channels such as pharmacy chains, supermarkets, hypermarkets, ecommerce websites and convenience stores (Helen & Selvi, 2022).

These companies play a crucial role globally and South Africa is no exception as about 15% of South African household monthly income is spent on CPGs (Accenture, 2020; Statistics South Africa, 2023). In South Africa, the CPG industry includes local players such as Portia M, regional players such as Tiger Brands and global giants like Nestle and Coca Cola. The study examines the overall CPG industry with a focus on companies operating in South Africa. The rationale for this selection is to fully investigate the literature gaps discussed in section 1.1 and to provide a focused and holistic analysis that can yield practical insights for CPG companies in South Africa. By concentrating on both

local and global players within the South African context, the study aims to explore the unique challenges and opportunities that arise from operating in a developing market. This includes understanding the impact of socio-economic factors, legislation and consumer behaviour.

1.1 Background to the study

The context of this study is the rapidly changing landscape of the CPG industry in South Africa, where DT plays an increasingly significant role in business processes, systems and competitiveness in the marketplace. This industry is very significant because it encompasses essential products used daily by consumers, such as packaged food items, beverages and household products thus making it a major contributor to the economy. Moreover, about 15% of South African household monthly income is spent on CPGs, highlighting its economic importance (Accenture, 2020; Statistics South Africa 2023). The 15% expenditure on consumer-packaged goods is especially significant when considering the broader economic conditions in South Africa. According to Statistics South Africa (2023), the median household income ranges from R14,000 to R16,000 monthly, with a significant amount of wages designated for essential needs. Given the elevated levels of income inequality, with a significant segment of the population living below the poverty line, this 15% figure underscores the critical role CPGs play in household spending patterns. Moreover South Africa's unemployment rate has remained structurally high for decades due to historical inequalities, skills mismatches and slow economic growth, with recent figures showing youth unemployment exceeding 60% (Statistics South Africa, 2023).

Apart from the unemployment rate, the 15% income spent on CPG products is especially significant when set against the backdrop of the remaining 85% of household expenditure, which typically covers essential living expenses such as food, accommodation and transport. Accommodation alone can consume a substantial portion of income, especially in urban areas where rent and mortgage payments are significant (Statistics South Africa, 2023). Transport costs, which include fuel or public transport

fees represent another substantial category due to long commuting distances in many parts of the country. Utilities such as electricity and water are necessary, but they can be costly, particularly with recurring issues like load-shedding affecting usage patterns and costs. Understanding that 85% of household spending is spread across these essential and sometimes fluctuating categories provides context for why the 15% allocation to CPGs is noteworthy.

In the broader context of South Africa's economy, which struggles with high unemployment and inflation rates, the CPG sector's resilience becomes evident as it remains a steady source of demand and economic contribution, particularly as consumer behaviour shifts towards more value-driven purchases in a challenging economic environment (Moloko, 2021). This study aims to provide a comprehensive understanding of the overarching impact of DT on the CPG industry in South Africa by adopting an aggregated perspective focusing on the whole industry instead of specific business units / departments within CPG companies in South Africa. This approach ensures a holistic examination of the industry, making the research findings applicable across various CPG companies rather than being confined to specific business units. It acknowledges the interconnectedness of the CPG ecosystem and the necessity to address the challenges and opportunities of DT in a way that benefits the entire industry. The choice of this industry is driven by its critical role in the daily lives of consumers and its substantial impact on the South African economy as articulated in the previous paragraph.

The focus of this study is anchored on DT and its impact on the CPG companies in South Africa. The advancement of DT creates numerous opportunities and challenges for CPG companies that are integrating DT into their business operations in South Africa. According to Moloko (2021), one of these challenges is the rise of job displacement caused by the implementation of DT projects in companies, as tasks are automated and digital tools are integrated to make processes more efficient and reduce production costs. Whilst new roles are also created due to DT, it is often the case that the

displaced employees cannot seize those opportunities due to the incompatibility of the skills required for those new roles (Matopoulos et al., 2012).

Despite the growing importance of DT in the CPG industry generally, there is a lack of research on how it is specifically shaping companies in South Africa (Sivakumar, 2022). This study aims to address this gap by exploring the role of DT in shaping the strategies and organisational culture of CPG companies in South Africa. The secondary part of what this study intends to investigate is linked to the research question in the next section. This part aims at uncovering key attributes that make DT initiatives successful and inclusive from a strategic point. This research question was inspired by McKinsey & Company's (2021) view that over 70% of DT initiatives fail because of misalignment in strategy across an organisation. This view is further supported by Kazim (2021) who states that these failures to implement DT initiatives are driven by competing department priorities and performance indicators as well as the reluctant engagement from employees as they fear job displacement that might result from DT initiatives.

To unpack the role of DT in CPG companies in South Africa, the study was underpinned in three theoretical frameworks to lay a foundation to the work that was covered in this dissertation. These theoretical frameworks are: the Resource-Based View, the Dynamic Capabilities View and the Digital Business Ecosystem Framework. Although these frameworks have been explored in previous studies and are universally used to define DT concepts, there is a notable lack of research on their applicability to the CPG industry in South Africa (Scardovi, 2017; Schwertner, 2017). By integrating these frameworks, the study aims to provide a comprehensive lens through which to assess how South African CPG companies leverage resources and capabilities to drive digital transformation. This approach highlights the importance of aligning internal competencies with external market dynamics to navigate the unique challenges of operating in a developing market.

The Resource-Based View (RBV) focuses on the business's unique and valuable resources as its competitive advantage. This perspective is evident when companies leverage their technical infrastructure, skilled employees and proprietary data to gain a competitive edge (Effoduh, 2016). The Dynamic Capabilities View (DCV) focuses on a company's ability to adapt and learn in this digital world. The building blocks are centralized around being adaptable, agile and able to capitalise on disruption. According to this framework, organisations must adapt to innovative technologies, changing customer expectations and shifting business models at a rapid pace to be successful and remain competitive in the marketplace (Soluk & Kammerlander, 2021). Both frameworks collectively highlight the importance of integrating internal strengths with external adaptability. By balancing resource optimization with dynamic learning and responsiveness, businesses can not only navigate the complexities of digital transformation but also thrive in a competitive and constantly changing marketplace.

The Digital Business Ecosystem framework is slowly emerging as the framework of choice for various organizations as it is anchored on the significance of collaboration and interaction within an organization's digital ecosystem, including customers and suppliers (Tsai et al., 2022). An example of this is the increasing collaboration between banks, fintech startups and payment processors to create mutually beneficial digital banking ecosystems (Barney et al., 2021). In the context of this study, the DBE framework is particularly relevant as it highlights the interconnected nature of digital transformation, where success depends not only on internal capabilities but also on external relationships and ecosystem dynamics.

By analyzing how South African CPG companies can build and sustain collaborative ecosystems, this study seeks to uncover practical insights into achieving digital transformation in a resource-constrained

yet dynamic environment. The framework's focus on co-dependence and shared value creation underscores its utility in addressing challenges unique to the South African context, such as economic inequalities and diverse consumer needs. This study aims to fill the gap in literature and contribute to knowledge by analysing how these theoretical frameworks can be applied to the unique context of South African CPG companies. The focus of this study is deliberately narrow, thereby excluding various aspects of DT, such as its impact on profitability, individual business units, or other countries.

1.2 Problem statement

While research on DT is advancing, there is a notable theoretical and empirical gap in understanding its impact within the context of the South African CPG industry. Theoretical gaps include the insufficient application of existing frameworks such as the Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem to the unique conditions of South African CPG companies. Empirical gaps involve a lack of comprehensive studies exploring how DT affects job displacement, employee involvement and strategic alignment within these companies. There is a pressing need to develop and explore strategies that can enhance the success of DT initiatives, particularly within the CPG industry in South Africa. This study aims to address these gaps by providing a focused analysis that offers practical insights and actionable recommendations.

1.3 Research questions

The overarching research question of this study is: How digital transformation is shaping CPG companies in South Africa? This main research question will further be explored through three broad focus areas that form part of the research sub-questions to ensure the study generates rich data and insights.

Research sub-questions:

1. How does DT in CPG companies operating in South Africa affect job displacement / job losses?
2. What are the main drivers and impediments to employee involvement and participation in DT in CPG companies in South Africa?
3. How can consumer packaged goods companies in South Africa develop successful inclusive DT strategies?

1.4 Objectives of the study

1. To investigate the strategies and measures adopted by CPG companies in South Africa to mitigate job displacement / job losses as a result of DT.
2. To examine the main drivers and impediments that hinder employee involvement in the DT process within CPG companies in South Africa.
3. To identify and formulate actionable strategies that enable CPG companies in South Africa to implement inclusive and successful DT initiatives.

1.5 Scope

The scope of this study is to examine how DT is shaping consumer-packaged goods companies in South Africa. In particular, the study explores how DT affects job displacement, the barriers and drivers that foster employee participation in the DT process and how CPG companies in South Africa can develop inclusive DT strategies that are successfully implemented. The study focuses on how CPG companies are utilising digital technologies to transform their operations, with particular attention to how these changes are driving job displacement and workforce restructuring. At its core, the study aims to unpack how CPG companies are leveraging digital technologies to transform their operations, with a particular emphasis on workforce dynamics. This includes examining the extent to which automation and other digital tools contribute to job displacement while simultaneously creating

opportunities for upskilling and reskilling. The analysis seeks to uncover the underlying factors that either hinder or enable employees to actively participate in and adapt to these changes, thereby ensuring a more inclusive transition.

However, this study does not investigate all dimensions of DT. For instance, it excludes the effects of DT on supply chain management, human resources and distribution channels. While supply chain management and HR functions are closely linked to DT, they were excluded due to the study's deliberate focus on cross-functional impacts at the strategic and employee interaction levels. Including all individual domains would have diluted the focus and exceeded the scope of a single Master's study. Additionally, the impact of the digital shift on specific CPG product lines or categories as well as the profitability of particular business units are not examined. Instead, the principal focus is to provide an integrated overview of the broader implications of DT on CPG companies in South Africa and to highlight how DT influences the intersections of technology, workforce and strategic change within these companies.

1.6 Justification

This study evaluates the three established theoretical frameworks namely Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem to ascertain their applicability to CPG companies operating in South Africa. By analysing the limitations and strengths of these models within the South African context, the study may propose a new or hybrid framework better suited to address the unique challenges and opportunities in the CPG industry. The proposed theoretical contribution aims to refine and extend these models by adapting their principles to fit the dynamics of DT in South Africa, where economic, infrastructural and workforce-related factors differ significantly from the environments where these frameworks were initially developed (Schwertner, 2017). While the RBV, DCV and DBE frameworks offer rich conceptual tools, they originate primarily from Global North

contexts and do not fully capture the constraints faced by developing economies. For instance, RBV's focus on resource optimization overlooks the systemic resource scarcities in South Africa (Schwertner, 2017), while DCV presumes a level of strategic agility that may not exist in companies with rigid hierarchies. DBE's emphasis on interconnectivity also assumes a degree of digital infrastructure that is often unevenly distributed across the country (Moloko, 2021). Addressing these limitations in application is critical for building context-appropriate insights. This refinement is capable of enhancing the theoretical understanding of DT in the CPG industry. This can be achieved by introducing context-specific factors, such as the impact of technological inequality and workforce adaptability into established models. As a result, the study aims to address a significant gap in the literature by proposing a framework that better captures the complexities of DT in emerging markets, with a particularly focus on South Africa.

On the empirical front, this study assesses how DT has altered organisational cultures within South African CPG companies, addressing a critical gap in the understanding of how DT drives organizational cultural changes, job displacement and workforce engagement. The research also explores the motivations and barriers to employee involvement during the implementation of DT initiatives, contributing valuable empirical data to the literature. The above phenomenon thereby provides valuable insights into the key organisational changes necessary for successful DT implementation and identify the levers that drive employee engagement and participation. These empirical findings have potential of increasing understanding of how DT initiatives can be structured to minimize resistance and foster collaboration within organizations undergoing digital transitions (Hudson et al., 2018).

Furthermore, this study offers evidence-based recommendations for business leaders on how to navigate the complexities of DT effectively. By providing a nuanced understanding of how DT

influences organisational culture, leadership strategies and employee engagement; the study offers actionable strategies for fostering innovation and managing change within the South African CPG industry. These recommendations are therefore particularly relevant for executives looking to implement successful DT initiatives in this unique context. The study also adds new perspectives into the existing literature by bridging theoretical concepts and empirical findings, offering a comprehensive analysis of the dynamics of DT in the South African CPG industry and contributing to both theory and practice.

1.7 Limitations

One ontological restriction of this study is its narrow focus on the CPG industry in South Africa. Although the CPG industry represents a sizeable portion of the economy, other industries may experience DT differently due to variations in market conditions, operational practices, business structures and processes. Another limitation pertains to the study's holistic approach, as it does not examine individual business units within CPG companies but rather considers the industry as a whole. Consequently, the findings may not fully capture the nuances and specific challenges faced by distinct business units within these organisations. The gender imbalance among participants where women were underrepresented, reflects broader disparities in leadership representation within the South African CPG industry and this skew limits the inclusivity of the findings and warrants further study. Despite these limitations, the study aims to provide comprehensive insights that can inform broader industry practices and strategies for DT in the South African context.

1.8 Overview of the dissertation

After establishing the foundation in this chapter, the dissertation progresses to the second chapter where a comprehensive literature review is provided. In this chapter, literature from previous research studies on DT as well as theoretical frameworks and their potential applications to CPG companies in

South Africa are covered. Chapter 3 explains the research methodology, detailing the research design, data collection methods and approaches employed to address the research questions. Chapter 4 presents the study's findings on how DT is shaping CPG companies in South Africa, with a focus on job displacement, employee involvement and inclusive DT strategies. Chapter 5 discusses the implications of these findings for theoretical frameworks and offers practical recommendations for CPG companies. This chapter concludes with a summary of key findings, contributions to knowledge and suggestions for future research in this field.

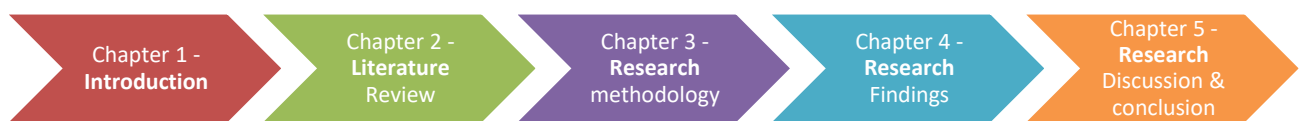


Fig 2: Dissertation formation

Chapter 2: Literature Review

2.0 Introduction to the literature review

Understanding how DT is shaping CPG companies in South Africa requires an in-depth analysis of both theoretical frameworks and empirical studies. These analyses encompass key dimensions such as organisational change, technological integration and workforce dynamics. The theoretical literature provides a foundation for understanding the concepts of innovation, strategy and digital capabilities. The theoretical section explores the relevance and applicability of the Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem in relation to the South African CPG industry.

The empirical literature highlights real-world applications of these concepts and their outcomes in various industries, including the CPG industry. By examining the theoretical and empirical literature, this research assesses how these dimensions interact within South African CPG companies and explore the implications for job displacement, employee engagement and DT strategies. This comprehensive review aims to provide a robust foundation for understanding the complexities of DT in the South African CPG industry, which later help in outlining and discussing the findings.

2.1 Theoretical literature review

Introduction

The Fourth Industrial Revolution has ushered in a transformative era, compelling businesses across various industries to undergo DT and integrate cutting-edge technologies to maintain their competitiveness. Despite this growing inclination towards digitalization, a considerable number of DT initiatives within the CPG industry face challenges and often fail (Schallmo et al., 2017). This literature review examines the theoretical frameworks of Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem to understand the intricacies of DT in the CPG industry in South

Africa and to identify the research gap and address the research questions.

2.1.1. Resource-Based View (RBV)

The Resource-Based View framework has been instrumental in analysing the factors and resources that contribute to the success of DT programmes. This framework posits that a company's unique resources and capabilities are critical in achieving and sustaining competitive advantage. In the context of DT, resources such as digital skills, technological infrastructure and organisational culture are pivotal (Gerhart & Feng, 2021; Firican, 2023). These resources form the foundational element upon which businesses can build successful DT programmes, as they enable companies to leverage technology for enhanced operational efficiency, customer engagement and overall competitiveness.

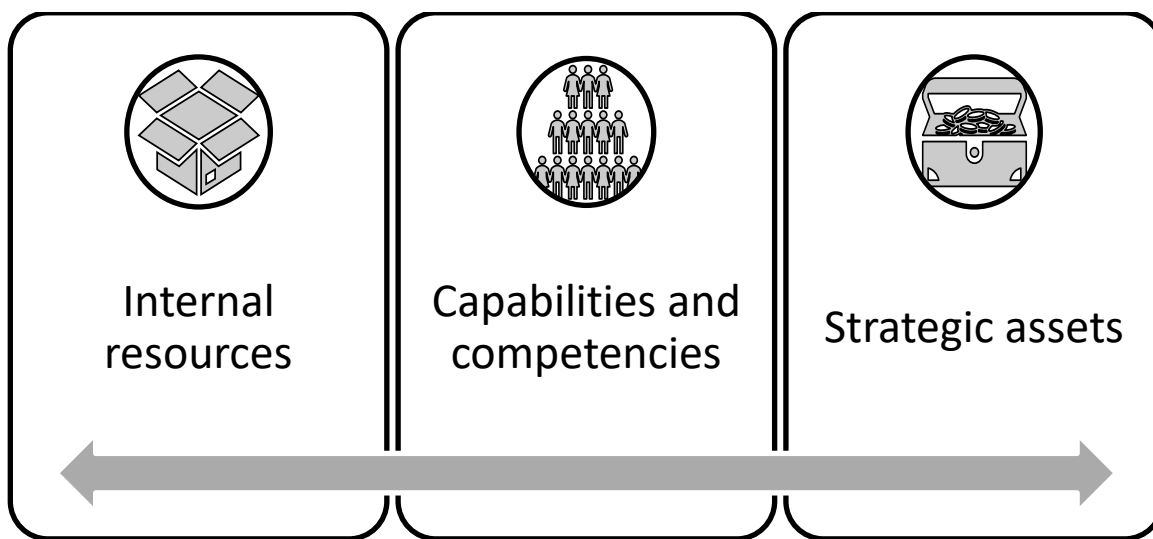


Fig 3: Framework for Resource Based View

Adapted source: Barney et al. (2021) and Gerhart & Feng (2021)

However, RBV has faced criticism for its static perspective on resources, overlooking the dynamic and continually changing nature of digital technologies (Barney et al., 2021; Eisenhardt & Martin, 2000). This critique becomes particularly relevant when examining businesses operating on the platform as a service model, such as Uber. According to Baron (2018), Uber's growth and success hinge on

resources, such as cars and motorcycles, which are not owned by the company itself but by third-party drivers or fleet companies. Uber's business model necessitates a re-evaluation of traditional notions of ownership and control in the context of RBV (Abdelkafi et al., 2019).

According to Abdelkafi et al (2019) just like in many multi-sided platforms, Uber may not own the physical assets utilized in its operations, it exercises significant control over the digital platform and thereby orchestrating interactions between riders and drivers. This hybrid ownership model blurs the boundaries between traditional tangible resources and intangible digital assets, posing novel challenges for strategic management and resource allocation (Baron, 2018; Ferreira et al., 2023). This practical example highlights the necessity of considering the dynamic nature of digital assets and the unique challenges they present in the DT process. Scholars and practitioners alike have called for a more dynamic and holistic approach to understanding DT, one that transcends the confines of traditional resource-based perspectives (Tripp et al., 2023).

Meanwhile, the core digital assets and competencies required for DT have been identified at the global level using RBV. Access to DT, technology infrastructure and digital talent are essential. Companies with these resources and capabilities are better positioned to succeed in DT (Oberländer et al., 2021; Aghimien et al., 2023). The application of RBV in the South African context however presents unique challenges hence the implementation of digital technologies within CPG companies is often constrained by systemic issues such as inadequate digital infrastructure, excessive costs of internet access and a shortage of skilled labour (Moloko, 2021). While large multinational CPG companies (e.g., Unilever and Nestlé) operating in South Africa, have the resources to deploy advanced digital tools, local CPG companies often struggle to access the same level of digital competency, particularly in rural and underdeveloped areas (Moloko, 2021). Another factor that exacerbates this adoption friction is the excessive costs associated with adopting new technologies, which places further pressure on

South African CPG companies, forcing them to prioritize operational efficiencies, often at the expense of workforce reduction (Mkansi & Landman, 2021).

Therefore, understanding how these contextual factors intersect with the RBV framework is crucial for explaining the unique challenges and opportunities faced by companies operating in South Africa. Cultural nuances and market dynamics specific to South Africa may influence the development and deployment of digital assets and competencies, necessitating tailored strategies for DT initiatives. The RBV can be utilised to highlight the value of understanding local markets and complying with regulations to drive DT in the CPG industry in South Africa (Moloko, 2021). While the RBV emphasizes internal resources as the key to competitive advantage, South African CPG companies must also consider external factors such as government policies, economic volatility and digital infrastructure limitations. The ability to leverage digital assets effectively is often contingent on broader ecosystem support, including partnerships with technology providers, financial institutions and educational bodies that can help bridge skills gaps.

2.1.2. Dynamic Capabilities View (DCV)

The term "capability" refers to a company's ability to deploy, integrate and reconfigure resources to achieve a desired objective (Teece, Pisano & Shuen, 1997). Capabilities are distinct from resources because while resources are assets, capabilities are the capacities to make use of them effectively. The Dynamic Capabilities View framework extends the RBV by emphasising the importance of an organisation's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments (Soluk & Kammerlander, 2021). Unlike the static perspective of the RBV, which emphasises the exploitation of existing resources, the DCV highlights the importance of adaptability and agility. In the context of DT, dynamic capabilities such as sensing opportunities, seizing opportunities and reconfiguring assets are critical for sustaining competitive advantage. This

framework resonates particularly well with the dynamic nature of DT as they mostly evolving due to constant innovation and disruption.

DCV emphasises the importance of organisational learning, experimentation and flexibility in navigating the complexities of the digital terrain. Organisational agility, a central point of DCV, enables companies to sense and seize emerging opportunities, respond swiftly to market changes and pivot their strategies in real-time (Soluk & Kammerlander, 2021). For instance, companies following the DCV framework can capitalise on emerging digital trends, such as the rise of artificial intelligence or blockchain technology, by swiftly integrating these innovations into their products, services or business models. The DCV framework identifies core dynamic capabilities crucial for DT, including sensing opportunities, seizing them and reconfiguring resources to maintain competitiveness as shown in Figure 4. These capabilities are essential for companies operating in fast-paced digital environments, where customer preferences and technological landscapes are constantly evolving. The ability to continually adapt and innovate is critical for sustained success in the digital age (Teece, 2007).

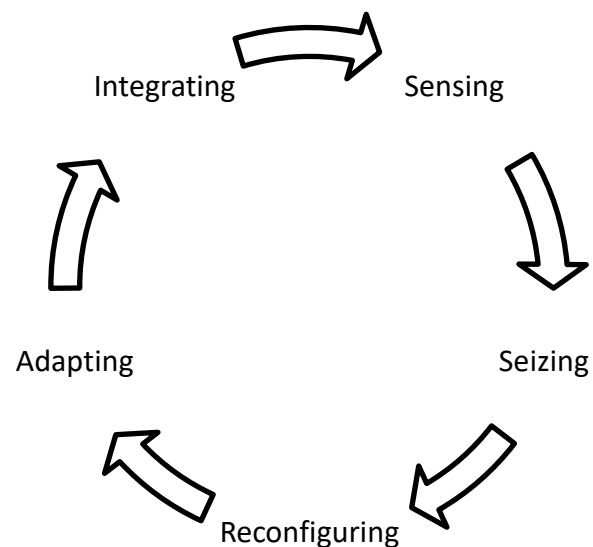


Fig 4: Framework for Dynamic Capabilities View

Source: Skog (2016)

In the South African context, DCV provides a valuable lens to understand how CPG companies can adapt to the digital landscape, seize innovation opportunities and restructure processes to take advantage of digital technologies. For example, some South African CPG companies have successfully adopted digital models such as direct-to-consumer, which are allowing them to bypass traditional retail channels and engage more directly with consumers via eCommerce platforms (Mkansi & Landman, 2021). While these innovations drive growth, they also contribute to job displacement, particularly in traditional retail roles. Dynamic capabilities thus become essential not only for navigating technological disruption, but also for ensuring that workforce realignment is managed in a way that minimizes job losses and promotes inclusivity (Soluk & Kammerlander, 2021).

DCV has drawn criticism for its vagueness and lack of empirical testing. Questions arise on how to innovate effectively within established workflows, hierarchies and standard operating models in companies and to what extent, since unmonitored innovation can evolve into a disastrous move for any business (Eisenhardt & Martin, 2000; Lee et al., 2018). To address these challenges, further empirical research is needed to understand how dynamic capabilities can be effectively cultivated and leveraged within the specific context of the South African CPG industry. This involves examining how companies are identifying and seizing new opportunities whilst changing their fundamental competencies (Maisiri & Van Dyk, 2021).

While both RBV and DCV provide valuable insights into the DT process, they may inadequately capture the nuanced dynamics of DT for CPG companies in South Africa. Specifically, RBV may overlook the importance of inter-organisational ties and network effects inherent in the South African CPG industry. Additionally, the DCV framework might not fully account for the influence of external stakeholders such as clients and suppliers who are also paramount in shaping DT strategies. These limitations highlight the need for a more nuanced approach to capture the complexity and dynamism

of DT within this context (Davis & DeWitt, 2021; Lee et al., 2018). Given the interconnected nature of the South African CPG industry, a more integrative framework such as the Digital Business Ecosystem may provide a holistic view of how digital transformation unfolds.

2.1.3. Digital Business Ecosystem (DBE)

The Digital Business Ecosystem framework provides a contemporary perspective on DT, emphasising the importance of network effects, platform-based business models and inter-organisational linkages (Bharadwaj et al., 2013). The DBE framework is different from traditional models because it focuses on the bigger picture of creating value, rather than just looking at the capabilities of an individual company (Aghimien et al., 2023). It therefore highlights how businesses can fully leverage the benefits of DT by becoming integral parts of larger ecosystems that include suppliers, clients, technology providers and other stakeholders. This interconnectedness allows organisations to fully leverage the benefits of DT, as they become part of an evolving and collaborative ecosystem that drives innovation and creates new avenues for value generation. A key element of the DBE framework is the concept of network effects, which refers to the phenomenon where the value of a product or service increases as more people use it. In the context of DT network effects are critical for the success of platform-based business models.

According to Aghimien et al (2023) in this ecosystem, synergistic partnerships and collaborations are essential for realising the potential of DT. By participating in a well-established digital business ecosystem, CPG companies in South Africa can gain access to a larger network of resources, technologies and expertise, which in turn allows them to remain competitive and adaptable in the constantly changing digital landscape. The platform-based business models of Amazon and Uber serve as tangible illustrations of the DBE framework in action. These companies, by leveraging their platforms to facilitate interactions among a diverse array of participants have transformed traditional

markets and created new sources of value (Tsai et al., 2022).

Despite the successes of companies like Amazon and Uber, the DBE framework has faced criticism for its perceived lack of precise definitions and theoretical support, which may limit its direct applicability in empirical research (Bican & Brem, 2020). Nevertheless, scholars and practitioners continue to recognize the significance of digital ecosystems in driving value creation and innovation in today's interconnected business landscape (Tsai et al., 2022). By fostering collaboration and resource sharing among diverse stakeholders, digital ecosystems enable companies to harness the collective intelligence and capabilities of ecosystem participants leading to enhanced competitiveness and adaptability.

The influence of Amazon and Uber's platform-based models is demonstrated by their capacity to cultivate dynamic ecosystems in which diverse users actively contribute to and reap rewards from the platform. Consumers enjoy improved ease and a wider range of options, while merchants and partners benefit from reaching a larger customer pool (Ukeni, 2022). This interconnection establishes a self-reinforcing loop, wherein the success of one member positively impacts others resulting in ongoing growth and advancement within the ecosystem.

In South Africa, DBE is particularly relevant as companies increasingly collaborate with technology providers, digital platforms and supply chain partners to enhance their DT efforts. For CPG companies in South Africa, this can be seen in the growing use of digital payment solutions such as SnapScan and Yoco, which have transformed the purchasing experience for consumers and enhanced sales for CPG companies in both urban and rural areas (Moloko, 2021). Another example is visible through the partnerships with local universities aimed at providing training to employees on DT topics (Mkansi & Landman, 2021).

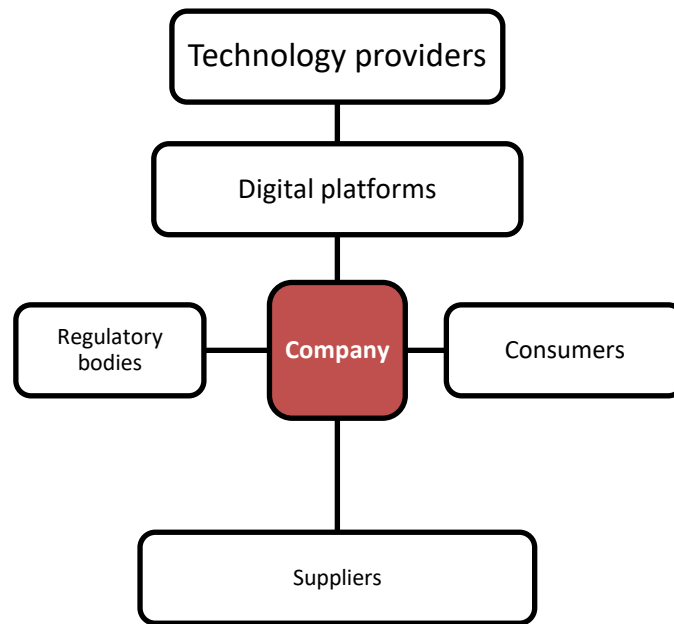


Fig 5: Framework for Digital Business Ecosystem

Source: (Matopoulos et al., 2012)

The DBE framework offers a valuable framework for analysing the dynamics of DT within specific industries, such as the CPG industry. By examining how companies in this industry leverage digital platforms to connect with consumers, suppliers and other partners, researchers can gain insights into the mechanisms driving ecosystem evolution and value creation. Understanding the interdependencies and network effects within digital ecosystems can inform strategic decision-making and facilitate the development of innovative business models that capitalise on emerging opportunities (Tawaststjerna & Olander, 2021).

In addition to its theoretical implications, the DBE model has practical relevance for companies seeking to navigate the complexities of DT. By adopting a platform-based approach, organisations can cultivate vibrant digital ecosystems that foster collaboration, innovation and value co-creation. Achieving success in these endeavours requires careful consideration of ecosystem design, governance

structures and value-sharing mechanisms to ensure equitable distribution of benefits among ecosystem participants. Therefore, further research is needed to explore the nuances of digital ecosystems and their implications for business strategy and organisational management (Tawaststjerna & Olander, 2021).

2.2 Empirical literature review

Introduction

This empirical literature review explores the application of the Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem frameworks in the context of the DT of CPG companies in South Africa. The review delves into the implications of these theoretical frameworks on various aspects of DT including process transformation, business model transformation, organisational transformation and domain transformation. By examining these frameworks in detail, this review aims to offer valuable insights into the localised dynamics of DT within the South African CPG industry.

2.2.1. Resource-Based View (RBV)

While much of the RBV literature is globally grounded, this section highlights how RBV has been applied specifically in South African studies of digital transformation. These examples offer context specific insights into how internal resource constraints and institutional settings affect DT success. The implementation of the RBV framework has uncovered significant discrepancies when contrasting studies conducted in developed and developing regions. The dimensions of the RBV include a broad range of resources, from technical assets (e.g., state-of-the-art digital systems) and high-speed internet to softer, more abstract elements (e.g., organisational culture, leadership capabilities and employee

skillsets). In the global north, studies have predominantly focused on digital tools such as machine learning, blockchain, semi conductors and data analytics as critical drivers of DT success. These tools are seen as essential for enhancing customer engagement, optimising marketing strategies and improving operational efficiencies (Gerhart & Feng, 2021; Singaram & Mayer, 2021). In contrast, research conducted in the global south, with a specific focus on South Africa, has highlighted a diverse set of factors deemed crucial for successful DT.

Key elements such as corporate culture, leadership and technical infrastructure have emerged as significant components in the South African context (Oberländer et al., 2021; Alade & Windapo , 2020). This divergence underscores the importance of contextual factors in shaping DT outcomes. South Africa's unique socio-economic and political context adds further complexity to the study of DT dynamics. As a developing country with a history of inequality and structural challenges, South Africa presents a diverse set of opportunities and obstacles for DT initiatives (Mkansi & Landman, 2021).

Specifically, corporate culture and leadership play a pivotal role in the success of DT initiatives. In South Africa, the legacy of apartheid has left deep-seated socio-economic inequalities that affect organisational dynamics. A supportive corporate culture that embraces change, fosters innovation and encourages continuous learning is essential for successful DT (Oberländer et al., 2021). Crucially, leadership styles that are inclusive, visionary and adaptable can drive the cultural shift needed to embrace DT and processes (Alade & Windapo, 2020).

Technical infrastructure, including access to DT, high-speed internet and reliable power supply are some of the critical factors influencing DT in South Africa. The digital divide between urban and rural areas also exacerbates these challenges as companies in rural areas may struggle with inadequate

infrastructure. Government initiatives aimed at improving digital infrastructure and bridging the digital divide are crucial for enabling widespread DT in the CPG industry (Mkansi & Landman, 2021).

Additionally, the role of government and public policy in facilitating DT cannot be overstated. In South Africa, government interventions such as the National Digital and Future Skills Strategy aim to prepare the workforce for the demands of the digital era. The establishment of dedicated ministries focusing on communications and digital technologies underscores the government's commitment to driving DT (Department of Communications & Digital Technologies, 2020). These initiatives are essential for addressing the structural challenges that hinder DT and ensuring that the benefits of digitalisation are equitably distributed.

2.2.2. Dynamic Capabilities View (DCV)

Sensing opportunities involves identifying and interpreting changes in the external environment that could impact the organisation. In the South African CPG industry, this capability is crucial for recognising the potential of DT to transform business operations and customer interactions. Companies that excel in sensing opportunities are better positioned to anticipate market trends, understand consumer preferences and identify emerging technologies that can drive innovation (Teece, 2018). For example, CPG companies with strong sensing capabilities may recognise the growing influence of eCommerce platforms, enabling them to shift focus toward digital channels that offer enhanced customer reach and engagement to better accelerate their sales and possibly lure new customers.

Beyond eCommerce, South African CPG companies can leverage sensing capabilities to detect shifts in consumer behaviour driven by socio-economic conditions, technological advancements and regulatory changes. The rise of digital payment solutions, for instance, has significantly influenced

how consumers interact with brands, prompting companies to adopt mobile payment integrations and loyalty driven digital platforms. With increasing awareness of sustainability, companies that sense the growing demand for eco-friendly products and ethical sourcing can position themselves ahead of competitors by proactively adjusting their supply chains and product offerings. With the emergence of various technologies companies that effectively sense emerging digital tools, such as AI-powered chatbots, blockchain for supply chain transparency and IoT-driven smart packaging, can gain a competitive edge. These tools not only enhance operational efficiencies but also improve the overall customer experience by offering greater product transparency, personalized engagement and faster service delivery. By continuously monitoring digital innovations and adapting strategies accordingly, South African CPG companies can sustain long-term growth and resilience in an increasingly digital-driven marketplace.

Seizing opportunities which is another core dynamic capability, involves mobilising organisational resources to capitalise on the opportunities identified. For South African CPG companies, seizing opportunities could mean investing in cutting-edge digital tools, adopting innovative business models and fostering a culture of agility and creativity within the organization. Companies that successfully seize vital opportunities are able to enhance operational efficiency, deliver superior customer experiences and unlock new revenue streams through digital channels (Teece, 2018). For instance, the development of direct-to-consumer models, facilitated by DT, allows CPG companies to build more intimate relationships with consumers while bypassing traditional retail channels, providing competitive advantages.

Beyond direct-to-consumer models, South African CPG companies can also capitalise on digital transformation by leveraging data analytics and artificial intelligence to enhance decision-making. The integration of AI-powered demand forecasting tools and machine learning-driven consumer insights

enables businesses to predict market trends and personalise offerings, improving customer satisfaction and inventory management. Furthermore, the rise of digital loyalty programmes and personalised marketing campaigns enabled by data collection from digital touchpoints allows CPG companies to enhance customer retention and brand loyalty in a competitive marketplace. Companies must also seize the opportunity presented by digital payment innovations. With an increasing reliance on mobile money solutions, QR-code-based transactions and fintech-driven credit services, CPG companies can help their strategic sellers like Spaza shops to reduce dependency on cash transactions, enhance accessibility in underserved communities and improve transactional efficiency. Companies that invest in seamless omnichannel payment experiences, ensuring consistency across eCommerce platforms, in-store digital transactions and mobile applications, will gain a significant competitive edge in the South African market.

In the context of DT, this involves investing in digital technologies, developing new business models and fostering a culture of innovation. South African CPG companies that effectively seize opportunities can enhance their operational efficiency, improve customer experiences and create new revenue streams (Teece, 2018). Reconfiguring assets involves transforming organisational structures, processes and resources to align with new strategic directions. This capability is critical for adapting to the dynamic digital landscape and ensuring that the organisation remains agile and responsive. For South African CPG companies, reconfiguring assets may involve restructuring supply chains, adopting agile methodologies and continuously upskilling employees to keep pace with technological advancements (Teece, 2018).

The empirical literature reveals methodological variances in how dynamic capabilities are measured in different regions. Researchers in the global north have predominantly relied on case study methodologies to delve into and evaluate unique business skills that contribute to dynamic capabilities.

This includes scholars such as Helfat and Peteraf (2003) and Eisenhardt and Martin (2000), who developed key pillars of DCV from studies in Silicon Valley and other developed economies, which may not directly translate to emerging markets like South Africa. These case studies provide rich qualitative insights into how organisations develop and leverage dynamic capabilities to drive DT (Teece, 2018). For example, case studies from large multinational corporations provide a deep understanding of how dynamic capabilities contribute to global competitiveness, highlighting best practices in leadership, culture and technology adoption (Soluk & Kammerlander, 2021; Lee et al., 2018)

In contrast, researchers in the global south including South Africa have shown a preference for survey-based assessments of dynamic capabilities (Moloko, 2021). Surveys allow for the collection of quantitative data from a larger sample of organisations, enabling statistical analysis and hypothesis testing. This approach provides valuable insights into the prevalence and distribution of dynamic capabilities across different companies and industries (Teece, 2018). While this approach provides valuable insights into how widespread certain capabilities are and how they correlate with organisational performance, it may not capture the nuanced, context-specific ways in which dynamic capabilities are developed and applied within individual companies. The application of the DCV framework in this study is critical for addressing the research questions, particularly those related to how South African CPG companies can effectively develop and sustain their digital capabilities.

According to Teece (2018), the difference in methodological approaches between scholars in the global north versus global south demonstrates the importance of considering regional and contextual factors when evaluating dynamic capabilities. Relying solely on one method may lead to an incomplete understanding of how dynamic capabilities are utilised in diverse environments. By adopting a mixed-methods approach that combines qualitative and quantitative insights, researchers can develop a more

comprehensive understanding of dynamic capabilities and their role in driving successful DTs in different regional settings. The mixed-methods approach would allow researchers to capture both the granular, company level details through qualitative case studies and broader industry-level trends through quantitative surveys thus providing a fuller picture of how CPG company in South Africa navigate the complexities of DT. The biggest disadvantages of using mixed methods are the complexity involved and the increased time and resources required to conduct the research.

2.2.3. Digital Business Ecosystem (DBE)

For South African CPG companies, leveraging network effects can enhance customer engagement, drive innovation and create new revenue streams (Teece, 2018). For example, a CPG company that integrates with popular eCommerce platforms may experience increased visibility and sales as the platform attracts more users, thereby creating a positive feedback loop that drives further growth and innovation. By harnessing the power of network effects, these companies can scale more rapidly and efficiently in the digital economy. Another compelling example of network effects in South African CPG companies could be the partnership between major CPG companies and mobile payment platforms such as SnapScan and Yoco. These digital payment solutions widely adopted across the country have transformed the purchasing experience for consumers and enabled seamless transactions for retailers. By strategically partnering with these payment platforms, CPG companies will be able to reach broader customer base, particularly in informal and rural markets where traditional banking infrastructure may be limited (Moloko, 2021).

Furthermore, platform-based business models are another cornerstone of the DBE framework. These models, exemplified by global giants like Amazon and Uber facilitate interactions among diverse participants including consumers and merchants. These platforms enable companies to tap into network effects, generating positive feedback loops that stimulate ecosystem-wide development and

innovation. South African CPG companies can adopt platform-based business models to create vibrant digital ecosystems that foster collaboration, innovation and value co-creation (Ukeni, 2022). These platforms can also provide the technological infrastructure needed for companies to explore new business models and improve operational efficiency.

Inter-organisational linkages are crucial for realising the potential of DT. By participating in well-established digital business ecosystems, CPG companies in South Africa can gain access to a larger network of resources, technologies and expertise. These collaborative networks enable companies to leverage external knowledge and capabilities, driving business model experimentation and adaptation (Tsai et al., 2022). For instance, CPG companies in South Africa have increasingly partnered with established eCommerce platforms such as Takealot and Amazon instead of developing their own proprietary online stores. These partnerships not only benefit the CPG companies and the platforms themselves but also extend to other ecosystem participants such as merchants, courier services, payment processors, digital marketing agencies and technology solution providers (Moloko, 2021). By participating in these ecosystems, CPG companies can expand their reach, improve operational efficiency and stay competitive in a rapidly changing market.

While the DBE model offers valuable insights into DT, it also presents challenges related to governance, value-sharing mechanisms and ecosystem design. One of the main challenges is establishing effective governance structures within the ecosystem. Without clear governance frameworks, businesses within the ecosystem may struggle with issues related to control, coordination and decision-making. Effective governance structures are therefore essential for ensuring that the benefits of DT are equitably distributed among ecosystem participants. Moreover, companies must carefully consider value-sharing mechanisms to foster trust and collaboration within the ecosystem (Tawaststjerna & Olander, 2021).

Another challenge relating to value-sharing mechanisms is that ecosystems depend on collaboration between different stakeholders, but for such collaboration to be successful, there must be fair and transparent mechanisms for sharing the value generated. Companies therefore need to develop strategies that foster trust, promote cooperation and ensure that all stakeholders (whether large or small) benefit from the collective growth of the ecosystem. Failing to establish equitable value-sharing mechanisms can result in fragmentation within the ecosystem, reducing its overall effectiveness and diminishing the potential for sustained innovation and growth.

Despite these challenges, the DBE model remains a powerful framework for understanding the dynamics of DT, particularly within the CPG industry. By embracing ecosystem-based strategies and leveraging digital platforms; South African CPG companies can position themselves to drive innovation, improve their market agility and create sustainable value for themselves and their ecosystem partners (Haffke et al., 2016). The DBE framework underscores the importance of collaboration, interdependence and shared value creation in a digital economy. For South African CPG companies to thrive, they must not only invest in digital technologies but also actively participate in and shape the ecosystems that will define their future success.

Ultimately, the application of the DBE framework in this study is essential for addressing key research questions relating to how South African CPG companies can navigate the complexities of DT through collaborative and ecosystem-based strategies. The DBE framework provides valuable insights into how companies can leverage their relationships with other businesses, technology providers and stakeholders to foster innovation and enhance their competitive advantage in the digital economy. The findings from this research are capable of contributing to a deeper understanding of how CPG companies in South Africa can develop effective DT strategies by integrating into broader digital

business ecosystems.

2.2.4. Types of digital transformation

DT can be categorised into four primary types: process transformation, business model transformation, organisational transformation and domain transformation (Kim, 2021; Annacone, 2019). Each of these transformation types plays a critical role in shaping how companies adapt to new digital technologies, respond to market changes and maintain competitive advantage (Annacone, 2019). By examining these transformations through the lenses of RBV, DCV and DBE frameworks, we can gain a comprehensive understanding of how South African CPG companies can navigate the complexities of DT.

Process transformation involves the strategic use of digital technologies to reinvent internal operations. Process transformation in the South African CPG industry is driven by the desire to improve operational efficiency, lower production costs and increase productivity. Digital tools such as data analytics, robotic process automation (RPA) and machine learning (ML) are pivotal in this transformation. However, in most instances, these technologies lead to the automation of several tasks, thus increasing the chances of causing job losses in many companies (Sivakumar, 2022). Before CPG companies can undergo process transformation, it is very crucial to have a plan of implementation as well as an incremental plan to achieve the desired change instead of changing the entire process overnight.

In the context of RBV using the process transformation lens, this involves harnessing advanced analytics techniques to gain a deeper understanding of consumer behaviours, market trends and operational inefficiencies (Gerhart & Feng, 2021). By doing so, CPG companies can optimise their processes, improve decision-making and drive operational excellence. The integration of RPA enables the automation of repetitive tasks, freeing up human capital to focus on value-adding activities, while

machine learning algorithms facilitate predictive analytics and continuous improvement in operational workflows (Pousttchi et al., 2019).

From the DCV perspective, process transformation requires dynamic capabilities such as sensing opportunities, seizing them and reconfiguring assets to adapt to new digital processes. South African CPG companies must therefore develop these capabilities to identify inefficiencies, invest in suitable digital tools and continuously adapt their processes to maintain operational excellence (Teece, 2018). This can be done by using data-driven insights to find inefficiencies, encouraging a culture of innovation and boosting organisational agility. The DBE framework also enhances process transformation by emphasising the importance of network effects and inter-organisational linkages, allowing businesses to leverage external expertise and technologies to enhance their processes, which will ultimately increase their competitiveness and operational efficiency (Tsai et al., 2022).

Business model transformation is another transformation used to categorise DT. It involves re-evaluating and redesigning the fundamental aspects of value generation within an organisation. This type of transformation is exemplified by disruptors like Uber and Airbnb, which have leveraged digital technologies to create entirely new business models (Baron, 2018; Tripp et al., 2023). In the South African CPG industry, business model transformation is driven by the need to stay competitive in an increasingly digital marketplace where the customer is sophisticated and shops both off and online. According to Tripp et al. (2023), this can be seen through the rise of CPG companies ramping up their direct to-consumer model, which allows small retailers and informal traders, who often experience stockouts to order products directly from the company rather than relying solely on distributors. This process not only enhances the CPG company's relationship with smaller retailers but also provides real-time data on consumer demand, enabling those CPG companies to optimise their reach and sales.

On the other hand, the RBV framework highlights the importance of leveraging unique resources and capabilities to develop innovative business models. South African CPG companies can capitalize on their digital competencies, such as data analytics and social media marketing, to create new revenue streams and enhance customer experiences (Ferreira et al., 2022, 2023). The DCV framework emphasises the need for organisational agility and the ability to continuously adapt business models in response to changing market dynamics. Companies must therefore develop dynamic capabilities to experiment with the new business models, iterate based on feedback and pivot strategies as needed (Teece, 2018). The DBE framework underscores the importance of platform-based business models and network effects in driving business model transformation. By adopting platform-based models, South African CPG companies can create digital ecosystems that facilitate interactions among diverse participants, fostering innovation and value co-creation (Ukeni, 2022). More so, collaborative networks and open innovation initiatives enable companies to leverage external expertise and resources to drive business model experimentation and adaptation (Tsai et al., 2022).

The third type of digital transformation focuses on the organisational aspect of any organisation as it encompasses structural changes, cultural shifts and strategic realignments within an organisation. This type of transformation is essential for fostering adaptability, resilience and innovation throughout the organisational ecosystem. In the South African CPG industry, organisational transformation is driven by the need to create a culture that embraces change, fosters innovation and encourages continuous learning (Oberländer et al., 2021). For this transformation to be successful, it requires strong leadership and cross functional collaboration to ensure alignment between digital goals and organisational capabilities.

Relatedly, the RBV framework emphasises the importance of leveraging unique organisational strengths, such as human capital and organisational culture to drive organisational transformation.

Companies must invest in developing digital skills among employees and fostering a culture of innovation to remain competitive in the digital age (Gerhart & Feng, 2021). The DCV framework presents the need for dynamic capabilities to continuously adapt organisational structures and processes to align with new strategic directions. South African CPG companies must develop therefore capabilities to reconfigure assets, embrace agile methodologies and continuously upskill employees to keep pace with technological advancements (Teece, 2018).

The DBE framework further supports organisational transformation by emphasising the importance of inter-organizational linkages and collaborative networks. By participating in digital ecosystems, companies can access external knowledge and expertise, driving organisational innovation and adaptation (Tsai et al., 2022). Effective governance structures and value-sharing mechanisms are also essential for fostering trust and collaboration within the ecosystem, ensuring that the benefits of DT are equitably distributed (Tawaststjerna & Olander, 2021).

Domain transformation involves strategically redefining products and services, allowing companies to diversify their offerings and enter new markets. This type of transformation is essential for maintaining flexibility and adaptability in response to digital disruption. In the South African CPG industry, domain transformation is driven by the need to explore new avenues for growth and innovation. Changing consumer behaviours and preferences necessitate companies to explore new categories and product offerings to ensure they capture the customer and grow their businesses. (Öberg, 2023).

The RBV framework stresses the importance of leveraging unique resources and capabilities to drive domain transformation. Companies must capitalise on their digital competencies to create new products and services, enter diverse industries and engage with new customer bases (Barney et al., 2021). Contrarily, the DCV framework highlights the need for dynamic capabilities to continuously

adapt and innovate in response to changing market conditions. South African CPG companies must develop capabilities to sense opportunities in new domains, seize them and reconfigure assets to align with new strategic directions (Teece, 2018).

The DBE framework underscores the importance of network effects and platform-based business models in driving domain transformation. By adopting platform-based models, South African CPG companies can create digital ecosystems that facilitate interactions among diverse participants, fostering innovation and value co-creation (Ukeni, 2022). Collaborative networks and open innovation initiatives enable companies to leverage external expertise and resources to drive domain transformation and explore new avenues for growth (Tsai et al., 2022).

The literature review highlights the critical factors influencing DT. These factors include corporate culture, leadership, technical infrastructure and dynamic capabilities, thus providing a comprehensive understanding of the localised dynamics of DT in the South African context. The review also addresses the sub-research questions by examining the impact of DT on job displacement, the drivers and impediments to employee involvement and the strategies for developing inclusive DT initiatives. This review identifies the research gap in understanding the unique challenges and opportunities faced by South African CPG companies during their DT journeys, which are further unpacked below.

Empirical evidence from various industries reveals that DT has led to significant job displacement, largely driven by advancements in automation, artificial intelligence and robotics. These technological innovations have increased productivity and operational efficiency but have also replaced certain tasks that were traditionally performed by human workers (Schwertner, 2021). For South African CPG companies, these advancements underscore the importance of acknowledging the need for reskilling and upskilling their workforce to remain relevant in a changing labour market (Hudson et al., 2018). The challenge is to balance the adoption of digital tools while safeguarding employment and ensuring

employees are prepared for future work environments.

Corporate culture, leadership and effective communication are foregrounded as critical drivers of employee involvement in DT initiatives (Alade & Windapo, 2020). A supportive corporate culture that embraces change, fosters innovation and encourages continuous learning is essential for successfully implementing DT strategies (Oberländer et al., 2021). In contrast, concerns about job security, the ability to adapt to new technologies and inadequate training and support can impede employee participation and thereby ultimately hindering the overall success of DT efforts (Kazim, 2021). Addressing these concerns requires transparent communication, leadership that promotes inclusivity and well-structured training programmes to mitigate resistance to change and increase employee engagement.

The literature accentuates the importance strategies that leverage unique organisational strengths, foster a culture of innovation and embrace collaborative networks. South African CPG companies must invest in developing digital skills amongst their employees, fostering a culture of innovation and participating in digital ecosystems to drive sustainable and inclusive DT that co-create value for all stakeholders in the ecosystem (Gerhart & Feng, 2021; Tsai et al., 2022). These strategies are critical for driving sustainable and inclusive DT initiatives that create value for all stakeholders in the ecosystem, from employees to partners and customers.

This empirical literature review has provided an analysis of the factors influencing DT in the South African CPG industry through the lenses of RBV, DCV and DBE frameworks. The review has established the importance of leveraging unique resources and capabilities, developing dynamic capabilities and embracing digital ecosystems to drive successful DT. By addressing the research gap and linking the literature to the research questions, this review provides valuable insights into the

localised dynamics of DT in South Africa and offers practical recommendations for policymakers, businesses and other stakeholders seeking to navigate the digital landscape effectively.

2.2.5. Limitations of theoretical frameworks in the South African context

While the Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem frameworks provide valuable lenses for understanding digital transformation, their applicability in the South African CPG context presents several limitations. Firstly, RBV assumes that companies can accumulate and mobilise strategic resources, yet many South African companies operate under structural constraints such as limited access to capital, skills shortages and regulatory instability. This undermines the assumption that internal resources alone are a sustainable competitive advantage (Ndung'u & Signé, 2020). Secondly, DCV's emphasis on sensing, seizing and reconfiguring presumes a level of organisational agility that is often impeded by hierarchical decision-making, low innovation budgets and legacy systems (Teece, 2007; Moloko, 2021). Lastly, while the DBE framework highlights the importance of inter-organisational collaboration and platform dynamics, South Africa's digital infrastructure and ecosystem maturity remain uneven. This creates a fragmented digital business environment, especially for smaller local companies lacking integration into global platforms (Reuver et al., 2018; Tsai et al., 2022). These contextual limitations warrant a critical, localised application of the frameworks and underscore the need for complementary constructs drawn from African innovation systems or developmental state theory in future research.

2.3 Summary of the literature reviewed

The literature review illustrates that the implementation of DT in organisations represents a multifaceted process that requires the integration of various elements such as organisational skills, business processes and digital technologies. The literature reviewed was thematically analysed using inductive coding to identify recurring themes related to digital transformation within RBV, DCV and

DBE. Sources were selected based on relevance, regional context and theoretical contribution. The RBV stresses the importance of a company's resources in achieving competitive advantage, particularly in the field of digital capabilities (Oberländer et al., 2021; Teece, 2018). The DCV complements the RBV by focusing on how organizations respond to environmental changes through dynamic capabilities, enabling them to adapt and thrive amidst evolving challenges and opportunities (Skog, 2016). The DCV framework highlights the importance of sensing and seizing opportunities and reconfiguring internal competencies to maintain competitiveness in a rapidly changing business environment.

Furthermore, the DBE framework builds on DCV by introducing the interplay of network effects, platform-based business models and inter-organisational linkages. This model underscores the collaborative nature of digital ecosystems, where businesses, technology providers and stakeholders co-create value and drive innovation (Tawaststjerna & Olander, 2021). By leveraging digital platforms and fostering collaborative relationships, companies can enhance their innovation capacity and achieve sustainable growth. This collective integration of internal strengths, adaptive capabilities and external ecosystem dynamics provides companies with a holistic framework for navigating the complexities of DT (Soluk & Kammerlander, 2021).

The RBV framework provides insights into how DT impacts job displacement by emphasising the importance of digital competencies and resources. Companies that successfully develop and leverage these resources are better positioned to navigate DT and thereby potentially reducing the negative impact on jobs (Gerhart & Feng, 2021). However, the RBV framework's static perspective may overlook the dynamic nature of job roles and the need for continuous skill development in response to evolving DT.

The DCV framework addresses the main drivers and impediments to employee involvement and participation in DT by highlighting the importance of dynamic capabilities. Companies that cultivate organisational agility, learning and innovation are more likely to engage employees effectively in the DT process (Soluk & Kammerlander, 2021). The DCV framework emphasises the need for companies to continuously adapt and innovate, which aligns with the dynamic nature of DT in the CPG industry.

The DBE model offers a comprehensive framework for developing inclusive DT strategies by emphasising the importance of network effects, platform-based business models and inter-organisational collaborations. By participating in digital ecosystems, CPG companies in South Africa can leverage the collective intelligence and capabilities of ecosystem participants to drive innovation and value creation (Tsai et al., 2022). The DBE model provides practical guidance for companies to design and implement DT strategies that are inclusive and responsive to the unique needs of the South African market. To synthesise the relevance of the three frameworks, Table 1 compares their respective focus areas, strengths, limitations and applicability to digital transformation in South African CPGs.

Framework	Core Analytical Focus	Theoretical Strengths	Inherent Limitations	Application to Digital Transformation in South African CPG Companies
RBV	Emphasis on company's specific, valuable, rare, inimitable, and non-substitutable resources	Provides a foundational lens to assess internal capabilities such as digital infrastructure, proprietary data and employee know-how; supports strategic positioning through resource control	Lacks sensitivity to dynamic market shifts; underplays external contingencies and systemic constraints typical of developing economies	Useful in identifying company's level digital competencies but limited in environments with high infrastructure inequality and scarce digital skills
DCV	Focuses on a company's ability to integrate, build	Captures temporal and evolutionary dimensions of	Empirical application is challenging due	Enables analysis of how companies adjust to DT via

	and reconfigure internal and external competences in response to environmental volatility	capability development hence it explains strategic flexibility and organisational learning in turbulent digital contexts	to its abstractness as it assumes managerial intentionality and organisational agility, which may not be feasible in rigid, hierarchical structures	reskilling, agile experimentation and digital upscaling hence it is critical for explaining varied organisational responses to platform-based disruption
DBE	Investigates value co-creation through networked digital platforms and stakeholder interdependencies across an ecosystem	Emphasises network effects, platformisation, and digital complementarities and is suitable for modelling co-evolution with consumers, suppliers and manufacturers	Less developed theoretically as it presumes advanced digital infrastructure and inter-organisational trust, often lacking in emerging markets	Ideal for understanding how CPG companies collaborate across the value chain to scale DT across fragmented markets

Table 1: Comparative Analysis of Theoretical Frameworks

Adapted Source: (Skog, 2016)

While the RBV, DCV and DBE offer robust theoretical anchors, each framework presents limitations in the South African context. For instance, the RBV presumes the existence of high-value internal resources such as digital infrastructure and skilled labour, which may not be widely available in local companies (Barney, 1991). The DCV assumes organisational flexibility that may not align with hierarchical structures or unionised environments common in South Africa (Teece, 2007). DBE's focus on inter-company platforms also presumes digital maturity in the ecosystem, which remains fragmented due to inconsistent broadband penetration and limited interoperability between public and private platforms (Reuver et al., 2018).

Importantly, each framework offers a unique perspective on how organisations can harness resources,

adapt to dynamic environments and leverage digital ecosystems to achieve competitive advantage. However, these frameworks also have limitations that need to be addressed through further empirical research. By integrating insights from these frameworks, researchers and practitioners can develop a more comprehensive understanding of the complexities of DT and design effective strategies to navigate the evolving digital landscape in South Africa.

The empirical literature review also explored several types of DT, including process, business model, domain and organisational transformation. Process transformation involves utilising digital technologies like data analytics and machine learning to optimise internal operations (Kondarevych et al., 2020). Business model transformation requires reassessing value generation as seen in companies like Uber and Airbnb and it also emphasises the need for digital competencies and organisational agility (Mattila et al., 2021). Domain transformation involves strategically redefining products and services, allowing companies to diversify their offerings and enter new markets. Organisational transformation entails cultural shifts and strategic realignments to foster adaptability and resilience (Ponsignon et al., 2019).

The literature review also examines strategies in South African CPG companies, highlighting the importance of digital capabilities, organisational culture and inter-organisational connections. It addresses the potential risk of job displacement due to automation and accentuate the need for employee training and support to mitigate these effects (Butt et al., 2024). Effective communication, employee support and addressing job insecurity are crucial for fostering successful DT (AlNuaimi et al., 2022; Fernández-Rovira et al., 2021). The literature highlights significant gaps in addressing the human aspect of transformation, particularly the role of employee support and inclusion, which will be crucial for future research and policy development.

Chapter 3: Research Methodology

3.0 Methodology introduction

This chapter details the research methodology employed to explore the impact of DT on CPG companies in South Africa. It begins with an explanation of the research approach used to explore the main research question and related sub-questions. The research design of the study is also discussed along with the rationale for selecting it. The chapter then outlines the sampling method used to recruit the participants who provided rich data and insights into the research questions. It continues with a detailed description of the semi-structured interview process used to gather data, focusing on specific sub-research questions. The data analysis section explains the coding and analysis techniques used to interpret the data to identify key themes in relation to the research questions. In the latter part of the chapter, the steps taken to ensure the validity and reliability of the research findings are discussed.

3.1 Research approach and strategy

A qualitative research approach was selected for this study, due to its suitability for exploring the complex and dynamic nature of DT in CPG companies operating in South Africa. This approach enabled the researcher to engage with the participants in-depth and to gather detailed insights. Given the focus on understanding the lived experiences, organisational processes and strategic shifts within these companies, a qualitative approach was chosen because of its exploratory nature, which is well-suited for understanding how the participants have perceived and experienced DT in CPG companies operating in South Africa (Anthony et al., 2021).

3.2 Research design

A multi-case study design refers to the use of more than one bounded case to explore a contemporary phenomenon within its real-life context (Yin, 2018). This approach was chosen to allow comparison across different companies and uncover patterns that may not emerge from a single case study. The

research employed a multi-case study design to address all the research questions comprehensively and to investigate multiple CPG companies to gain a deeper understanding within a bounded setting. The case study approach was selected due to its suitability in providing an in-depth exploration of the DT phenomenon within CPG companies in South Africa (Saunders et al., 2019). The cases were carefully chosen to represent a variety of perspectives, sizes and DT strategies within the CPG industry. The criteria for selecting these cases included company size, product categories and the extent of their DT efforts. For example, the study examined companies at various stages of digital maturity, i.e., both early adopters of digital tools and those that were not yet digitally matured as at the time of collecting data from them. The companies who were classified as early adopters was based on their demonstrated use of digital tools prior to industry-wide mandates, participation in pilot initiatives and internal investment in digital transformation units by 2023, as confirmed through industry reports and company disclosures. By selecting cases from different product categories (e.g., food, beverage and personal care), the research was able to capture a holistic view of DT's impact across the industry. The multi-case study design facilitated a comparative analysis across different cases, thus enhancing the robustness of the findings. This approach was particularly effective in examining the varied impacts of DT on job displacement, identifying drivers and impediments to employee involvement and exploring inclusive DT strategies.

To ensure clarity and link the design to the research questions, the cases were used to address specific sub-questions. For the question on job displacement, the cases included CPG companies that had undergone significant DT, allowing for a comparative analysis of how these changes affected job roles and employment within each company. For the question on drivers and impediments to employee involvement, embedded cases within each company were used to examine different departments, providing a detailed understanding of the internal factors influencing employee participation in digital initiatives. For the question on developing inclusive DT strategies, the research compared different

CPG companies to identify best practices and shared challenges in creating inclusive digital strategies, ensuring that diverse approaches were considered. By employing this multi-case study design, the research aimed to generate rich insights into the specific contexts and experiences of various CPG companies in South Africa.

3.3 Sampling

The study employed a theoretical sampling approach, which is inherently tied to theory development as it allows for the purposeful and iterative selection of participants based on emerging data. Theoretical sampling was used to select participants who could offer insights aligned with the study's conceptual frameworks (RBV, DCV and DBE), particularly those in roles related to strategy, technology implementation or employee engagement. While diversity in function was achieved, gender diversity was less balanced due to the composition of roles in the companies studied, which was skewed to more male. The theoretical sampling method is designed not only to gather rich and insightful data but also to refine and develop theoretical concepts as the research progresses (Naderifar et al., 2017; Saunders et al., 2019). In this case, theoretical sampling was used to explore DT within CPG companies in South Africa, aiming to ensure that each participant could provide insights that would further develop the study's emerging themes. The iterative nature of theoretical sampling meant that initial data analysis informed subsequent participant selection, allowing the researcher to focus on areas that required deeper investigation and refine theoretical insights with each round of data collection. According to Saunders et al., (2019), this strategy is particularly useful in qualitative research when building or extending theoretical frameworks based on empirical data, aligning closely with the study's objective to explore how DT influences workforce dynamics and organisational strategies in the CPG industry.

The participants were selected across various organisational hierarchies and departments to capture a

broad range of experiences and perspectives, ensuring a comprehensive understanding of DT dynamics. Theoretical sampling allowed the researcher to select participants from different levels of the hierarchy based on their potential to provide valuable insights into specific research sub-questions (Saunders et al., 2019). The diversity of perspectives gathered from junior staff, middle managers and senior executives enriched the study's theoretical development by revealing how DT had been experienced differently across organisational levels and roles. The final sample of 20 participants was guided by theoretical saturation and the availability of individuals with deep insight into transformation strategies and outcomes. Challenges during recruitment included access restrictions, managerial gatekeeping and employee availability. These factors limited the scope of inclusion to digitally engaged individuals, excluding potentially valuable views from lower-tier employees or those affected by displacement.

South Africa was chosen as the geographical focus of this study due to its status as an emerging market and its unique characteristics within the CPG industry making it an ideal case for theory development. The CPG industry, which accounts for approximately 15% of South African household monthly spending (Statistics South Africa, 2023), holds significant importance within the broader socio-economic landscape of the country. The 15% of household spending on CPGs is significant when viewed alongside the essential items that make up the remaining 85%, which includes accommodation, transport, utilities, healthcare and education (Statistics South Africa, 2023). These categories are non-discretionary and crucial for basic living standards, meaning households must allocate the majority of their income to these essentials first. The fact that 15% of spending is still directed toward CPGs, despite the pressure of meeting these critical needs, underscores the indispensable nature of CPGs in daily life. With over one-third of the population unemployed (Statistics South Africa, 2023) and many families living on minimal wages; a substantial portion of household income is spent on essential consumer goods such as food, beverages and hygiene products.

For lower-income households where disposable income is limited, the 15% expenditure on CPGs represents a major financial commitment, further highlighting the economic role of this industry. In a country with significant socio-economic disparities, this spending also underscores the centrality of CPG companies in both meeting consumer needs and driving economic activity. Furthermore, the CPG industry provides crucial employment opportunities in manufacturing, distribution and retail sectors, contributing to both job creation and economic stability. Therefore, the focus on the CPG industry not only reflects its economic importance but also provides a vital context for understanding how DT may impact employment and overall market dynamics.

For the research sub-question related to job displacement, the participants included individuals who had experienced or had insights on how DT affected job roles and positions within CPG companies in South Africa. These participants were employees who had undergone job changes due to DT. The participants also included managers who had overseen workforce transitions and some experts in human resources who had helped organisations navigate this change. This selection ensured a comprehensive understanding of the impact of DT on employment within the CPG industry.

Similarly, for the sub-question on the key drivers and barriers to employee involvement, the participants included individuals with knowledge of organisational culture and leadership practices as well as employees who had actively participated in DT initiatives. The sample consisted of junior staff, managers and executives from CPG companies in South Africa, thus ensuring that the participants were well-represented. This also yielded diverse perspectives concerning the factors influencing employee engagement with DT initiatives. To ensure a comprehensive analysis, the study focused on four major CPG companies namely Unilever South Africa, Beiersdorf Southern Africa, Tiger Brands and RCL Foods. These companies were selected due to their significant presence in the South African market, their diverse product portfolios and their varying stages of DT. This selection enabled the study

to capture a broad spectrum of DT experiences and strategies within the CPG industry.

The participants from these companies included marketing managers, operations supervisors, sales representatives, human resource managers, finance directors, IT specialists, senior global managers, data leads, DT managers, research and development scientists, procurement officers, digital executives, sales directors, insights managers, product development managers, packaging engineers, distribution supervisors, operators, artisans and digital heads. This diverse participant pool ensured that the study captured a wide range of perspectives on DT within the CPG industry. The criteria for selecting these participants were based on their potential to provide valuable insights into each research sub-question. To ensure a wide range of experiences and perspectives, the participants were selected from different organisational sizes and departments. This included smaller divisions with around 50 employees and larger divisions with up to 1200 employees. This diversity in organisational size helped to understand how DT impacts companies differently based on their scale and structure. The sampling was iterative, meaning that initial findings guided the selection of subsequent participants. This approach allowed the researcher to focus on areas that required deeper exploration and to refine the theoretical concepts as new data emerged. The role classification of the participants is shared in the table below.

Roles	No. of participants
Business executives	6
Blue collar workers	5
Middle and senior managers	9
Total	20

Table 2: Summary of research participants by job type

Source: (Author, 2024)

The gender breakdown of the research participants is shown in the pie chart below. Twelve of the twenty participants were men and eight were women. This distribution offers a variety of viewpoints and insights into the study research questions, with an almost equal gender representation that reflects

the diversity within the CPG industry in South Africa. This semi balanced representation ensures that a diverse range of perspectives and experiences are captured, thus contributing to the richness and depth of the research findings.

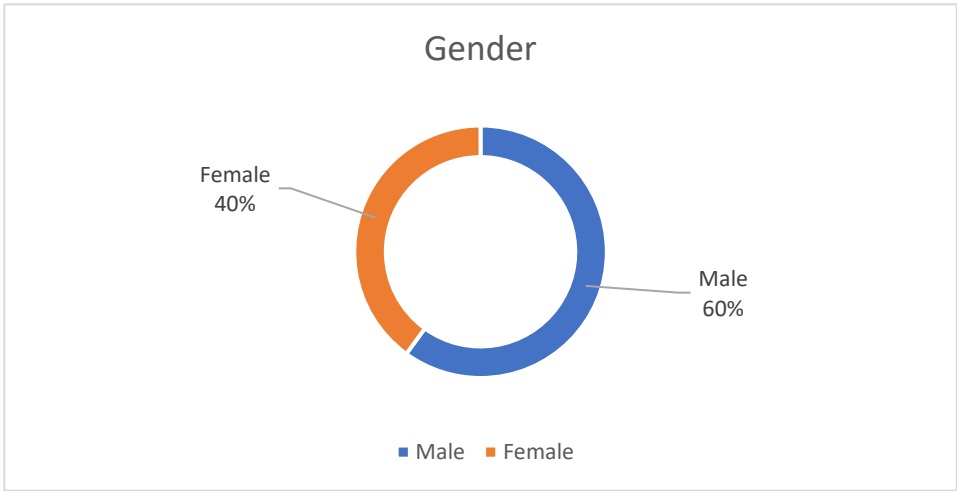


Fig 5: Gender representation of participants

Source:(Author, 2024)

The distribution of participants according to years of professional experience is shown in the table below. Of the twenty participants, two had less than five years work experience, seven had six to nine years and the majority (eleven) had over nine years of experience. This distribution provided a variety of viewpoints and the differences in experience levels, thus enhanced the depth of knowledge gained during the research.

Years of experience	No. of participants
0 – 5 yrs.	2
6 – 9 yrs.	7
> 9yrs.	11
Total	20

Table 3: Summary of research participants by experience

Source: (Author, 2024)

The distribution of participants based on how long they have been in their current positions is shown in the pie chart below. Six participants had been in their current roles for less than two years, indicating that they were relatively recent hires. Furthermore, five participants had been in their roles more than

five years, showing their longer-term commitment to their particular positions. Nine participants had tenure ranging from three to five years, indicating a moderate level of experience in their responsibilities.

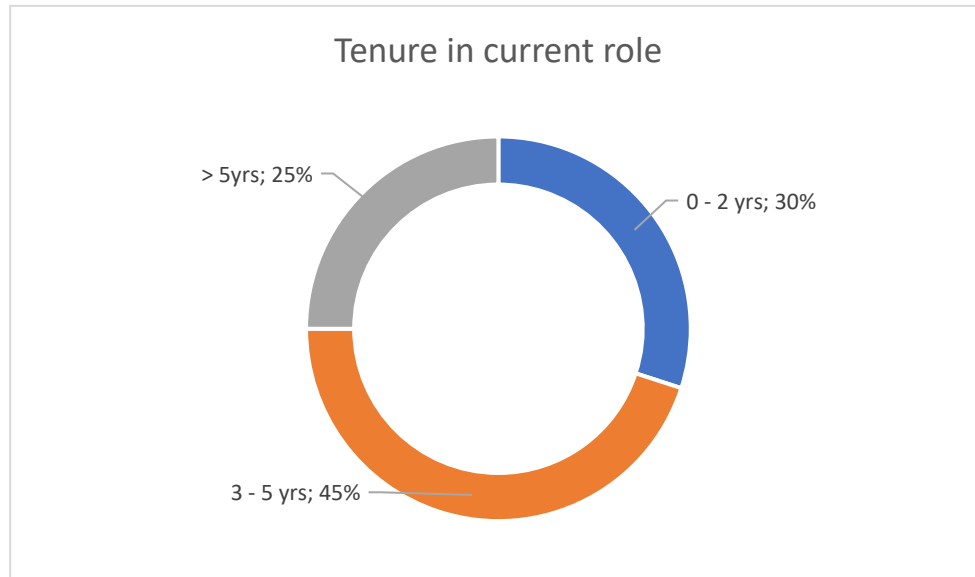


Fig 6: Tenure in current role

Source; (Author, 2024)

The research also defined specific units of analysis for each sub-question. For the main research question, which sought to understand how DT shaped CPG companies in South Africa, the industry as a whole was considered the unit of analysis. This approach was well-suited for the exploratory nature of the research, allowing for a holistic view of the DT phenomenon within the CPG companies in the South African context. For each sub-question, the units of analysis were aligned with the particular focus and scope of inquiry, ensuring that the study comprehensively addressed all aspects of the research objectives.

3.4 Data collection

The data collection process for this study involved conducting semi-structured interviews with purposively selected participants from the identified CPG companies, namely Unilever South Africa,

Beiersdorf Southern Africa, Tiger Brands and RCL Foods. The interviews were designed to gather detailed lived in experiences concerning the impact of DT on job displacement, employee involvement and the development of inclusive DT strategies within these companies. The participants were purposively chosen based on their roles and potential to provide valuable insights into each research sub-question (Etikan, 2016). The data was collected through 20 semi-structured interviews, with each interview lasting approximately one hour. Thirteen of these interviews were conducted online due to logistical constraints and the participants' preferences. Seven interviews were conducted in person and this helped to capture more nuanced non-verbal cues and establish better rapport. All interviews were audio-recorded and detailed notes were taken to ensure accuracy and to capture non-verbal cues. The semi-structured format allowed for flexibility, enabling the interviewer to probe deeper into specific areas of interest as the conversation unfolded (Saunders et al., 2019). This approach was particularly effective in exploring the participants' perspectives on DT and how it impacted their roles and organisations.

The first sub-research question explored the extent to which DT contributed to job displacement within the CPG industry in South Africa. The participants were asked about the extent of job displacement they had observed or experienced in their organisations, the factors contributing to job displacement and the strategies adopted to manage its impact. The interviews aimed to uncover key drivers of job displacement, including the adoption of automation technologies, artificial intelligence and data analytics, which have reshaped and still reshape operational processes and functions within CPG companies. The interviews examined how different companies managed the social and organisational implications of job displacement. The participants reflected on whether their organisations had implemented strategies to mitigate the adverse effects of job displacement such as retraining and reskilling programmes, redeployment of staff, or early retirement initiatives. This sub-research question also focused on how DT impacted various roles across organisational hierarchies, noting

differences in job displacement across managerial, operational and frontline positions.

The second sub-research question investigated the factors that influenced employee involvement and participation in DT initiatives within CPG companies. The participants were asked about the role of organisational culture, leadership, communication, training and support in fostering employee engagement with DT initiatives. The aim was to explore the ways in which these factors either facilitated or hindered employees' participation in digital initiatives across different organisational levels. The third sub-research question focused on the strategies that CPG companies in South Africa adopted to ensure that their DT initiatives were inclusive. The participants were asked about the specific approaches, tools and methodologies used to ensure inclusivity in their DT initiatives. Also, the participants were asked to discuss the mechanisms put in place to ensure that all employees, regardless of their role or skill level, had an opportunity to participate in and some benefits derived from the DT initiatives.

Before each interview, the participants were provided with an overview of the study's objectives and research questions to be explored. The participants were also furnished with the participation consent letter, which they filled to confirm their willingness to participate in the interview process. This preparation ensured that all participants were well-informed and could provide relevant insights. For on-site interviews, the participants were given all the information about the researcher to make the security check-in run smoothly. The online meeting application was also tested to ensure everything was in order before commencing with the virtual interviews. It should be noted that the interviews were conducted either online or in person, depending on the participants' preferences and availability. Each interview session was audio-recorded with the participants' consent and detailed notes were taken to capture both verbal and non-verbal cues. This approach ensured that the data collected was comprehensive and accurately reflected the participants' perspectives. Each research participant was

assigned a pseudonym to ensure confidentiality. This was ensured from the point of data collection and while writing the research findings and discussion chapters.

In two cases where technical difficulties disrupted the interview process, follow-up interviews were conducted to supplement the missing data. These follow-up interviews were essential in supplementing any missing or incomplete data that might have resulted from the technical issues encountered during the initial discussions. By conducting these additional interviews, the researcher was able to gather all relevant information and resultantly ensured that no critical insights were lost. This approach maintained the thoroughness of the data collection process and contributed to the overall robustness and accuracy of the study's findings.

3.5 Data analysis

An inductive approach was employed, where themes emerged from the raw data rather than being imposed beforehand, which is consistent with Braun and Clarke's (2006) reflexive thematic analysis. The data collected from both in-person and virtual interviews was transcribed into text and systematically analysed using a textual analysis software. Transcripts were analysed using NVivo software, which facilitated efficient coding, theme development and pattern recognition across interviews. The software enabled structured data management and visualisation of emerging themes aligned with Braun and Clarke's (2006) reflexive thematic analysis. The data analysis process involved coding the interview transcripts to identify key themes that aligned with each specific research sub-question. After transcription, the data underwent a rigorous review process to ensure accuracy. This step was crucial to maintaining the integrity of the data and facilitating a reliable foundation for the subsequent analysis. The iterative nature of thematic analysis allowed for the emergence of patterns and insights as the data was meticulously reviewed and coded (Kiger & Varpio, 2020). This iterative process ensured that the analysis was thorough and that the themes identified were robust and reflective

of the participants' experiences and perspectives. The research analysis involved a systematic examination of the qualitative data collected through semi-structured interviews with participants from the CPG industry in South Africa. Thematic analysis was employed as the primary methodological approach to identify patterns, themes and diverse perspectives embedded within the interview transcripts. The process began with familiarisation with the data, followed by the generation of initial codes to capture key concepts and ideas. Through an iterative process of coding and theme refinement, the research analysis unveiled rich insights into the impact of digital tools on employees, organisational strategies for navigating DT and the broader implications for workforce dynamics and organisational culture within the CPG industry in South Africa. The analysis, summarised in Table 3, provides a comprehensive overview of these themes, offering critical insights for understanding how DT shapes organisational strategies and employee experiences.

Theme	Code	Patterns and Insights
Impact of digital tools on employees	Changes in Job Roles	Introduction of digital tools led to significant changes in job roles, requiring new skills and altering daily tasks and responsibilities.
	Job Loss Factors	Certain jobs are more vulnerable to displacement due to digital tool changes; unforeseen consequences observed.
	Learning New Skills	Organizations facilitate learning of new skills through specific programmes and resources, with varying levels of employee engagement.
Employee involvement in DT initiatives	Openness to Change	Employees' receptiveness is influenced by factors such as organisational culture and communication; positive attitude toward change cultivated through various efforts.
	Barriers and Challenges	Employee resistance and concerns are common; organisations address challenges through communication, training and change management strategies.
	Engagement Initiatives	Initiatives aimed at engaging employees with new digital tools vary in success; examples of successful initiatives are noted.
	Feedback Mechanisms	Structured processes for collecting and responding to employee feedback exist; instances of feedback leading to changes are observed.
	Initiatives for Inclusivity	Companies undertake various initiatives to ensure inclusivity in DT efforts, with varying employee responses.

Inclusivity in the DT strategy	Planning and Prioritisation	Employee inputs solicited in planning and prioritising DT projects; level of involvement varies.
	Employee Contributions	Employees contribute to ensuring changes work for everyone through valued input and consideration of diverse experiences.
Organisation and culture	Leadership influence	Effective leadership is critical in shaping organisational culture toward embracing DT.
	Change management practices	Successful DT often requires robust change management practices to align organisational culture with new digital initiatives.
	Communication strategies	Transparent and consistent communication helps mitigate cultural resistance and foster a culture of innovation and adaptability.

Table 4: Summary of insights and code

For the first research sub-question, which explored the impact of DT on job displacement, codes encompassed changes in job roles, job loss factors and learning new skills. The analysis showed significant changes in job roles due to digital tools, highlighting the need for new skills and altered daily responsibilities. Job loss factors indicated that certain roles were more vulnerable to displacement and this was the case for repetitive tasks that could be automated. To ensure employees learned a new skill, organisations facilitated skill learning through specific programmes, though engagement levels varied. This analysis was found to be critical for understanding the evolving employment landscape in the context of DT and its implications for workforce dynamics.

In examining the second sub-question, which addressed the barriers and enablers of employee adoption and implementation of DT initiatives, the codes uncovered during the analysis included openness to change, barriers and challenges, engagement initiatives and feedback mechanisms. One of the emerging trends was that employees' receptiveness to change was influenced by organisational culture and communication. In most cases, common barriers included resistance and concerns, which organisations addressed through strategies like communication and training. Engagement initiatives

varied in success with some notable examples. Feedback mechanisms helped to collect and respond to employee feedback, sometimes leading to organisational changes. Although some employees struggled with integrating new tools, others thrived when given proper guidance and resources. This analysis provided valuable insights into the complexities of employee experiences, offering a clearer understanding of how companies can foster greater participation in DT initiatives.

For the third sub-question, which focused on how CPG companies can develop inclusive DT strategies, the codes were focused on initiatives for inclusivity, prioritisation and employee contributions. Companies undertook various initiatives to ensure inclusivity, with differing responses from employees. Employee inputs were solicited in planning and prioritising projects, though the level of involvement varied. Many employees contributed to making changes work for everyone by providing valuable input and considering diverse experiences. The findings indicated that companies, which emphasised inclusivity in their strategies tended to experience smoother transitions and more widespread adoption of DT. While some companies faced challenges in ensuring equal participation, others demonstrated success through adaptive and inclusive approaches. By integrating diverse perspectives, some organisations were able to create more adaptive and resilient strategies that addressed a wide array of needs, leading to more sustainable DT outcomes.

Leadership influence, change management practices and communication strategies in facilitating DT were the codes for the theme on organisation and culture. Effective leadership emerged as crucial in shaping a culture that embraces DT. Robust change management practices were also identified as necessary to align organisational culture with new digital initiatives, ensuring smooth transitions. Moreover, transparent and consistent communication was highlighted as vital for mitigating cultural resistance and fostering an environment of innovation and adaptability. This combination of strong leadership, proactive change management and open communication was essential for creating an

environment that encouraged innovation, adaptability and long-term success in DT efforts.

3.6 Research criteria

To ensure the validity and reliability of this study, several rigorous measures were implemented throughout the research process. A robust research design, comprehensive methodology and a carefully considered sampling strategy were employed to mitigate potential biases and enhance the credibility of the findings. Despite the relatively small sample size of 20 participants, the diversity of roles and perspectives ensured that the study captured a broad range of experiences. However, during two interview sessions, technical difficulties resulted in intermittent disruptions and data discrepancies. To maintain the integrity of the data, follow-up interviews were conducted to supplement and clarify the missing information from the initial sessions. This ensured the completeness and reliability of the collected data.

To further strengthen the validity of the findings, multiple sources of data were incorporated. Alongside primary data from interviews, company documents were analysed to provide additional context and corroborate the findings. This triangulation of data sources enhanced the robustness of the research and allowed for a more comprehensive understanding of DT processes within CPG companies. Recognising the potential for researcher bias, reflexivity was a critical component of the research process. The researcher actively engaged in reflexive practices, continuously reflecting on personal biases and preconceptions that could negatively influence the study. By maintaining a high level of self-awareness and critical reflection, the study aimed to minimise the impact of these biases on both the methodology and the interpretation of the results. This commitment to reflexivity ensured that the findings accurately reflect the complexities and realities of DT in the South African CPG industry.

3.7 Ethical considerations

Ethical clearance was obtained from the University of Cape Town's Ethics Committee (Ref: COM/00558/2024). Participants were informed of the purpose of the study and their right to withdraw at any stage. Informed consent was obtained prior to the interviews. All participants were assigned pseudonyms and identifiable company information was omitted to ensure anonymity and confidentiality.

Chapter 4: Research findings

4.1 Introduction

This chapter presents the research findings, structured into an introduction, results and conclusion, outlining how DT is shaping consumer packaged goods (CPG) companies in South Africa. By exploring the research questions, the chapter reveals the nuanced shifts in organisational structures, workforce dynamics and strategic imperatives. It is important to note that women were underrepresented in the sample, reflecting both broader gender imbalances in leadership roles within the CPG industry and potential limitations in recruitment reach. This gender skew may influence the range of perspectives captured and warrants further inquiry. This study analyses the relationship between technology adoption, organisational culture and the strategic element of DT within the CPG industry in South Africa. All these help in offering empirical evidence and theoretical insights to inform strategic decision-making and organisational evolution. Unlike previous studies that address DT in broader sectors, this study uniquely situates digital transformation within the lived experiences of employees in South African CPG companies. The layered comparison across companies also highlights differences in how inclusive or exclusive DT practices manifest in practice which highlights insights that have not been widely documented in the local literature.

To further illustrate the divergent approaches to digital transformation between local and multinational consumer packaged goods companies, Table 5 below summarises key comparative dimensions. These highlight differences in strategic orientation, resource access, technology use, cultural readiness and ecosystem integration. These distinctions support the finding that multinational companies tend to have more structured and resource-intensive digital transformation strategies, while local companies face greater constraints and may prioritise operational efficiency over strategic innovation. This has

implications for policy, support mechanisms and knowledge-sharing within the South African digital ecosystem.

Dimension	Multinational CPG Companies	Local CPG Companies
Strategic Orientation	Globally aligned digital strategy cascaded from HQ, often linked to international innovation mandates	Primarily reactive digitisation focused on cost-efficiency and local market needs.
Resource Availability	Access to global tech budgets, specialized teams and third-party vendors across markets.	Limited digital budgets, reliance on local integrators and lack of in-house DT specialists.
Technological Adoption	Lead in piloting AI, blockchain, cloud solutions, following corporate best practices.	Typically adopt only essential technologies e.g., ERP
Workforce Capabilities	Built-in digital training mechanisms via global talent networks and corporate learning and development platforms.	Upskilling through project-based or external training, often informal and less systematic.
Cultural Readiness	Pro-change culture, supported by global narratives and cross-functional digital champions.	Cultural inertia, driven by hierarchical structures and traditional management styles.
Ecosystem Engagement	Active partnerships with eCommerce platforms, fintechs and log-tech solutions across borders.	Partnerships are transactional and limited to local suppliers or service providers.
Regulatory Adaptation	Able to interpret and comply with global and local digital regulations quickly.	Slower adaptation, primarily reactive rather than informing policy dialogue.

Table 5: Multinational vs Local CPG companies.

Adapted Source: Ray (2025)

4.2 Results

To preserve the authenticity of participants' voices, direct quotations were used extensively. However, efforts were made to avoid overrepresentation by any one participant. Quotes were selected for thematic relevance and clarity whilst repetition was limited by paraphrasing overlapping insights. While some longer quotations were retained to convey nuance and emotion, care was taken to present a diversity of voices across the dataset. The thematic analysis of the research findings delved deep into the narratives shared by the participants from the CPG industry in South Africa, uncovering a rich source of insights. These insights not only shed light on the multifaceted impact of digital tools on

employees but also revealed the intricate strategies employed by organisations to navigate the complex terrain of DT. Beyond the immediate ramifications for individual job roles and skillsets, the analysis unearthed broader implications for workforce dynamics and organisational culture within the CPG industry in South Africa.

4.2.1 Impact of digital tools on employees

To address the first sub-research question, the participants shared that the impact of digital tools on employees within the CPG industry in South Africa extends beyond operational efficiencies and productivity gains to encompass a wide range of implications for organisational culture, workforce dynamics and employee experiences. When asked about their perceptions of DT, participants showed a mix of enthusiasm and apprehension. While some praised automation for reducing repetitive tasks, others expressed concerns over surveillance and job security. These mixed reactions underline the importance of addressing employee awareness and acceptance as a precondition for successful transformation, echoing concerns raised by Oberländer et al. (2021) on digital readiness. Participant 1 emphasised the transformative role of data analytics tools in revolutionising consumer behaviours understanding. She stated that:

“The integration of data analytics tools has not only enhanced our understanding of consumer preferences but has also enabled us to anticipate market trends and tailor our marketing strategies accordingly. This has empowered us to deliver more targeted and personalized campaigns, ultimately driving higher engagement and conversion rates.”

In addition to automation technologies, Participant 2 pointed out the positive impact of digital tools on inventory management. He elaborated on this point by saying, *“Digital inventory management systems have significantly streamlined our operations by providing real-time visibility into stock levels,*

demand forecasts and supply chain logistics. This has enabled us to optimise inventory levels, reduce stockouts and enhance overall operational efficiency". Participant 8 also shared insights on how digital tools had transformed internal decision-making processes thus: *"Analytics tools have become crucial in shaping our operational strategies. By analysing real-time data, we've been able to adjust our production schedules to meet consumer demand more effectively, which has reduced waste and improved our overall productivity."*

However, while Participants 1, 2 and 8 highlighted the transformative effects of digital tools on their roles and responsibilities, other participants shed light on the potential challenges and negative consequences associated with digitalisation. Participant 3 expressed concerns about the depersonalisation of customer interactions resulting from the widespread adoption of DT in sales and marketing. He reiterated how automated communication channels and online platforms have diminished the opportunity for face-to-face interactions with clients, leading to a sense of disconnection and loss of rapport by saying that: *"The more we rely on digital tools, the less personal our interactions with customers become. Automated emails and chatbots may be efficient, but they lack the human touch, which is essential for building lasting relationships."*

Similarly, Participant 13 raised the issue of over-reliance on digital tools and its effect on employee skills by stating that:

"Automation has definitely made our jobs easier, but I sometimes worry that we're losing our ability to think critically and problem-solve without the help of technology. It's important to strike a balance between leveraging tools and maintaining essential human skills."

Participant 10 echoed these sentiments by emphasising the impact on team dynamics thus:

"In some cases, digital tools have replaced traditional collaboration methods. We now communicate primarily through digital platforms, which has reduced face-to-face interactions. While this is efficient, it sometimes leads to misunderstandings and a lack of personal connection within the team."

Some participants also highlighted the pressure digital tools create on employees to constantly adapt and learn new systems. Participant 4 for instance remarked that: *"We're constantly having to learn new software and tools, which can be overwhelming. It's a lot to take in and some employees struggle to keep up with the pace of technological changes."* Participant 6 added that:

"While digital tools help us become more efficient, they can also create a sense of job insecurity. With automation handling many of the tasks we used to do manually, there's always the fear that our roles could become redundant. I have seen this first hand with my current employer, where automation led to over 100 retrenchments. "

Similarly, Participant 4 explicated the potential for job displacement and workforce restructuring arising from the automation of HR processes and the implementation of digital HR systems. This participant said that:

"The automation of HR functions has streamlined a lot of what we do, but there's a real concern that these efficiencies come at the expense of jobs. We need to ensure that while we gain in productivity, we don't lose the human touch and that employees feel secure in their roles. When I started, my function had 23 people, now it has been reduced to only 11 of us."

Participant 16 likewise echoed this sentiment, adding that: *"There's always this looming fear that automation will make certain roles obsolete. The key is finding a way to integrate these systems without alienating employees."*

These perspectives indicate the importance of balancing technological advancements with human considerations. Participant 7 echoed the need for proactive reskilling thus: *"As we introduce new digital tools, it's imperative that we offer reskilling programs so that employees can adapt and evolve. It's about creating opportunities rather than letting the technology leave people behind."* These insights suggest that while automation brings efficiency gains, there is a need to address its human implications through reskilling, upskilling and career transition programmes to maintain morale and ensure job security. A few participants highlighted that collaborative initiatives with technical colleges or public-private partnerships could address the digital skills gap. Some companies had already initiated partnerships with training institutions to roll out digital literacy programs. These practices align with Moloko's (2021) call for ecosystem-based solutions to bridge human capital gaps.

By addressing the human implications of DT, organisations can mitigate resistance to change and foster a culture of inclusivity and employee well-being. Participant 6 also stressed the importance of employee upskilling to mitigate the potential negative impact of automation by stating that: *"As we adopt new digital tools and technologies, it's critical to invest in continuous learning opportunities. This not only helps employees keep pace with changes but also reassures them that their roles are evolving rather than disappearing."* Relatedly, Participant 18 remarked: *"Training is key. It's not just about adopting new tools, but about ensuring that employees are equipped to work with these tools effectively, reducing the risk of job losses."*

Data privacy and cybersecurity were also raised as critical concerns. Participant 5 recounted an incident in which his organisation suffered a ransomware attack, highlighting the increasing cybersecurity risks.

"We were hit by a ransomware attack two years ago, which really exposed how vulnerable we were. Since then, we've prioritized cybersecurity measures to protect sensitive financial data, but it's an ongoing battle as threats continue to evolve. We now have a technology partner as well as a new cyber security team that internally supports us with ensuring our infrastructure is safe and not prone to any attacks." Participant 10 also emphasized the importance of investing in robust security protocols: *"As we become more reliant on digital tools, safeguarding our data becomes paramount. One breach can damage the trust we've worked so hard to build with our clients hence in my organisation the IT team now has a cyber security division which has been heavily resourced over the last three years."*

Participant 11 highlighted the need for continuous cybersecurity training. This participant said: *"It's not enough to implement technical safeguards. Employees need to be constantly educated about potential threats. It's often human error that opens the door for cybercriminals."* These perspectives underscore the critical role that both technology and human awareness play in protecting against cybersecurity threats, with organisations needing to invest in both advanced technologies and employee training to safeguard their operations. It also highlights the new career opportunities created by these cyber security risks as various organisations have resourced teams to mitigate cyber-attacks.

In addition to these challenges, some participants also highlighted the importance of organisational culture and leadership in driving successful DT initiatives. Participant 7 stressed the role of leadership

in fostering a culture of innovation and collaboration thus:

"Leadership sets the tone for how DT is embraced. If leaders are fully invested and promote a culture of continuous learning and collaboration, the whole organisation will follow. That has been the case with my company. The EXCO (executive committee) are usually champions of various DT initiatives." Participant 9 echoed this view, stating: "Leadership buy-in is essential for any DT to succeed. Without a clear vision and support from the top, it's difficult to get everyone on board."

By championing a culture of innovation and agility, leaders can empower employees to embrace change, experiment with new technologies and drive business innovation and growth. Participant 12 supported this by highlighting that:

"DT isn't just about new technologies, it's about shifting mindsets. Leaders need to encourage a culture where employees feel safe to take risks and innovate. Failure should be seen as an opportunity to learn, not something to be feared. Unfortunately, in my current organisation, failure is career limiting and most of us don't want to take chances to innovate. We need brave leaders to change the status quo. "

The key insights from the study participants revealed critical aspects of how digital tools impacted employees both positively and negatively. Examples of how data analytics tools revolutionised consumer behaviour understanding, leading to more targeted campaigns and higher engagement were shared to establish the positive benefits of digital tools. However, concerns about the depersonalisation of customer interactions, as more companies integrate digital tools were raised. To mitigate the potential for job displacement, the majority of the participants also emphasised the need for reskilling

programmes as continuous learning is essential to ensure employees feel secure and capable in the evolving job market. Leadership was also identified as a key factor in fostering a culture of innovation and collaboration, which is vital for the success of DT initiatives. The role of leadership in creating an environment of trust and openness to experimentation was highlighted as central to empowering employees to embrace the changes brought about by digitalisation.

4.2.2 Employee engagement and organisational strategies

To fully explore the second sub research question, participants provided insights into the strategies employed by organisations to enhance employee engagement and navigate the challenges associated with DT. Participant 9 highlighted the importance of clear and open communication in gaining employee buy-in for DT initiatives. She shared that:

"Effective communication is key to ensuring that employees understand the rationale behind DT efforts and feel empowered to contribute their ideas and feedback. By maintaining open channels of communication, we can build trust and collaboration among team members, driving greater engagement and alignment with organisational goals."

This sentiment was echoed by Participant 14, who accentuated how communication fosters collaboration and trust: *"In my career I have learned that when employees are informed and feel involved, it creates a sense of transparency. This openness is essential in gaining their support for the initiatives."* Relatedly, Participant 8 added that: *"We noticed that when we provided regular updates and explained how the changes would affect each department, employees were much more engaged and willing to offer suggestions to improve the process."* Collectively, these responses underscore the

importance of transparent communication in creating a collaborative environment, where employees feel valued and motivated to contribute to DT efforts.

The role of leadership in fostering employee engagement was another recurring theme. Participant 10 emphasised that strong leadership is crucial in setting the tone for employee engagement. She stated that:

"Strong and good leadership is essential for creating a supportive and inclusive work environment where employees feel valued and motivated to participate in DT initiatives. Leaders should lead by example, demonstrating a commitment to learning and embracing new technologies, which sets the tone for the rest of the organisation."

Participant 6 supported this by explaining the influence of visible leadership. This participant said that:

"When our business leaders are genuinely committed to the transformation process and show their willingness to learn new systems, it encourages employees to follow suit. Leadership engagement sends a strong message that DT is not just a buzzword, but a strategic priority."

The alignment between leadership and employee involvement was further reinforced by Participant 12 who observed that:

"The most successful transformations in my current organisation have happened when the leadership team is visibly engaged and drives the digital agenda. Employees feel more confident in adapting when they see that their leaders are fully committed to the"

process."

In addition to leadership and communication, some participants highlighted the significance of recognizing and rewarding employee contributions during DT initiatives. Participant 14 stated thus:

"Acknowledging and rewarding employees for their efforts and achievements in driving DT initiatives is crucial for sustaining motivation and morale. Recognition can take various forms, such as performance bonuses, public acknowledgment or opportunities for career advancement, which reinforces a culture of appreciation and fosters a sense of ownership among employees."

Similarly, Participant 5 explicated that: *"We found that offering non-financial rewards, such as career development opportunities or allowing employees to lead digital projects, created a sense of ownership and kept them motivated to embrace the changes."* These perspectives suggest that recognition, both monetary and non-monetary, plays a pivotal role in maintaining employee engagement and morale, while reinforcing a culture of innovation and continuous improvement. These opinions affirm the pivotal role of employee engagement in the success of DT initiatives.

Despite these strategies, resistance to change was identified as a significant challenge. Participant 17 shared his experience of dealing with this resistance thus:

"While many employees are eager to embrace digital tools and technologies, others may be resistant to change due to fear of job losses or lack of familiarity with new systems. That's why we have made it essential in my organisation to provide adequate

training and support to help employees navigate the transition and overcome any barriers to adoption."

In addition, Participant 4 said: *"I would say resistance often comes from fear of the unknown, especially among employees who are less tech-savvy. Providing training that builds their confidence in using the new systems is critical."* Participant 13 also echoed this, emphasising the role of continuous support by saying that:

"My organisation learned the hard way that it's not enough to introduce new technologies. Employees need ongoing support to feel comfortable with the changes. If an organization fails to address this, resistance will persist and the DT process will stall."

These responses underscore the importance of providing training and support to alleviate concerns, ensuring that the transition process is smooth to reduce resistance to the implementation of DT initiatives.

Participant 18 reiterated the crucial role of inclusivity in DT projects. He elaborated thus:

"To ensure that DT initiatives benefit all employees, organisations must take a proactive approach to inclusivity and diversity. This includes considering the needs and perspectives of all stakeholders, including frontline workers and providing equitable access to training and development opportunities."

Participant 18's insights shed light on the importance of inclusivity in driving successful DT efforts. His perspective implies the need for a more balanced approach, ensuring that all employees regardless

of their position are included in decision-making processes and given the opportunity to contribute meaningfully.

Further supporting this point, Participant 16 echoed similar concerns, stating that: *“Frontline workers often feel left out of the strategic conversations. We’re the ones expected to implement the changes, yet our input is rarely considered.”* This underscores the necessity for organisations to create spaces where the voices of frontline employees are heard and valued, ensuring that their on-the-ground perspectives are incorporated into strategic decisions. Participant 18 added another layer to this discussion by stating that frontline workers are often treated as "cannon fodder" by head office employees, as they were expected to implement DT initiatives without fully understanding their impact or the reasons behind the changes. He stressed that: *“We are tasked with carrying out these changes without a clear understanding of why, which affects morale and engagement. If we resist implementing the changes, we know disciplinary measures will be taken against us.”* These responses indicate the critical need for transparent communication and inclusivity at all levels to foster greater engagement and commitment to organisational goals.

Inclusivity, as highlighted by several participants is not just about consultation but also about providing equitable access to resources such as training and development opportunities. Participant 6 stated that: *“Inclusivity should mean equal access to the tools needed for success. Training programs should be accessible to everyone, regardless of their position, to ensure that all employees can adapt to new technologies and contribute effectively.”* This point aligns with Participant 18’s call for frontline workers to be treated as key contributors in the DT process, rather than being passive implementers. These perspectives illustrate how inclusivity and equitable access to training are foundational to creating a culture of empowerment and innovation across all organisational levels.

In addition to inclusivity, collaboration emerged as a key theme in driving successful DT initiatives. Participant 20, a Digital Head with six years of tenure highlighted the importance of cross-functional collaboration by stating that:

"DT is a collaborative effort that requires input and participation from various departments and functions within the organisation. By breaking down silos and fostering collaboration across teams, we can leverage diverse expertise and insights to develop holistic and integrated digital solutions that address the needs of our organisation."

Participant 20's insights show the need to move beyond siloed approaches, which often stifle innovation and slow progress. She highlighted that collaboration is essential for generating creative solutions that are more likely to succeed in a rapidly changing business environment.

Supporting this, Participant 9 added that: *"When departments work together, we see better results. People from different areas bring unique perspectives and that's what drives innovation. In a DT era, no department can operate in isolation."* This underscores the notion that collaboration across departments is essential to ensure that digital initiatives are aligned with the needs of the entire organization. The breakdown of silos, as discussed by several participants, fosters a more cohesive approach to innovation and problem-solving. Participant 15 reinforced this by stating, *"When teams collaborate, we are able to anticipate challenges earlier and develop solutions that are more comprehensive and effective."* These perspectives collectively demonstrate the significance of collaboration as a cornerstone of successful DT.

To further emphasise this point, participant 20 highlighted the role of leadership in championing cross-

functional collaboration and fostering an environment that encourages teamwork and cooperation, rather than competition between teams. She noted thus: *"Leaders need to establish clear communication channels and provide the necessary resources to ensure that collaboration is not just encouraged but embedded into the organisational culture."* Participant 14 further supported this point, adding that: *"When leadership promotes transparency and open communication, it helps build trust between teams. People are more likely to share ideas and work together towards common goals."*

These insights emphasise that leadership is pivotal in driving a culture of collaboration and fostering alignment across departments. In conclusion, participants highlighted how transparent communication fosters employee buy-in and trust. Strong leadership underscored the success of DT initiatives as it created an inclusive work environment that motivates participation whilst recognising employee contributions and sustaining morale. Some participants also affirmed the need to address resistance to change through adequate training and support and they also stressed inclusivity when implementing DT initiatives to ensure equitable access to development opportunities and the recognition of ideas.

These engagement patterns align with the Dynamic Capabilities View, particularly the concept of 'sensing' and 'seizing' opportunities (Teece, 2018). Employees who engaged positively with digital changes demonstrated adaptability, a hallmark of dynamic capabilities. Conversely, reluctance to engage points to structural rigidities, underscoring DCV's limitations in hierarchically run companies, as discussed by Maisiri & Van Dyk (2021). It is acknowledged that the study focused primarily on digitally engaged professionals, which may exclude voices of those adversely affected or resistant to DT. Including perspectives from employees who experienced displacement or opposed digital initiatives could offer a more balanced view and is recommended for future research.

4.2.3 Digital Transformation strategies

The majority of the participants provided valuable information concerning the strategies employed by their organisations to ensure inclusivity and success in DT initiatives. One recurring theme was the implementation of training and upskilling programmes to empower employees with the necessary digital skills. Participant 8 said that:

"Our company puts the employees at the centre of our DT strategies. They have invested in comprehensive training programs to equip employees with the digital skills needed to succeed in the evolving landscape. These initiatives have been well-received, with employees expressing enthusiasm for learning and embracing new technologies."

The emphasis on training programmes highlights a strategic effort to bridge the skills gap created by digitalisation. This sentiment was echoed by Participant 16, who commented thus:

"Training and development are essential in any DT journey. Without it, employees feel left behind and unable to contribute effectively. Our organisation ensures that all employees, from entry level staff to senior management, have access to resources that help them adapt to new technologies."

These perspectives illustrate the proactive approach taken by organisations to ensure that DT does not alienate employees, but rather empowers them to adapt and thrive in an evolving digital landscape.

Supporting the focus on inclusive decision-making, Participant 12 mentioned the importance of inclusive decision-making processes. He stated that:

"The cornerstone of our DT strategy is communication. Our organisation actively solicits input from employees at all levels before implementing digital technologies. This inclusive approach ensures that diverse perspectives are taken into account,

leading to more effective and sustainable solutions."

Inclusivity in decision-making was also highlighted by Participant 9 who stated that: *"It's important for employees to feel like their input matters, especially when the changes impact their day-to-day work. By involving employees in the decision-making process, we foster a sense of ownership and responsibility, which, in turn, enhances engagement."* The emphasis on inclusivity not only reflects a cultural shift within organisations but also aligns with strategic goals aimed at ensuring that the workforce remains cohesive and engaged throughout the DT process.

Furthermore, collaboration emerged as a central theme in promoting inclusivity in DT efforts. Participant 20 highlighted the importance of breaking down silos between departments, stating *"DT is a collaborative effort that requires input from various departments. By fostering cross-functional collaboration, we ensure that diverse expertise are leveraged to develop holistic solutions."* This perspective suggests that successful DT initiatives rely not only on technological advancements but also on the ability of different teams to work together and share knowledge. Supporting this, Participant 5 stated that: *"Collaboration is essential in ensuring that DT initiatives are successful. Bringing together employees from different departments allows us to harness collective intelligence and drive innovation."* This view was further reinforced by Participant 19, who shared the following perspectives: *"We've established cross-functional task forces comprised of employees from diverse backgrounds to ensure different perspectives are considered in DT projects."* Collectively, these insights illustrate the importance of cross-functional collaboration, not only as a means of ensuring inclusivity but also as a strategic imperative for driving innovation and achieving organisational goals.

Participant 15 added that: *"Collaboration across teams helps anticipate challenges earlier and we can develop solutions that are more comprehensive and effective."* This illustrates the practical benefits of

collaboration, where potential obstacles are identified early in the process, allowing teams to proactively address them. The integration of various perspectives and expertise results in solutions that are better aligned with the overall objectives of the organisation, ensuring that DT initiatives are both efficient and successful.

Reskilling and upskilling programmes were repeatedly identified as critical strategies for promoting inclusivity in DT. Participant 6, for instance noted that: *"Reskilling programmes have been instrumental in helping employees' transition to new roles and responsibilities. By investing in continuous learning and development, organisations ensure that employees are equipped with the skills needed to thrive."* This point was echoed by Participant 18, who shared some views that: *"Reskilling initiatives have empowered employees to embrace digital tools and technologies in their daily work. By providing training and support, organisations can empower employees to contribute meaningfully to DT initiatives."*

Participant 4 emphasised the importance of reskilling to maintain job security, stating that: *"Providing reskilling opportunities not only helps employees adapt but also reduces fears about job displacement, which can hinder engagement in the transformation process. It's important that employees feel secure in their roles while embracing new technologies."* These responses reveal the role of reskilling as a strategic tool to promote inclusivity, ensuring that employees not only keep up with technological advancements but also remain integral to the organisation's evolving goals. Participant 18 elaborated this further by mentioning the psychological benefits of reskilling programmes. *"There's a sense of empowerment when employees know that they are being equipped with the skills they need for the future. It alleviates the anxiety of feeling obsolete."* These insights suggest that reskilling not only serves a practical function in terms of skill acquisition but also plays a significant role in maintaining employee morale and engagement during the transformation process, hence it should be embedded in

the digital transformation strategy of any organisation. For example, Tiger Brands' experimentation with blockchain traceability offers a glimpse into early-stage platform integration, while Unilever South Africa's AI-enabled route-to-market optimization indicates more advanced use of predictive analytics (Moloko, 2021). This contrast highlights how even within the same sector, digital capabilities and infrastructure vary widely.

Effective communication was consistently identified as a crucial factor in promoting inclusivity in DT strategies. Participant 17 emphasised the importance of transparency, stating that: *"Clear and transparent communication is essential in building trust and confidence among employees. By keeping employees informed about the objectives, progress and impact of DT initiatives, my organization has fostered a culture of transparency and accountability."* Participant 20 also echoed this sentiment by sharing that: *"Regular updates and clear communication ensure that employees feel valued and included in the DT journey."* The role of communication in ensuring inclusivity was further supported by Participant 15 who stated that: *"Transparent communication not only keeps employees informed but also allows them to voice their concerns and contribute to the process."* These perspectives reinforce the idea that communication plays a pivotal role in fostering a culture of inclusivity, where employees are not merely recipients of change but active contributors to the process and DT strategy.

Moreover, Participant 9 stated that communication is not just about informing but also about listening *"We ensure that communication is a two-way process. Employees' feedback is invaluable in refining our digital strategies and this exchange helps foster trust and collaboration."* The importance of a dialogue-driven approach to communication is evident in these remarks, highlighting that organisations benefit not just from disseminating information but also from creating opportunities for employees to shape the transformation process actively. The variation in DT strategies among the companies reflects differing levels of digital maturity and ecosystem integration. For instance,

Unilever's predictive analytics efforts signal a robust RBV orientation, while RCL's reliance on traditional channels illustrates weaker ecosystem leverage, which the DBE framework critiques as suboptimal in interconnected value chains (Tsai et al., 2022; Moloko, 2021).

Despite the positive strategies employed, some participants pointed out challenges related to global influence on DT strategies. Participant 7, a Senior Global Manager expressed concerns about the alignment of global strategies with local market needs, stating that: *"While global teams play a crucial role in crafting and driving DT strategies for multinational CPG companies in South Africa, there's often a disconnect between their priorities and the realities of local markets. This can lead to misalignment and inefficiencies in implementation."* Similarly, Participant 20 emphasised the importance of soliciting input from local employees, adding that: *"Employees on the ground have valuable insights into local market dynamics and customer preferences. Their input is essential for developing digital solutions that resonate with our target audience."* These comments imply the complexity of balancing global and local priorities in DT strategies, suggesting that organisations require tailoring their initiatives to reflect the specific needs and contexts of different markets. Participant 16 further elaborated on this point by stating that: *"The challenge is often in trying to adopt global solutions without considering local nuances. What works for one market may not necessarily work for another and it's crucial that we adapt strategies accordingly."* This reinforces the need for flexibility and adaptability in implementing DT initiatives across different regions.

4.2.4 Organizational culture and adaptability

The thematic analysis of the research findings revealed that organisational culture plays a pivotal role in shaping the response to DT initiatives within CPG companies in South Africa. Many participants mentioned the importance of fostering a culture of innovation, agility and adaptability to navigate the complexities of digital disruption effectively. One of the key themes that emerged from the interviews

was the role of leadership in shaping organisational culture. Many participants highlighted the importance of visionary leadership that encourages experimentation and risk-taking.

For instance, Participant 14 captured it thus: *"Our organisation's leadership fosters a culture of innovation by encouraging employees to think outside the box and experiment with new ideas. This supportive environment empowers employees to embrace change and drive DT initiatives forward."*

This was reinforced by Participant 13 who shared that: *"Our leadership team leads by example, demonstrating a willingness to embrace change and adapt to new technologies. This sets the tone for the entire organization and encourages employees to be more open to innovation and experimentation."* This theme of the role of visionary leadership in fostering a positive organisational culture conducive to DT was reinforced numerous times by the participants during the interviews. These participants highlighted examples of good leadership that encouraged experimentation, risk-taking and open communication.

Relatedly, Participant 13 expanded on the value of visionary leadership by stating that:

"Our leaders are not afraid to embrace change and adapt to new technologies. They demonstrate a willingness to learn and grow, which inspires confidence and trust among employees. This proactive approach to leadership sets a positive tone for the entire organization and encourages employees to be more open to innovation and change."

These observations underscore the critical role of leadership in driving successful DT initiatives. Effective leaders serve as catalysts for change, guiding their organisations through periods of transition and uncertainty with confidence and vision. By modelling a growth mindset and demonstrating a commitment to continuous learning and improvement, leaders can inspire and motivate employees to

embrace new technologies and ways of working. This perspective highlights the importance of leadership authenticity and transparency in fostering trust and engagement among employees. When leaders openly acknowledge the challenges and opportunities presented by DT, employees feel empowered to voice their concerns and contribute their ideas to the change process. By also involving employees in decision-making and providing opportunities for feedback and dialogue, leaders can create a sense of ownership and accountability for DT initiatives. As a result, employees are more likely to buy into the change efforts and actively participate in driving organisational success in the digital age.

Conversely, some participants shared experiences of poor leadership that hindered DT efforts and stifled innovation within their organizations. Participant 6 shared an example of ineffective leadership that lacked direction thus:

"In my previous role, the leadership team was resistant to change and unwilling to invest in new technologies. This created a culture of stagnation and complacency, where employees were discouraged from exploring innovative solutions. As a result, the organisation fell behind competitors and struggled to adapt to evolving market trends".

Participant 2 also supported this view as he expressed frustration with leadership that prioritised short-term gains over long-term strategic objectives. He stated that:

"Our leadership team was focused on cutting costs and maximizing efficiency without considering the broader implications for DT. This narrow-minded approach stifled innovation and prevented us from capitalising on emerging opportunities in the market. Without visionary leadership, our organisation struggled to stay relevant and

competitive in the digital age."

The impact of good or bad leadership on organisational culture and adaptability was evident in the outcomes experienced by participants. Organisations with visionary leaders who embraced change and fostered a culture of innovation reported greater success in their DT efforts. In contrast, organisations with ineffective leadership that resisted change and stifled innovation faced challenges in adapting to digital disruption and fell behind competitors in the market.

In addition, some participants also highlighted the importance of fostering a culture of continuous learning and development to support DT efforts. Participant 9 stated that:

"Our organisation prioritizes learning and development, providing employees with opportunities to acquire new skills and adapt to technological changes. This commitment to continuous learning ensures that employees are equipped to thrive in these digital times and drive innovation within the organization."

Similarly, Participant 6 emphasised that continuous learning is embedded within the organisational culture, noting that: *"Employees are encouraged to pursue professional development opportunities and stay updated on emerging technologies."* This is particularly crucial in a rapidly changing business landscape where staying updated on technological advancements is essential to maintaining a competitive edge.

This commitment to continuous learning was also formalised in some organisations through professional development plans. Participant 9 mentioned that her company integrated professional development plans into annual performance targets. She added that: *"Employees have personalised professional development plans that are tracked quarterly by HR, ensuring that continuous learning*

is not just encouraged but institutionalised within the organisation.” This formal approach to learning and development fosters an environment where employees are empowered to continuously upgrade their skills, thereby enabling the organisation to remain agile and adaptable in the face of technological disruption.

In addition to leadership and learning, the majority of the participants highlighted the importance of fostering a culture of collaboration and teamwork to support DT initiatives. Participant 2 put it this way: *"Collaboration is essential in driving DT forward. By breaking down silos and fostering cross-functional collaboration, organisations can harness the collective intelligence of their employees and drive innovation at every level."* This perspective was supported by Participant 20 who mentioned that: *"Our organisation encourages collaboration and teamwork, providing employees with opportunities to work together on cross-functional projects and share ideas and best practices.* This collaborative culture, according to Participant 20, creates the ideal environment for innovation and thereby allowing employees to work together to develop holistic solutions to complex challenges.

Some participants also emphasised the importance of agility and adaptability in responding to digital disruption. Participant 17 stated that: *"In today's rapidly changing business environment, organisations need to be agile and adaptable to stay competitive. This requires a culture that embraces change and encourages employees to be flexible and responsive to new opportunities and challenges."* This point was echoed by Participant 18 who added that: *"Our organisation has embraced a culture of adaptability, empowering employees to quickly pivot and respond to changing market conditions and customer preferences. This flexibility enables us to stay ahead of the curve and capitalize on emerging opportunities."*

The implementation of exchange programmes with tech organisations was another insight from the

participants. Three participants highlighted their organisations' exchange programmes with tech companies as valuable opportunities for employees to gain exposure to new technologies and innovative practices. Participant 8 specifically mentioned that her company participates in exchange programmes with tech companies, where selected employees spend up to 18 months in these organisations. She stated that: *"Our exchange programme with tech companies is instrumental in keeping our workforce updated on the latest trends and technologies. It provides employees with hands-on experience and exposure to innovative practices that they can bring back to our organisation."* Similarly, participant 20 emphasised the benefits of the exchange programme in promoting collaboration and knowledge sharing between organisations. She stated that *"Our exchange programme fosters collaboration and knowledge sharing between our organisation and tech companies. It allows employees to work alongside industry experts and gain insights into cutting-edge technologies and methodologies."*

These participants highlighted how the exchange programme contributes to employee development and career growth and Participant 9 shared: *"The exchange programme offers employees the opportunity to enhance their skills and expand their professional networks. It exposes them to diverse perspectives and challenges, ultimately contributing to their personal and professional growth."* The exchange programme was also seen by this participant as a strategic initiative to stay competitive in the digital landscape. The thematic analysis of the research findings underscores the importance of organisational culture in shaping the response to DT initiatives. By fostering a culture of innovation, learning, collaboration and adaptability, organisations can create an environment that empowers employees to embrace change and drive DT forward.

The study participants varied in their acceptance of digital transformation. While younger, digitally native employees viewed DT as an opportunity for growth, others particularly long serving staff

expressed scepticism or fear. One participant stated, “I worry that automation means we won’t be needed soon.” These sentiments reflect that awareness and social acceptance are not uniform and transformation strategies need to account for this diversity to ensure sustainable adoption. Beyond the challenges, participants acknowledged emerging opportunities from DT. These include the creation of data analyst roles, digital content specialists and remote support technicians. Some companies implemented hybrid work policies that offered employees greater flexibility. One HR lead noted, “Digitalisation allowed us to rethink job design as people can now work across functions or remotely, which was unthinkable five years ago”.

Summary of findings

The introduction of digital tools has significantly altered job roles and responsibilities across CPG companies in South Africa. The majority of the participants highlighted the transformative effects of data analytics on understanding consumer behaviour and marketing strategies, while others pointed to efficiency gains from automation technologies. However, these advancements also raised concerns about job displacement and the need for upskilling. Several participants expressed worries about automation's impact on traditional roles, emphasising the necessity for support during transitions. Organisational leaders must strategically manage talent by prioritising employee development and reskilling to adapt to new technologies and roles. Doing this may therefore foster a culture of continuous learning to mitigate resistance and maximize DT benefits.

Employee engagement emerged as crucial for successful DT. Participants stressed the importance of transparent communication, leadership commitment and inclusive strategies to foster positive attitudes toward change. They highlighted the role of regular updates from senior management in cultivating acceptance of digital initiatives. It was established that effective leaders who engage with employees and address their concerns will definitely build trust and a sense of ownership and thereby enhancing

engagement and commitment. Creating a supportive work environment that encourages collaboration and innovation was found to be essential, as demonstrated by companies that promoted psychological safety and risk-taking, harnessing collective creativity to drive digital innovation and achieve organisational goals.

DT strategies varied among CPG companies, with some prioritising inclusivity and collaboration while others focused on efficiency and innovation. Many participants emphasised the importance of inclusive decision-making and ecosystem orchestration in driving innovation and competitiveness. Several participants discussed initiatives like diversity training programmes and employee resource groups to ensure inclusivity. The research highlighted the need for a balanced approach that leverages digital technologies for operational efficiency while fostering innovation. Leadership played a pivotal role in creating a culture of adaptability, with effective leaders providing a clear vision and support to drive transformation. Cross-functional collaboration and alignment with organisational goals were stated as an essentiality to break down silos and maximise the impact of digital initiatives, ensuring that strategies were responsive to local market dynamics. This act is capable of enhancing competitiveness and market relevance.

Organisational culture emerged as a critical enabler or barrier to DT. Many participants reiterated the importance of fostering a culture of innovation, collaboration and resilience to navigate digital disruption. Leadership was said to be essential in managing the complexities of transformation, with both positive and negative leadership behaviours significantly impacting employee morale and performance. Several participants expressed leadership support in setting the tone for transformation, which was crucial for driving change. The ability to adapt to evolving market conditions and technological disruptions was seen as vital for maintaining competitiveness. Continuous learning and adaptation were underscored, with the participants encouraging experimentation with new ideas and

technologies. Organisational values such as transparency, trust and empowerment shaped employee attitudes towards DT, motivating them to embrace change and contribute to initiatives, thereby enhancing overall success. The research findings address the central research question and its sub-questions by highlighting the multifaceted impact of DT on CPG companies in South Africa. The thematic analysis revealed that digital tools significantly alter job roles, necessitate employees to gather new skills and influence workforce dynamics. This addresses the first sub-question by showing how DT can lead to both job displacement and the creation of new opportunities, underscoring the need for effective support plans and upskilling initiatives.

The findings also shed light on the second sub-question by identifying key drivers and barriers to employee involvement in DT. Effective communication, leadership and inclusivity emerged as critical factors in fostering employee engagement and participation. This highlights the importance of transparent communication, strong leadership and inclusive decision-making processes in overcoming resistance to change and ensuring successful DT. The strategies for fostering inclusive DT were also explored, thus addressing the third sub-question. The analysis had shown the significance of reskilling programmes, collaborative efforts and transparent communication in promoting inclusivity. These strategies ensure that DT initiatives are aligned with the diverse needs of employees, enabling organisations to harness the full potential of their workforce. The findings provide a comprehensive understanding of the impact of DT on CPG companies, offering practical insights into fostering a culture of innovation, collaboration and continuous learning for CPG companies in South Africa.

Chapter 5: Research discussion and conclusion

5.1 Introduction

This chapter systematically addresses the impact of digital tools on employees, factors influencing employee involvement and participation as well as the strategies for fostering inclusive DT. By synthesising the key themes and patterns identified through thematic analysis, the aim is to shed light on the complex interplay between DT, organisational dynamics and employee experiences within the CPG industry in South Africa. In this chapter, the analysis ties the findings back to the research questions to demonstrate how they were addressed. The chapter also highlights the implications for both theory and practice before crafting the conclusions of the study. The chapter also presents future research areas and some recommendations.

5.2 Discussion

Across the thematic analysis, several key themes emerged, highlighting the complex interplay between digital technologies and organisational practices. As discussed in the research findings chapter, the adoption of digital tools has led to a transformation in job roles and responsibilities for many employees. This transformation is characterised by shifts in daily tasks and skill requirements, as employees adapt to new technologies and workflows. This is further supported by Cao et al., (2022) who affirm how the introduction of data analytics tools has revolutionised marketing strategies, requiring marketers to develop new analytical skills to interpret consumer data effectively. Nevertheless, alongside these positive changes, concerns about potential job displacement have also emerged among employees. As digital tools automate certain tasks and processes, there is a risk of certain job functions becoming obsolete, leading to fears about job security and livelihoods. This reflects broader concerns within the literature where scholars like Kazim (2021) accompany the precarious balance between leveraging automation for efficiency and protecting jobs. The fear of job

redundancy has been well documented in industries undergoing DT, particularly where routine tasks can be automated. The study findings align with this literature, stressing the critical need for reskilling programmes to mitigate the negative effects of job displacement.

Many participants also expressed the need for upskilling initiatives to support employees through this transition period, emphasising the importance of continuous learning and professional development in the face of technological change. By providing opportunities for training and reskilling, organizations can help employees adapt to evolving job roles and mitigate the negative impacts of DT on their careers. This point echoes McKinsey & Company's (2021) argument that successful DT hinge not only on the implementation of new technologies but also on the ability of organisations to develop the requisite skills among their workforce. Meanwhile, the biggest concern is that some employees who are displaced cannot be absorbed as the new jobs created by DT initiatives require a distinct set of skills and experience.

The findings also illustrate that employee engagement is crucial to the success of DT initiatives. By actively involving employees in the DT process, organisations can harness their insights, experiences and expertise to drive innovation and achieve strategic objectives. One key aspect of employee engagement highlighted by participants is the importance of fostering a positive attitude toward change. In an environment where technological advancements are rapidly reshaping traditional workflows and business models, employees must embrace change as an opportunity for growth and development rather than a threat to their job security. This finding is consistent with the broader literature, which suggests that organisations with higher levels of employee engagement tend to see smoother DT (AlNuaimi et al., 2022). In particular, when organisations communicate the purpose and benefits of digital initiatives openly, they help reduce uncertainty and build trust among employees.

Furthermore, organisations that prioritise communication and transparency in their DT initiatives can help employees understand the rationale behind changes and alleviate fears of uncertainty. According to AlNuaimi et al., (2022), organisations that foster communication across the various job grades have higher success rates when implementing DT initiatives, as this allows them to be proactive to issues instead of being reactive since they get constant feedback from employees. The participants also underscored the need for organisations to actively solicit employee feedback and input throughout the DT journey. By creating channels for open communication and dialogue, organisations can empower employees to voice their concerns, suggestions and ideas for improvement. This not only fosters a sense of ownership and inclusion but also ensures that DT initiatives are aligned with the needs and preferences of employees. Furthermore, organisations that implement initiatives to excite and involve employees in the DT process reported greater success in driving adoption and implementation. Whether through training programmes, recognition schemes or cross-functional collaboration initiatives, these organisations prioritise employee engagement as a strategic imperative for achieving organisational goals. By empowering employees to become champions of change, organisations can overcome resistance, build momentum and foster a culture of innovation and continuous improvement.

The findings also illustrated that DT strategies varied widely among CPG companies in South Africa, with some prioritizing inclusivity and collaboration while others focused on efficiency and innovation. Also, the participants asserted the need for inclusive decision-making processes that involve employees at all levels of the organisation. By soliciting input from frontline workers, managers and executives, organisations can leverage diverse perspectives and expertise to inform strategy development and implementation. This participatory approach not only fosters a sense of ownership and commitment but also ensures that DT initiatives are aligned with organisational goals and objectives.

The role of leadership emerged as a very critical determinant of DT success. The majority of the participants highlighted the importance of visionary leadership in championing change, driving innovation and creating a culture of adaptability. Effective leaders were seen as not only responsible for setting the strategic direction but also for inspiring and motivating employees to embrace DT as a strategic imperative. By fostering a supportive and empowering work environment, leaders can cultivate a culture of innovation, experimentation and continuous learning that fuels organisational growth and resilience in the face of digital disruption (AlNuaimi et al., 2022). As a bigger subset of driving good leadership, organisational culture emerged as a critical enabler or barrier to DT, with participants citing the importance of fostering a culture of experimentation and learning. By creating a safe and supportive environment that values innovation and risk-taking, organisations can foster a culture of continuous improvement and adaptation that is essential for success in today's rapidly evolving business landscape.

The barriers shared by the study participants aligned closely with systemic limitations identified by Ndung'u & Signé (2020), who note that digital transformation in African economies is hampered not just by inadequate infrastructure but by institutional and policy fragmentation. This study's participants repeatedly pointed to regulatory inconsistencies, unreliable internet access in rural areas and the absence of affordable platforms tailored to local market conditions. These challenges were especially pronounced in smaller locally owned companies. Smith (2018) similarly emphasises the "digital capability trap," whereby companies underinvest in training or overestimate their readiness. This was evident in companies that purchased high-cost tools without adequate change management strategies or employee training, leading to low adoption rates. By linking these barriers to broader developmental and organisational theory, the study surfaces a deeper structural critique that transcends firm-level issues.

The role of leadership in shaping organisational culture and driving DT efforts was a recurring theme

in the interviews. Many participants shared both positive and negative examples of leadership behaviours and their impact on employee morale, engagement and performance. Effective leaders were described as visionary, empathetic and empowering, thus inspiring employees to embrace change and championing DT as a strategic priority. In contrast, ineffective leaders were perceived as resistant to change, micromanaging or lacking a clear vision, hindering organisational progress and stifling innovation. These findings echo Oberländer et al. (2021), who emphasise that digital transformation demands adaptive leadership and reskilling at scale. However, unlike global North contexts where digital maturity is high, South African companies exhibit more uneven patterns due to structural constraints (Moloko, 2021). This aligns with participant observations on the patchy implementation of skills development initiatives.

The study findings resonate with the Resource-Based View (RBV) framework, particularly regarding to how internal capabilities drive DT success. RBV posits that an organisation's resources and competencies are key determinants of competitive advantage (Barney et al., 2021). In the context of DT, these resources include not only technological assets but also the human capital required to operate, manage and innovate using these technologies. The participants consistently showed that organisations investing in the development of digital competencies among their workforce were more successful in navigating the complexities of DT.

The focus on upskilling and reskilling employees as seen in the study is directly linked to RBV's emphasis on leveraging unique internal capabilities for sustained competitive advantage. The findings suggest that CPG companies in South Africa that prioritise employee development through continuous learning initiatives are better positioned to respond to digital disruption. This is particularly important in an industry where technological advancements are rapidly reshaping traditional business models and processes. Moreover, the findings reinforce the notion that DT success is not just about acquiring

new technologies but about aligning those technologies with the internal capabilities of the workforce to create sustainable value.

The RBV framework provides a theoretical lens that help understand the intricate interplay between internal resources, organisational capabilities and competitive success in the digital era (Davis & DeWitt, 2021). Nevertheless, it has been criticised for its static view of resources. As shown by Eisenhardt and Martin (2000), the rapidly changing digital landscape requires organisations to be more dynamic in how they develop and deploy their resources. This is particularly relevant in the South African context where infrastructure and resource limitations can inhibit the rapid adoption of digital tools. The findings suggest that organisations must not only invest in building internal competencies but also create mechanisms to continuously adapt these competencies to evolving market conditions, thus aligning more with the Dynamic Capabilities View (DCV).

Importantly, DCV provides a more adaptive lens through which one can interpret the findings of this study and contextualise participants' responses regarding DT initiatives. The DCV also emphasises the need for companies to reconfigure their resources and capabilities in response to changing environments (Teece, 2007). Many participants consistently indicated the importance of organisational agility and adaptability in navigating the complexities of digital change, echoing the core tenets of dynamic capabilities view framework. For example, some participants highlighted the need for organisations to experiment with emerging technologies, pivot in response to market shifts and continuously evolve their strategies to remain competitive.

More so, the participants' insights regarding organisational culture and adaptability strongly echo the core building blocks of the DCV. The findings indicate that leadership plays a critical role in cultivating these dynamic capabilities. Many companies that cultivate cultures that prioritise

innovation, experimentation and continuous learning were significantly better positioned to spearhead successful DT endeavours, as evidenced by the first-hand experiences shared by the participants. Conversely, participants from organisations characterized by rigid or resistant cultures articulated that they encountered more pronounced hurdles in adapting to digital change and seizing new opportunities. Leaders who championed a culture of innovation, embraced experimentation and encouraged learning were instrumental in driving successful DT initiatives within their respective organisations. On the other hand, participants lamented the challenges posed by leadership that remained entrenched in traditional mindsets or exhibited resistance to change, hindering the organisation's ability to effectively navigate digital disruptions and capitalise on transformative opportunities. These findings suggest that for CPG companies in South Africa to thrive in the digital era, they must not only invest in technology but also in building the dynamic capabilities necessary to adapt to continuous change. This includes fostering a learning-oriented culture, encouraging cross-functional collaboration and empowering employees to innovate. In the case where they lack capacity, building ecosystems that they can leverage can accelerate their learning paths.

The Digital Business Ecosystem offers valuable insights into understanding the dynamics of DT as observed in this study and reflected in participants' responses. Some participants consistently stressed the interconnected nature of digital change and they stated the importance of collaboration and partnership with external stakeholders such as technology providers, customers and industry partners. This finding is consistent with the argument by Bharadwaj et al. (2013) that digital ecosystems are essential for organisations looking to remain competitive in a rapidly evolving market. By leveraging the resources and expertise available within the broader ecosystem, organisations can accelerate innovation, access new markets and co-create value in ways that would be challenging to achieve in isolation (Mattila et al., 2021).

The research findings suggest that CPG companies that actively participate in digital ecosystems whether through exchange programmes with tech companies or partnerships with external stakeholders are better positioned to leverage new technologies and drive innovation. Some of the participants shared examples of exchange programmes where employees gained exposure to cutting-edge technologies and developed collaborative relationships with external partners. This approach not only enhances the organisation's internal capabilities but also enables it to access resources and expertise that would be difficult to develop in isolation.

Organisations that prioritize inclusivity and actively engage with diverse stakeholders reported greater success in driving digital innovation and fostering a culture of collaboration and co-creation. These findings underscore the notion that DT is not solely an internal process but rather involves the integration of internal and external capabilities within a broader ecosystem context. By embracing an ecosystem mindset and cultivating collaborative relationships with external partners, organisations can unlock new opportunities and navigate the complexities of digital disruption more effectively. This supports the DBE model's focus on network effects and platform-based business models, where collaboration and inclusivity are key drivers of innovation (Tsai et al., 2022).

These dynamics reflect what Tsai et al. (2022) describe as the increasing necessity of ecosystem thinking in digital strategy. Successful transformation is no longer contained within company boundaries but depends on how well a company integrates with partners, platforms and service providers. This was observed in companies that built robust ties with ecommerce providers, fintech platforms and local courier services, enabling broader reach and innovation at scale. Similarly, Reuver et al. (2018) argue that digital platform ecosystems must be understood as socio-technical systems that require alignment between technological architecture and value co-creation among actors. In this study, companies that succeeded in DT often played an orchestrating role by

establishing data-sharing protocols, mutual incentives and governance standards with partners. By contrast, companies that failed to collaborate effectively struggled to scale their digital efforts beyond pilot phases.

The majority of the participants also highlighted the importance of building resilience and adaptability within the digital business ecosystem. They affirmed the need for organisations to remain agile and responsive to changing market dynamics, technological advancements and customer preferences. This adaptability enables organisations to seize emerging opportunities, mitigate risks and sustain competitive advantage in an increasingly digital and volatile environment. By fostering a culture of continuous learning, experimentation and adaptation; organisations can position themselves as agile players within the digital ecosystem, capable of thriving amidst uncertainty and disruption. The DBE perspective provides a comprehensive framework for understanding and navigating the complexities of DT and thereby fostering collaboration, inclusivity and adaptability within the broader ecosystem to enable organisations to drive innovation and co-create value.

5.3 Practical implications

The research findings have several practical implications for CPG companies in South Africa seeking to navigate the complexities of DT and capitalise on the opportunities it presents. Firstly, the impact of digital tools on employees underscores the importance of investing in upskilling and reskilling initiatives to equip employees with the necessary competencies to thrive in a digital environment. Organisational leaders should prioritise learning and development programmes that empower employees to adapt to evolving job roles and leverage digital tools effectively. By fostering a culture of continuous learning and skill development, companies can enhance employee engagement and productivity while driving innovation and competitiveness. The research also highlights the transformative potential of inclusive organisational strategies that prioritise collaboration and diversity. Companies that embrace inclusivity and leverage the diverse perspectives and expertise of

their workforce are better positioned to develop innovative digital solutions that meet the needs of a diverse customer base. By fostering an inclusive culture that values and respects all employees, organisations can create a supportive environment that encourages creativity, collaboration and high performance across the organisation.

Secondly, the findings highlight the critical role of employee engagement in driving successful DT initiatives. Organisational leaders should prioritise communication and stakeholder engagement strategies to cultivate a positive attitude toward change and mitigate resistance to digital initiatives. By involving employees in the decision-making process and soliciting their feedback and ideas; companies can foster a sense of ownership and empowerment, leading to greater commitment and buy-in from employees at all levels of the organisation. The research also underscores the importance of effective change management practices in ensuring the smooth implementation of DT initiatives. Organisational leaders should develop comprehensive change management plans that address the needs and concerns of employees, anticipate potential challenges and provide the necessary support and resources to facilitate the transition to a digital thriving workplace. By proactively managing change and addressing employee concerns, companies can minimise disruption and maximise the success of their DT efforts.

Thirdly, DT strategies should prioritise inclusivity and collaboration, recognising that successful digital innovation often requires the collaboration of diverse stakeholders across the digital business ecosystem. Organisational leaders should seek to build strategic partnerships with technology providers, customers and industry peers to access external expertise, resources and market insights. By embracing an ecosystem mindset and fostering a culture of collaboration and co-creation, companies can unlock new opportunities for growth and innovation in the digital era. The research findings also underscore the importance of agility and adaptability in navigating the rapidly evolving digital

landscape. More so, organisational leaders should adopt flexible and agile approaches to DT, enabling them to respond quickly to changing market conditions, emerging technologies and customer preferences. By embracing experimentation and iteration, companies can learn from failures and successes, continuously improving their digital strategies and staying ahead of the competition.

The research findings provide actionable insights for organisational leaders and decision-makers in CPG companies in South Africa, highlighting the importance of investing in employee development, fostering a culture of engagement, promoting internal collaboration and adopting an ecosystem mindset to drive successful DT initiatives. By adopting these strategies, companies can position themselves for long-term success in an increasingly digital and competitive marketplace. The research findings also underscore the need for organisational leaders to cultivate a forward-thinking mindset that prioritises innovation and adaptability. In today's fast-paced business environment, companies must continually evolve and innovate to stay relevant and competitive. By fostering a culture of innovation and experimentation, organisational leaders can encourage creativity and risk-taking driving continuous improvement and growth. In addition, organisational leaders should leverage data analytics and insights to inform strategic planning and resource allocation, enabling them to make informed decisions that drive business growth and innovation.

These findings reinforce the work of Kane et al. (2015), who argue that digital maturity is not solely a function of technological investment, but of organisational culture that embraces experimentation, cross-functional collaboration and risk-taking. Participants from digitally mature companies reflected strong communication channels and flatter hierarchies that enabled quicker buy-in and collective problem-solving. This was particularly evident in companies that integrated digital tools into daily workflows and aligned these with shared performance goals.

Moloko (2021) further highlights that in the South African context, cultural inertia and hierarchical

decision-making often impede transformation. This was echoed in this study by respondents who felt that leadership in some local companies lacked the courage or capability to mobilise a digitally fluent organisational culture. The insights from this study offer valuable guidance for CPG executives and managers to prioritise culture change initiatives and continuous learning programmes to reduce digital anxiety. Strategic investments should focus on scalable digital tools that match both business maturity and workforce capabilities. For policymakers, creating sector-specific DT blueprints with stakeholder input can accelerate adoption while preserving inclusivity.

5.4 Conclusion

In conclusion, this research journey has provided valuable insights into the impact of DT on CPG companies in South Africa. By examining the multifaceted implications of digital tools on employees, organisational strategies and DT strategies; this study contributes to both theory and practice in the fields of inclusive innovation and DT. Through the engagement with industry professionals, key findings were synthesized, offering actionable strategies for navigating the complexities of DT in CPG companies operating in South Africa.

The primary objective of this study was to examine how DT impacts job roles, factor that hinder employee engagement in DT initiatives and how inclusive successful DT were in South African CPG industry. The research addressed these objectives through an in-depth analysis of the experiences of industry professionals, supported by literature that highlighted the theoretical frameworks such as the Resource-Based View, Dynamic Capabilities View and Digital Business Ecosystem. One of the most significant findings of this study is the transformative effect of digital tools on employee roles and organisational structures. The participants stressed how technologies such as data analytics and automation have redefined marketing strategies and operational efficiencies. However, these innovations have also introduced challenges, particularly regarding job displacement. Employees in

traditional roles expressed concerns about the future of their positions as automation reduces the need for manual tasks. This highlights the urgent need for organisations to implement comprehensive upskilling and reskilling programmes to help employees adapt to new job requirements.

This means that organisational leaders and decision-makers in South African CPG companies must consider the study findings and prioritise employee development, engagement and collaboration in their DT efforts. In addition, the study explored the role of employee engagement in driving successful DT. Many participants emphasised that organisations must foster open communication and transparency throughout the transformation process to build trust and mitigate resistance to change. Additionally, clear and consistent communication about the purpose and goals of digital initiatives encourages employee buy-in and reduces anxiety over potential disruptions to existing workflows. The findings also suggest that organisations that involve employees in decision-making processes are more likely to achieve successful outcomes as this promotes a sense of ownership and commitment among the workforce.

Expanding upon the implications of these findings, it becomes clear that organisations must adopt a holistic approach to DT that goes beyond mere technological upgrades. The integration of digital tools must be accompanied by comprehensive workforce development programmes that equip employees with the necessary skills to thrive in a digital environment. This includes continuous learning opportunities, reskilling and upskilling initiatives that enable employees to adapt to new roles and responsibilities brought about by DT. CPG companies should also establish robust support systems to manage the transitional challenges faced by employees, such as job displacement and changing job roles, ensuring a smooth and inclusive transformation process.

The research underscores the critical role of leadership in driving DT. Effective leaders must champion

digital initiatives, inspire confidence and cultivate a culture of innovation and agility within their organisations. This involves transparent communication, active employee engagement and fostering a supportive environment where experimentation and risk-taking are encouraged. Leaders should also prioritize the alignment of DT strategies with organisational goals, ensuring that all levels of the organisation are committed to and involved in the transformation process. By doing so, leaders can mitigate resistance to change and harness the full potential of their workforce to drive digital innovation and organisational growth.

The study also highlights the importance of inclusivity in DT strategies. Organisations should adopt inclusive decision-making processes that actively solicit and incorporate diverse perspectives from all levels of the workforce. This approach not only ensures that DT initiatives are comprehensive and effective but also fosters a sense of ownership and commitment among employees. Inclusive DT strategies should also address the unique challenges faced by different employee groups, providing tailored support and resources to ensure that no one is left behind in the digital transition. The findings also have significant implications for the broader CPG industry and similar sectors undergoing DT. The strategies and insights derived from this study can serve as a model for other organisations seeking to navigate the complexities of DT in distinct and similar contexts. By adopting a holistic, inclusive and employee-centric approach to DT, organisations can enhance their competitiveness, drive innovation and achieve sustainable growth in an increasingly digital world. While inclusive digital transformation is widely celebrated in the literature (Ndung'u & Signé, 2020), participants revealed tensions between speed and inclusivity. For example, accelerated automation projects improved efficiency but sidelined older workers lacking digital fluency. This reflects the trade-off between inclusivity and performance imperatives. Unlike successful examples where inclusive design was baked into early DT planning (Moloko, 2021), some companies in this study admitted that inclusive measures were often retrospective.

This study makes valuable contributions to the theoretical understanding of DT, particularly by applying the RBV, DCV and DBE frameworks to the South African CPG context. The integration of these theoretical models provides a robust foundation for analysing how organisations navigate the complexities of DT. The theoretical contributions of this research, grounded in the RBV, DCV and DBE frameworks, provide a robust foundation for understanding the dynamics of DT in the CPG industry. The practical implications offer actionable strategies for organisations seeking to enhance their competitiveness and drive innovation through DT. Ultimately, this research contributes to the ongoing discourse on DT and provides a framework for navigating the complexities of the digital age in South Africa and beyond.

5.5 Recommendations

The research findings have highlighted the critical areas where CPG companies in South Africa can enhance their DT efforts. To address the challenges and leverage the opportunities presented by digital tools and technologies, a set of strategic recommendations have been developed. These recommendations focus on equipping employees with necessary digital skills, fostering an inclusive and collaborative culture, developing robust change management frameworks, enhancing leadership capabilities and prioritising employee well-being and engagement. Implementing these recommendations will enable CPG companies to navigate the complexities of DT effectively, ensuring sustained growth and competitive advantage in the digital age.

To successfully navigate DT, CPG companies in South Africa should prioritise comprehensive reskilling and upskilling programmes tailored to equip employees with the necessary digital competencies. Given the significant impact of digital tools on job roles and responsibilities, companies should implement continuous learning initiatives that focus on both technical and soft skills

development. This will not only minimise job displacement fears but also empower employees to adapt to evolving technologies and maintain their relevance in the digital age. Partnering with educational institutions and industry experts can enhance the quality and relevance of these training programmes, ensuring they meet the dynamic needs of the industry. A clear divergence emerged between multinational and locally-owned CPG companies. Multinationals like Unilever and Beiersdorf, backed by global infrastructure, were able to implement advanced DT tools such as predictive analytics and AI driven supply chain visibility. Local companies, by contrast, reported challenges such as unreliable broadband, limited IT budgets and lower internal readiness. These disparities reflect the critique of the Resource Based View in developing economies, where resource asymmetries skew DT outcomes (Ndung'u & Signé, 2020).

More so, fostering a culture of inclusivity and collaboration is paramount for the successful implementation of DT strategies. Leadership should actively promote and model inclusive decision-making processes, ensuring that diverse employee perspectives are considered in strategic planning. This can be achieved by establishing cross-functional teams that bring together different departments to work on digital initiatives, thereby harnessing a broad range of expertise and fostering innovation. Moreover, transparent communication channels should be maintained to keep employees informed and engaged, mitigating resistance to change and building a collective sense of ownership and commitment to DT goals.

CPG companies must develop robust change management frameworks that align DT efforts with organisational objectives and market demands. This involves integrating digital strategies into the core business model, ensuring that digital initiatives are not isolated projects but are embedded within the broader strategic vision of the company. Leadership should provide clear guidance and support throughout the transformation journey, addressing any challenges and facilitating a smooth transition.

By leveraging global best practices and tailoring them to local market conditions, companies can enhance their competitive edge and ensure that DT efforts are both effective and sustainable. Investing in advanced cybersecurity measures is also crucial to protect sensitive data and maintain stakeholder trust in an increasingly digital landscape.

Strong leadership is critical in driving DT. CPG companies should invest in leadership development programs that equip current and future leaders with the skills and knowledge needed to lead digital initiatives effectively. These programmes should emphasise strategic thinking, change management and digital literacy to enable leaders to inspire confidence and guide their teams through the transformation process. By fostering a visionary leadership culture, organisations can ensure that their DT efforts are well-supported and aligned with overall business objectives.

Ensuring employee well-being and engagement is essential for sustaining motivation and productivity during the implementation of DT initiatives. Companies should implement policies and practices that promote a healthy work-life balance, provide mental health support, recognize and reward employee contributions. Engaging employees in the transformation process by seeking their input and addressing their concerns can build a sense of belonging and commitment. Creating a supportive environment where employees feel valued and heard will enhance their resilience and adaptability, driving the success of DT initiatives.

5.6 Future research directions

While this study has provided valuable insights into the impact of DT in CPG companies operating in South Africa, several avenues for future research warrant exploration. Longitudinal studies could offer insights into the long-term effects of DT on organisational performance and competitiveness. By tracking the evolution of digital initiatives over time, researchers could assess the sustainability of DT

strategies and their impact on key performance indicators such as revenue growth, market share and customer satisfaction. Comparative studies across different industries and regions could provide a broader perspective on the implications of DT for various industries. By examining how DT strategies vary across industries with diverse levels of digital maturity and market dynamics, researchers could identify best practices and lessons learned that are transferable across industries. Qualitative research methods such as ethnographic research could provide deeper insights into the complex dynamics of DT within individual organisations. By immersing researchers in the day-to-day operations of CPG companies undergoing DT, ethnographic studies could uncover nuanced insights into the challenges, opportunities and cultural factors that shape the implementation and outcomes of digital initiatives.

Another overlooked dimension in existing DT literature is the role of product category. In this study, companies handling perishable goods (e.g., dairy and meat) adopted IoT sensors and blockchain-enabled traceability faster due to shelf-life imperatives. By contrast, companies dealing in household or personal care goods focused more on e-commerce channel optimization and consumer data platforms. This suggests that DT trajectories are not only shaped by company size or strategy, but also by intrinsic product requirements.

Interdisciplinary research that integrates insights from fields such as organisational psychology, sociology and information systems could provide a more holistic understanding of the human and organisational aspects of DT. By exploring how individual attitudes, behaviours and social dynamics influence the adoption and effectiveness of digital tools, researchers could develop more nuanced theories and frameworks for guiding organisational change efforts in the digital age.

References

- Abdelkafi, N., Raasch, C., Roth, A., & Srinivasan, R. (2019). Multi-sided platforms. *Electronic Markets*, 29, 553-559. <https://doi.org/10.1007/s12525-019-00385-4>
- Accenture. (2020, April 28). *COVID-19 will permanently change consumer behavior: Fast-changing consumer behaviors influence the future of the CPG industry*. Accenture. <https://www.accenture.com/content/dam/accenture/final/a-com-migration/r3-3/pdf/pdf-149/accenture-how-will-covid-19-change-the-consumer.pdf>
- Aghimien, D., Aigbavboa, C., Oke, A., Thwala, W., & Moripe, P. (2020). Digitalization of construction organisations: A case for digital partnering. *International Journal of Construction Management*, 22(10), 1950–1959. <https://doi.org/10.1080/15623599.2020.1745134>
- Alade, K., & Windapo, A. O. (2020). Developing effective 4IR leadership framework for construction organisations. *Engineering, Construction and Architectural Management*, 28(5), 1377-1396. <https://doi.org/10.1108/ECAM-07-2020-0576>
- AlNuaimi, B. K., Singh, S. K., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility and digital strategy. *Journal of Business Research*, 145, 636–648. <https://doi.org/10.1016/j.jbusres.2022.03.038>
- Annacone, A. (2019, June 19). *The 4 types of digital transformation*. LinkedIn. <https://www.linkedin.com/pulse/4-types-digital-transformation-andrew-annacone/>
- Anshari, M., Syafrudin, M., & Fitriyani, N. L. (2022). Fourth Industrial Revolution between knowledge management and digital humanities. *Information*, 13(6), 292. <https://doi.org/10.3390/info13060292>
- Anthony, B., Abbas Petersen, S., Helfert, M., & Guo, H. (2021). DT with enterprise architecture for smarter cities: A qualitative research approach. *Digital Policy, Regulation and Governance*, 23(4), 355-376. <https://doi.org/10.1108/DPRG-04-2020-0044>
- Aziona, C. (2023). Value creation in the 4IR: Millennials and digital multisided platforms (MSPs). *Digital Policy Studies*, 1(2), 1-7. <https://doi.org/10.36615/dps.v1i2.2274>
- Barney, J. B., Ketchen, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of Management*, 47(7), 1936-1955. <https://doi.org/10.1177/01492063211021655>
- Baron, D. P. (2018). Disruptive entrepreneurship and dual purpose strategies: The case of Uber. *Strategy Science*, 3(2), 439–462. <https://doi.org/10.1287/stsc.2018.0059>
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy:

- Toward a next generation of insights. *MIS Quarterly: Management Information Systems*, 37(2), 471-482. <https://doi.org/10.25300/MISQ/2013/37:2.3>
- Bican, P. M., & Brem, A. (2020). Digital business model, digital transformation, digital entrepreneurship: Is there a sustainable “digital”? *Sustainability*, 12(13), 5239. <https://doi.org/10.3390/su12135239>
- Butt, A., Imran, F., Helo, P., & Kantola, J. (2024). Strategic design of culture for digital transformation. *Long Range Planning*, 57(2), 102415. <https://doi.org/10.1016/j.lrp.2024.102415>
- Cao, G., Tian, N., & Blankson, C. (2021). Big data, marketing analytics and firm marketing capabilities. *Journal of Computer Information Systems*, 62(3), 442–451. <https://doi.org/10.1080/08874417.2020.1842270>
- Chen, C. L., Lin, Y. C., Chen, W. H., Chao, C. F., & Pandia, H. (2021). Role of government to enhance digital transformation in small service business. *Sustainability*, 13(3), 1028. <https://doi.org/10.3390/su13031028>
- Dang-Pham, D., Hoang, A. P., Vo, D. T., & Kautz, K. (2022). Digital kaizen: An approach to digital transformation. *Australasian Journal of Information Systems*, 26, 1-28. <https://doi.org/10.3127/AJIS.V26I0.3851>
- Davis, G. F., & DeWitt, T. (2021). Organization theory and the resource-based view of the firm: The great divide. *Journal of Management*, 47(7), 1684-1697. <https://doi.org/10.1177/0149206320982650>
- Department of Communications & Digital Technologies. (2020). *Our mandate: Constitutional mandate*. <https://www.dcdt.gov.za/about-us/mandates.html>
- Effoduh, J. O. (2016). “The Fourth Industrial Revolution” by Klaus Schwab [book review]. In *The Transnational Human Rights Review*, 3(1), 76-84. <https://core.ac.uk/download/232640421.pdf>
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105-1121. <https://www.jstor.org/stable/pdf/3094429.pdf>
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fernández-Rovira, C., Álvarez Valdés, J., Molleví, G., & Nicolas-Sans, R. (2021). The digital transformation of business. Towards the datafication of the relationship with customers. *Technological Forecasting and Social Change*, 162, 120339. <https://doi.org/10.1016/j.techfore.2020.120339>
- Ferreira, W. S. de S., Vale, G. M. V., & Bernardes, P. (2023). Institutional disruption and technology

platforms: The Uber case. *Revista de Gestão*, 30(2), 113-132. <https://doi.org/10.1108/REG-12-2020-0127>

- Ferreira, W. S. de S., Vale, G. M. V., & Corrêa, V. S. (2022). Diffusion of innovation in technological platforms: The Uber case. *BAR - Brazilian Administration Review*, 19(3), e210101. <https://doi.org/10.1590/1807-7692bar2022210101>
- Firican, D. A. (2023). Digital transformation and digital culture: A literature review of the digital cultural attributes to enable digital transformation. *Proceedings of the International Conference on Business Excellence*, 17(1), 791-799. <https://doi.org/10.2478/picbe-2023-0073>
- Gerhart, B., & Feng, J. (2021). The resource-based view of the firm, human resources and human capital: Progress and prospects. *Journal of Management*, 47(7), 1796-1819. <https://doi.org/10.1177/0149206320978799>
- Haffke, I. (2017). *The implications of digital business transformation for corporate leadership, the IT function and business-IT alignment*. (PhD Thesis) Faculty of Law and Economics, Darmstadt University of Technology. <https://core.ac.uk/download/pdf/76651126.pdf>
- Helen, J., & Selvi, V. D. (2022). Consumer behavior on fast-moving consumer goods. *International Journal of Management (IJM)*, 13(3), 214-221. <https://doi.org/10.17605/OSF.IO/QZMV4>
- Hudson, S., Kim, A., & Moulton, J. (2018, April). What beauty players can teach the consumer industry about digital disruption. *Our Insights*. McKinsey&Company. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/what-beauty-players-can-teach-the-consumer-sector-about-digital-disruption>
- Kazim, F. A. (2021). Digital transformation in communities of Africa. *International Journal of Digital Strategy, Governance and Business Transformation*, 11(1), 1-23. <https://doi.org/10.4018/ijdsGBT.287100>
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846-854. <https://doi.org/10.1080/0142159X.2020.1755030>
- Kim, Y. S. (2021). Digital transformation types for product-service systems. *Proceedings of the Design Society*, 1, 1283-1292. <https://doi.org/10.1017/pds.2021.128>
- Kondarevych, V. andriushchenko, K., Pokotylska, N., Ortina, G., Zborovska, O., & Budnyak, L. (2020). Digital transformation of business processes of an enterprise. *TEM Journal*, 9(4), 1800-1808. <https://doi.org/10.18421/TEM94-63>
- Kuzmina, K., Prendeville, S., Walker, D., & Charnley, F. (2019). Future scenarios for fast-moving consumer goods in a circular economy. *Futures*, 107, 74-88. <https://doi.org/10.1016/j.futures.2018.12.001>
- Lee, M. H., Yun, J. H. J., Pyka, A., Won, D. K., Kodama, F., Schiuma, G., Park, H. S., Jeon, J., Park,

- K. B., Jung, K. H., Yan, M. R., Lee, S. Y., & Zhao, X. (2018). How to respond to the Fourth Industrial Revolution, or the second information technology revolution? Dynamic new combinations between technology, market and society through open innovation. *Journal of Open Innovation: Technology, Market and Complexity*, 4(3), 21.
<https://doi.org/10.3390/joitmc4030021>
- Maisiri, W., & Van Dyk, L. (2021). Industry 4.0 skills: A perspective of the South African manufacturing industry. *SA Journal of Human Resource Management*, 19, 1416.
<https://doi.org/10.4102/sajhrm.v19i0.1416>
- Matopoulos, A., Herdon, M., Várallyai, L., & Péntek, Á. (2012). Digital business ecosystem prototyping for SMEs. *Journal of Systems and Information Technology*, 14(4), 286-301.
<https://doi.org/10.1108/13287261211279026>
- Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. *Business and Information Systems Engineering*, 57(5), 339-343. <https://doi.org/10.1007/s12599-015-0401-5>
- Mattila, M., Yrjölä, M., & Hautamäki, P. (2021). Digital transformation of business-to-business sales: What needs to be unlearned? *Journal of Personal Selling and Sales Management*, 41(2), 113-129. <https://doi.org/10.1080/08853134.2021.1916396>
- McKinsey & Company. (2018). Unlocking success in digital transformations. Advanced Industries Practise. <https://rb.gy/pqp4qp>
- McKinsey & Company. (2021). Implementing a digital transformation at industrial companies. Advanced Industries Practise. <https://rb.gy/txtpl1e>
- Mkansi, M., & Landman, N. (2021). The future of work in Africa in the era of 4IR–The South African perspective. *Africa Journal of Management*, 7(S1), 17-30.
<https://doi.org/10.1080/23322373.2021.1930750>
- Moloko, D. (2021). *Fourth industrial revolution leadership imperatives for the south African fast moving goods industry*. (MPhil Thesis) University of Johannesburg, South Africa.
<http://hdl.handle.net/102000/0002>
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, 14(3), e67670.
<https://doi.org/10.5812/sdme.67670>
- Öberg, C. (2023). Towards a typology of sharing economy business model transformation. *Technovation*, 123, 102722. <https://doi.org/10.1016/j.technovation.2023.102722>
- Oberländer, A. M., Röglinger, M., & Rosemann, M. (2021). Digital opportunities for incumbents: A resource-centric perspective. *Journal of Strategic Information Systems*, 30(3), 101670.
<https://doi.org/10.1016/j.jsis.2021.101670>

- Ponsignon, F., Kleinhans, S., & Bressolles, G. (2019). The contribution of quality management to an organisation's digital transformation: A qualitative study. *Total Quality Management and Business Excellence*, 30(sup1), S17-S34. <https://doi.org/10.1080/14783363.2019.1665770>
- Pousttchi, K., Gleiss, A., Buzzi, B., & Kohlhagen, M. (2019). Technology impact types for digital transformation. In *Proceedings of the 21st IEEE Conference on Business Informatics, CBI 2019*, pp. 487-494. <https://doi.org/10.1109/CBI.2019.00063>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students*. (8th ed.). Pearson.
- Scardovi, C. (2017). *Digital transformation in financial services*. Springer. <https://doi.org/10.1007/978-3-319-66945-8>
- Schallmo, D., Williams, C. A., & Boardman, L. (2017). Digital transformation of business models- best practice, enablers and roadmap. *International Journal of Innovation Management*, 21(8), 1740014. <https://doi.org/10.1142/S136391961740014X>
- Schwertner, K. (2017). Digital transformation of business. *Trakia Journal of Science*, 15(Suppl.1), 388–393. <https://doi.org/10.15547/tjs.2017.s.01.065>
- Schwertner, K. (2021). The impact of digital transformation on business: A detailed review. In J. Metselaar (Ed.), *Strategic management in the age of digital transformation*. ProudPen. https://doi.org/10.51432/978-1-8381524-3-7_1
- Singaram, S., & Mayer, C.-H. (2021). *The influence of 4IR on organisational culture*. <http://hdl.handle.net/102000/0002>
- Sivakumar, S. (2022, November 16). Study of internationalization process of Unilever. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3939738>
- Skog, D. (2016). *The dynamics of digital transformation: The role of digital innovation, ecosystems and logics in fundamental organizational change*. (Thesis) Department of Informatics, Umeå University. <https://www.researchgate.net/publication/330539207>
- Soluk, J., & Kammerlander, N. (2021). Digital transformation in family-owned Mittelstand companies: A dynamic capabilities perspective. *European Journal of Information Systems*, 30(6), 676-711. <https://doi.org/10.1080/0960085X.2020.1857666>
- Statistics South Africa (2023). *Ministry in the Presidency: National planning, monitoring and evaluation*. <https://www.Statistics South Africa.gov.za/publications/P0318/P03182023.pdf>
- Sutherland, E. (2020). The Fourth Industrial Revolution: The case of South Africa. *Politikon*, 47(2), 233-252. <https://doi.org/10.1080/02589346.2019.1696003>
- Tawaststjerna, T., & Olander, H. (2021). Managing digital transformation in digital business ecosystems. *International Journal of Innovation Management*, 25(10), 2140003.

<https://doi.org/10.1142/S136391962140003X>

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40-49.

<https://doi.org/10.1016/j.lrp.2017.06.007>

Tripp, J., McKnight, D. H., & Lankton, N. (2023). What most influences consumers' intention to use? Different motivation and trust stories for uber, airbnb and taskrabbit. *European Journal of Information Systems*, 32(5), 818-840. <https://doi.org/10.1080/0960085X.2022.2062469>

Tsai, C. H., Zdravkovic, J., & Stirna, J. (2022). Modeling digital business ecosystems: A systematic literature review. *Complex Systems Informatics and Modeling Quarterly*, 168(30), 1-30.

<https://doi.org/10.7250/csimq.2022-30.01>

Ukeni, C. S. (2022). Strategy behind the business success of Amazon: A case study. *Texila International Journal of Management*, 8(1), 1-16.

<https://doi.org/10.21522/tijmg.2015.08.01.art009>

Appendices

Appendix A: Participant Consent Form

Master of Philosophy in Inclusive Innovation
Interview Consent Form

Participant name:

I volunteer to participate in a research project being conducted by Tshepo Ngaleka in partial fulfilment of the requirements for the MPhil Degree at the UCT Graduate School of Business. I understand that the research is designed to gather information about the role of DT in shaping consumer packaged goods companies in South Africa and that I will be one of the approximately 20 people interviewed for this research.

Background and purpose of the research

The context of this study is the rapidly changing landscape of the consumer-packaged goods (CPG) industry in South Africa where DT is playing an increasingly important role. Digital technologies have changed the way that consumers shop and interact with brands thus creating new opportunities and challenges for CPG companies operating in South Africa. The advancement of DT is also one of the key contributors that lead to job displacement as tasks are automated, making some employees redundant. Despite the growing importance of DT in the CPG industry, there is a lack of research on how it is specifically shaping companies in South Africa (Matt et al., 2015). This study aims to address this gap by exploring the role of DT in shaping the strategies and organizational culture of CPG companies in South Africa.

Ethics approval

Ethical consent for the study has been approved by the UCT Commerce Faculty Ethics in Research Committee.

Participation and confidentiality

I understand that my participation in this research is voluntary, that I will not be compensated and that I may withdraw at any time.

The interview will take approximately 45 to 60 minutes to complete and will be audio recorded. I understand that I will not be identified by name in any reports using information obtained from this interview and that my confidentiality as a participant in this study will remain secure.

Consent

I consent to participate in this interview, based on the terms outlined above and subject to the following additional conditions of my own (if any).

Signed by interviewee

Date

Appendix B: Semi-structured Questions for Participants

Master of Philosophy in Inclusive Innovation

Student Name: Tshepo Ngaleka

Student Number: NGLTSH003

Introduction: Hi my name is Tshepo Ngaleka. I am a Master of Philosophy in Inclusive Innovation student at UCT conducting research on the impact of DT in the consumer-packaged goods (CPG) industry in South Africa. Before we delve into our interview, I would greatly appreciate it if you could provide some insights about yourself.

- (i) Could you kindly share some details about your background, your current role within your organisation, length of service in the role and how long you have worked in the CPG industry?
- (ii) Have you worked in other industries? If yes, which industries?
- (iii) What impact has the advancement of technology had in your role over the years?
- (iv) How has your role evolved over time and can you describe any specific processes or changes you've experienced?

- (v) What impact did these changes have on your career trajectory or skill development?
- (vi) Can you share some of the common digital tools you use on a daily basis in your role?

Theme 1: Impact of digital tools on employees

1. Can you describe any noticeable changes in job roles due to the introduction of new digital tools at your workplace?
 - How have these changes affected people's jobs and the skills they now require?
 - How does this play out in terms of daily tasks and responsibilities?
2. From your perspective, what factors contribute to potential job losses as a result of these changes in digital tools?
 - Are certain jobs more affected than others and have you noticed any unforeseen consequences?
3. Are there existing plans in your workplace to support individuals who might face job displacement due to changes brought about by these digital tools?
 - What impact have these support plans had and are there any difficulties or achievements in their execution?
4. In what ways does your organisation facilitate the learning of new skills when digital tools bring about changes in job roles?
 - Are there specific programmes or resources designed for this purpose?
 - How do employees generally perceive and engage with these learning opportunities?

Theme 2: Employee involvement in DT initiatives in the workplace

5. Based on your experience, how open are employees to the changes brought about by new digital tools at work?
 - How do employees generally respond to these changes and what factors influence their receptiveness?
 - How does your organisation cultivate a positive attitude toward change?
6. Can you share any challenges or barriers that prevent employees from actively participating in the changes introduced by digital tools?
 - Do employees commonly express concerns or resistance to these changes?
 - How does your organisation address and overcome these challenges?

7. Are there specific initiatives in your workplace aimed at engaging and exciting everyone about the introduction of new digital tools?
 - How do employees typically respond to these efforts?
 - Can you provide examples of successful initiatives that generated excitement?
 8. How does your organisation collect and respond to employee feedback regarding changes related to digital tools?
 - Is there a structured process for employees to share their thoughts?
 - Can you recall a situation where employee feedback led to any changes?
-

Theme 3: Inclusivity in the DT strategy

9. Could you share examples of initiatives your company has undertaken to ensure inclusivity in their DT initiatives?
 - How have employees responded to these efforts?
 - Are there lessons learned that could be valuable for other companies?
 10. How does your organization prioritise and plan for DT projects?
 - Does your organization solicit inputs from workers before implementing any digital technologies in the workplace?
 - How involved are employees in this process?
 - At what stage is this communicated to all employees in your organisation?
 11. From your perspective, how do employees contribute to ensuring that changes related to digital tools work for everyone in your organization?
 - How is employee input valued and put into action?
 - How can your company ensure diverse experiences are considered?
-

Sense Check Question: As we conclude, how would you summarise your organisation's approach when implementing new digital tools in relation to employee engagement and ensuring workers are positively impacted in the process?

As an employee do you see the benefits of adopting digital tools in your workplace? What do you think your organisation can do better when implementing these changes?

End of the Interview: Thank the interviewee for their time and valuable insights. Provide an outline of the next steps in the research process, including any follow-up interviews that may be necessary.

Appendix C: Data Management Plan

1. General guidelines

PURPOSE OF THIS TEMPLATE - The purpose of the Outline DMP is to indicate your initial plans for how your data will be collected, shared and stored and to give you a chance to think about these data-focused aspects of the research process. As you begin doing your research, your data process may change and it is perfectly acceptable to change your data management plan to accommodate the changes in your research process. Indicate below that you understand the purpose of completing this Outline DMP template.

I understand the Outline DMP template is a projection of my anticipated data management planning requirements and should be updated as my project develops.

2. Authors and supervisors

PROJECT NAME - Replicate the title of your project, dissertation or thesis exactly as it appears in your proposal document.

DT in South African consumer packaged goods companies

PERSONAL DETAILS - Indicate the name(s) and student number(s) of the student(s) who will be involved in this project, dissertation or thesis.

Tshepo Ngaleka NGLTSH003

SUPERVISOR(S) DETAILS - Indicate who will supervise this project, dissertation or thesis. If you do not yet have a supervisor, leave this section blank.

Dr Mundia Kabinga

3. Data Collection/Generation

COLLECTION OF ORIGINAL DATA - Indicate whether or not you intend to gather/produce original data for your study and provide a brief description of the kind of data you think you will collect. If you are unsure at this time, indicate what you think you are most likely to collect. If you are not intending to gather or collect your own data, declare that here.

I intend to collect original data (described below).

I will collect recorded interviews notes which will be transcribed.

USE OF EXISTING DATA - Indicate if you intend to re-use existing data, either from online searches or from datasets provided by your supervisor, lab, or funder. If you are not intending to re-use existing data, declare that here.

I do not intend to reuse existing data.

DATA SHARING - Indicate whether or not you are intending to publish your research data. If you are, indicate where you are intending to publish your data and under what licensing conditions, such as Creative Commons. If you are not intending to publish your

data, provide reasons and reference the appropriate ethical considerations, commercial applications/patenting ambition, or data re-use agreements that prevent you from publishing your data. Created using UCT DMP. Last modified 13 November 2023 2 of 3

I intend to share my data (details below).

4. Data Storage

ANTICIPATED DATASET SIZE - Indicate the estimated size of your completed dataset and indicate whether or not you will need to access additional data storage facilities. If such storage is not provided by your unit or department, you may need to factor in the cost of purchasing additional storage space.

20GB or less depending on the number of interviewed participants.

DATA BACKUPS - Indicate how you plan to ensure your data is secure and retrievable in case of errors or hardware failure. Describe what procedures you will put in place to back up copies of your data and where they will be stored.

I intend to back up my data using a service provided by UCT (UCT GoogleDrive, UCT OneDrive, Netstorage, ZivaHub etc.). Google Drive will be used.

5. Data Centre(s)/Repositories **DATA CENTRES/REPOSITORIES** - Once your project, dissertation or thesis is complete, it is advisable to curate and archive your completed dataset with an established data centre or repository. Note that you should archive your data even if you are not intending to publish it. Check with your supervisor or funder if you are required to deposit your data in a specific repository, or declare that you will deposit the data in ZivaHub (see the Guidance section).

At the end of my study, I will deposit my data on ZivaHub.
I will store data on ZivaHub.

METADATA - Metadata is descriptive information that others will need to make sense of your dataset. Metadata includes things like study descriptions or abstracts, study instruments (sample collection schedules, codebooks for variables, survey instruments, etc.), subject codes and keywords. Indicate what metadata will accompany your curated dataset.

I will be using audio and video recordings and interviews to conduct my research.

6. Budget

BUDGET - Indicate any costs specifically relating to the management and curation of your data, such as purchasing additional storage space, digitization of physical media, data storage or curation charges and data audits. Most student research will be able to make use of free options provided by UCT and will not have to budget for data costs.

I do not anticipate any data costs as my data is less than 10GB and I will be using a storage system provided by UCT (UCT GoogleDrive, UCT OneDrive, Netstorage, ZivaHub, etc.)

Appendix D: Research Ethics Approval



2024/01/19

COM/00558/2024

RE: Research Ethics Committee Project Approval Letter

Dear Tshepo Ngaleka,

Your application for ethics review of your project titled
Digital transformation in South African consumer packaged goods companies.

has been reviewed and evaluated by the
Commerce Research Ethics Committee.

You may proceed with your research project titled:
Digital transformation in South African consumer packaged goods companies.

Please note that should:

- (i) any serious or adverse effects to participants occur and/or,
- (ii) aspect(s) of your current project change and/or
- (iii) any unforeseen events that might affect continued ethical acceptability of the project occur then you should immediately report this to the approving REC. You may be required to submit an amendment to this application, in order to determine whether the changed aspects increase the ethical risks of your project.

Based on the information supplied your application has been successful and is approved.

Please note the following additional conditions associated with this approval:

- (i)

Regards,

Commerce Research Ethics Committee.

Appendix E: Research participants

Pseudonym	Role	Tenure	Size of department	Years of experience
P1 – Alice	Marketing Manager	3 years	250 employees	8 years
P2 – Bob	Operations Supervisor	5 years	1000 employees	12 years
P3 – Mkhonto	Sales Representative	1 year	50 employees	4 years
P4 – Bibo	Human resource Manager	2 years	300 employees	7 years
P5 – Eric	Finance Director	4 years	800 employees	15 years
P6 – Diana	IT Specialist	6 years	400 employees	12 years
P7 – Ola	Senior Global Manager	2 years	250 employees	16 years
P8 – Hannah	Data Lead	3 years	1200 employees	9 years
P9 – Jasmine	DT Manager	2 years	50 employees	8 years
P10 – Lala	Research and Development Scientist	4 years	1200 employees	11 years
P11 – Linda	Procurement Officer	3 years	400 employees	8 years
P12 – Oscar	Digital Executive	4 years	250 employees	19 years
P13 – Nadia	Sales Director	5 years	300 employees	17 years
P14 – Rachel	Insights Manager	2 years	50 employees	8 years
P15 – Quincy	Product Development Manager	3 years	400 employees	9 years
P16 – Sam	Packaging Engineer	2 years	400 employees	5 years
P17 – Paul	Distribution Supervisor	6 years	1000 employees	14 years
P18 – Thulani	Operator	12 years	1200 employees	12 years
P19 – Tom	Artisan	7 years	1200 employees	15 years
P20 – Tina	Digital Head	6 years	300 employees	16 years

Appendix F: Summary of initials codes and themes

Initial Codes	Broader Themes	Frequency
Engagement Initiatives	Employee involvement in DT initiatives	22
Feedback Mechanisms		12
Barriers and Challenges		30
Openness to Change		40
Changes in Job Roles	Impact of digital tools on employees	35
Job Loss Factors		28
Learning New Skills		49
New Skills		42
Support Plans		17
Employee Contributions	Inclusivity in the DT strategy	45
Initiatives for Inclusivity		38
Planning and Prioritization		20
Adaptation Strategies	Organisational strategies for DT	25
Collaboration		32
Leadership		48
Resource Allocation		27
Technological Integration		34
Cross-Functional Teams	Organisational strategies for DT	29
Change Management		23
Communication		33
Innovation		47
Digital Skills		37
Global Team Alignment		41
Continuous Learning		44
Data Management		31
Cultural Adaptation		24
Employee Empowerment		39
Technological Advancement		26
Strategic Partnerships		36
Customer-Centric Approach		43
Agile Methodologies		21
Change Resistance		50
Innovation Culture		19
Digital Literacy		16
Talent Acquisition		11
Knowledge Sharing		10

Appendix G: Summary of key insights on the impact of digital tools on employees

Participant	Key Insight	Analysis	Additional Insight	Quotes & Key Words
P1	Data analytics tools transformed understanding of consumer behaviours and improved targeted campaigns.	Highlights how digital tools enhance marketing strategies and consumer engagement.	Data-driven insights help tailor campaigns, making them more personalised and effective.	"Data analytics is like having a map that guides us to our target audience." "Our marketing efforts are more precise and impactful with digital tools." Key words: Marketing, Personalisation, Efficiency, Data Analytics, Targeted Campaigns, Consumer Insights.
P2	Digital tools improved inventory management, providing real-time visibility into operations.	Emphasises the efficiency gains from digital tools in optimising supply chain and operations.	Real-time data enhances decision-making and operational responsiveness.	"We can monitor inventory in real time, making our operations smoother." "Digital tools have revolutionised the way we handle supply chains." Key words: Digital Transformation, Supply Chain Optimisation, Inventory Management, Real-Time Data, Efficiency.
P3	Concerns about depersonalisation of customer interactions due to digital tools and automation.	Reflects challenges with maintaining personal relationships with customers amid digitalization.	While digital tools improve efficiency, they can reduce human touch in customer relationships, potentially affecting loyalty.	"Sometimes it feels like we're losing the personal connection with our customers." "There's a risk that technology replaces the human element in sales." Key words: Technology, Human, Depersonalisation, Customer Relationship, Automation

				Interaction, Customer Loyalty.
P4	Automation creates job displacement risks, requiring reskilling and maintaining the human element.	Stresses the importance of balancing automation with human-focused strategies and job security.	Balancing automation with human capabilities is essential to maintaining employee morale and job security.	"We need to upskill our workforce so they aren't left behind by automation." "Automation should complement, not replace, human roles." Key Words: Human Element, Job Security, Workforce Planning, Job Displacement, Reskilling, Automation.
P5	Ransomware attack highlighted the critical need for robust cybersecurity measures.	Underscores the importance of investing in cybersecurity protocols to protect sensitive data.	Cybersecurity is essential to safeguard organizational data from digital threats.	"After the ransomware attack, we realized the importance of cybersecurity. " "Without strong security protocols, digital tools can become a liability." Key Words: Security, Protection, Risk Management, Cybersecurity, Malware.
P6	Upskilling is crucial to mitigate job security concerns caused by DT.	Reinforces the need for continuous learning opportunities to keep employees relevant.	Continuous upskilling ensures employees remain adaptable and capable in a digital-first workplace.	"Continuous learning is the only way to ensure we stay relevant in a tech-driven world." "Upskilling is the best way to keep pace with technology." Key Words: Learning, Adaptability, Workforce Development, Upskilling, Job Security, Digital Skills.
P7	Leadership fosters a culture of innovation and collaboration, driving DT success.	Leadership is key in promoting continuous learning and innovation	Leadership's commitment to innovation sets the tone for the organization's digital	"Innovation thrives when leadership actively supports it." "Creating a culture of innovation starts from the top down."

		throughout the organization.	transformation journey.	Key Words: Culture, Leadership Support, Digital Transformation, Leadership, Innovation, Collaboration.
P8	Analytics tools transformed decision-making processes and operational strategies.	Demonstrates the value of data analytics in improving operational effectiveness.	By leveraging data analytics, decisions are more informed and aligned with business objectives.	"Data analytics is not just a tool; it's a strategic advantage." "With data, we can make decisions faster and more accurately." Key Words: Strategy, Efficiency, Real-Time Decisions, Data Analytics, Decision-Making, Operational Strategy.
P9	Leadership buy-in is essential for successful DT initiatives.	Highlights the critical role of leadership in supporting digital change and driving alignment.	Strong leadership support aligns the entire organization with the vision for digital transformation.	"When leadership supports digital transformation, it's easier for everyone to get on board." "Digital transformation starts with leadership commitment." Key Words: Buy-In, Organisational Alignment, Leadership Support, Leadership, Alignment, Digital Change.
P10	Digital tools have replaced traditional collaboration methods, affecting team dynamics.	Points out the challenges of digital tools reducing personal interactions and collaboration.	While digital tools enhance collaboration, they can also diminish personal interactions, which are vital for team cohesion.	"The personal touch is often lost when using digital collaboration tools." "We've lost some of the human aspect of collaboration in digital environments." Key Words: Interaction, Personal Relationships, Teamwork, Collaboration, Digital Tools, Team Dynamics.

P11	Continuous employee cybersecurity training is essential to prevent cyber threats.	Emphasises the need for ongoing employee education to mitigate cybersecurity risks.	Ongoing training helps keep employees aware of emerging cyber threats and best practices for prevention.	"Cyber threats are constantly evolving and we need to stay ahead of them." "Employees need to understand their role in protecting company data." Key Words: Employee Education, Threat Prevention, Cybersecurity, Cybersecurity, Training, Risk Mitigation.
P12	DT requires mindset shifts and a culture that encourages experimentation.	Encourages a culture where innovation and learning from failure are central to digital success.	Cultivating a mindset that embraces experimentation fosters innovation and accelerates digital transformation.	"We need to encourage experimentation, even if it means learning from failure." "Failure is part of the process; it's how we grow and adapt." Key Words: Learning, Growth, Digital Culture, Mindset Shift, Experimentation, Innovation.
P13	Over-reliance on digital tools may diminish critical thinking and problem-solving skills.	Reflects concerns about automation replacing human skills and decision-making processes.	There is a risk that over-reliance on digital tools can erode employees' critical thinking abilities.	"When we rely too much on tools, we stop thinking for ourselves." "Digital tools should support, not replace, human judgment." Key Words: Decision-Making, Judgment, Automation, Critical Thinking, Automation, Problem-Solving.
P16	Fear of automation making certain roles obsolete.	Reinforces the need to integrate automation without causing alienation or job insecurity.	Automation should be integrated gradually, with a focus on reskilling and adapting roles to new technologies.	"Automation should enhance, not replace, our work." "We need to ensure no one is left behind as automation takes over." Key Words: Role Evolution,

				Adaptation, Job Security, Automation, Job Insecurity, Reskilling.
P18	Training is key to equipping employees with skills for working with new digital tools.	Highlights the importance of training to mitigate job displacement and ensure workforce readiness.	Comprehensive training ensures employees can operate new tools effectively and remain competitive in a digital workplace.	"Training is the only way to keep up with the changes happening around us." "The more we learn, the more confident we feel about the future." Key Words: Confidence, Learning, Workforce Development, Training, Digital Tools, Workforce Readiness.

Appendix H: Summary of key insights on employee engagement and organisational strategies

Participant	Key Insight	Analysis	Additional Insight	Quotes & Key Words
P18	Inclusivity in DT is essential to involve all employees, especially frontline workers.	Highlights the need for proactive efforts to include all levels of the workforce in decision-making processes.	Frontline workers often hold valuable insights that are overlooked without inclusivity in DT.	"Everyone should have a say, not just the management team." "When frontline workers are involved, we feel valued and heard." Key Words: Employee Engagement, Empowerment, Involvement, Inclusivity, Frontline Workers, Employee Voice.
P16	Frontline workers often feel excluded from strategic discussions in DT efforts.	Emphasizes the need for consultation and involvement of all employee levels to improve engagement and morale.	Involving frontline employees fosters a sense of ownership and boosts morale, ultimately enhancing DT outcomes.	"We often feel disconnected from the decisions being made." "Involving everyone creates a stronger sense of purpose." Key Words: Morale, Ownership, Engagement, Exclusion, Disconnect, Frontline Workers.
P6	Inclusivity should mean equal access to training and resources for all employees.	Highlights the necessity of providing equitable access to development opportunities to ensure all employees can adapt to new technologies.	Equal access to resources ensures that no employee is left behind in the transformation process, enhancing overall adaptability.	"Everyone should have the same access to tools and training." "When we all get the same opportunities, we succeed together." Key Words: Equal Opportunity, Team Success, Adaptability, Equity, Training, Access.
P20	Cross-functional collaboration is	Suggests that breaking down	Collaboration ensures that	"Collaboration makes the whole

	critical for successful DT.	silos and fostering teamwork between departments leads to better outcomes.	diverse knowledge and skills come together, fostering more innovative and effective DT solutions.	team stronger and more innovative." "When departments work together, ideas flow freely." Key Words: Synergy, Teamwork, Knowledge Sharing, Collaboration, Cross-Functional, Innovation.
P9	Collaboration between departments results in more innovative and aligned solutions.	Reinforces the idea that collaboration brings diverse perspectives, driving innovation and problem-solving.	Cross-departmental collaboration promotes alignment of goals and enhances the quality of solutions.	"Working together makes us more innovative and ensures we're aligned with the goals." "The power of teamwork cannot be overstated in digital transformation." Key Words: Teamwork, Collaboration, Strategy, Alignment, Innovation, Problem-Solving.
P15	Cross-functional collaboration helps anticipate challenges and develop more comprehensive solutions.	Stresses that collaborative efforts improve problem-solving and efficiency across departments.	Anticipating challenges through collaboration ensures that solutions are more holistic and readier for implementation.	"When we collaborate, we can spot problems before they escalate." "It's about creating better solutions together, not in isolation." Key Words: Holistic Solutions, Anticipation, Teamwork, Proactive, Problem-Solving, Efficiency.
P20	Leadership is essential in promoting cross-functional collaboration and creating a supportive environment.	Leadership plays a key role in fostering a culture of teamwork and ensuring clear communication across the organisation.	Strong leadership is crucial for setting the tone and ensuring collaboration becomes part of the organizational culture.	"As leaders, we must create the environment where collaboration can thrive." "A supportive leadership style allows teams to flourish and innovate." Key

				Words: Supportive Leadership, Flourishing Teams, Innovation, Leadership, Culture, Collaboration.
P14	Transparency from leadership builds trust and promotes teamwork.	Highlights that open communication from leadership encourages trust and collaboration, leading to more effective DT efforts.	Transparency fosters a culture of trust, where employees feel informed and empowered to contribute to DT initiatives.	"Transparency is the foundation of trust and teamwork." "When leadership is open, it strengthens the whole team." Key Words: Open Communication, Empowerment, Trust, Transparency, Trust, Leadership.

Appendix I: Summary of key insights on Digital Transformation strategies

Participant	Key Insight	Analysis	Additional Insight	Quotes & Key Words
P8	Emphasized the importance of training programs to equip employees with digital skills.	Training programs are critical for employee adaptation and engagement in DT.	Training ensures employees are not only skilled but also confident in adopting digital tools.	"Training programs are the cornerstone of our digital success." "It's about empowering our people with the right tools for the future." Key Words: Empowerment, Confidence, Digital Adoption, Training, Digital Skills, Employee Engagement.
P12	Highlighted inclusive decision-making processes to ensure diverse perspectives are considered.	Inclusivity in decision-making fosters employee ownership and enhances the effectiveness of digital initiatives.	Including a broad range of voices in the decision-making process ensures more well-rounded and effective DT strategies.	"Everyone's voice counts in shaping our digital journey." "Diverse teams bring diverse solutions." Key Words: Diversity, Perspectives, Solutions, Inclusivity, Decision-Making, Ownership.
P9	Stressed that open communication channels build trust and engagement.	Clear and transparent communication encourages employee participation and fosters collaboration.	Open communication is key to building a trust-based culture that is essential for driving successful digital transformation.	"When communication is open, engagement follows naturally." "Trust is built through constant, clear communication." Key Words: Communication, Trust-Building, Culture, Transparency, Trust, Engagement.
P20	Focused on breaking down silos for cross-functional collaboration in digital projects.	Collaboration across departments ensures diverse perspectives and	Cross-functional teamwork promotes the flow of ideas, leading to more creative	"Breaking down silos allows us to innovate faster." "The best solutions come when we

		fosters innovative solutions.	and efficient digital solutions.	collaborate across teams." Key Words: Problem-Solving, Teamwork, Efficiency, Cross-Functional, Collaboration, Innovation.
P5	Emphasized the importance of collaboration across departments to drive innovation.	Collective intelligence from cross-functional teams enhances problem-solving and digital success.	Collaborating across departments ensures that all necessary skills and perspectives are leveraged for optimal DT outcomes.	"Innovation thrives when we bring together diverse teams." "Each department adds something crucial to the table." Key Words: Diverse Teams, Synergy, Problem-Solving, Innovation, Cross-Departmental Collaboration, Collective Intelligence.
P19	Discussed the formation of cross-functional task forces for inclusive DT.	Task forces comprising employees from diverse backgrounds improve decision-making and alignment in DT initiatives.	Diverse task forces bring together a wide range of insights, driving better strategic decisions in DT.	"Task forces bring a variety of viewpoints, making solutions stronger." "Our collective input makes the DT process more aligned with actual needs." Key Words: Alignment, Collaboration, Inclusivity, Task Forces, Decision-Making, Diversity.
P16	Highlighted the psychological impact of reskilling programmes in alleviating fears of job displacement.	Reskilling reduces anxiety around job displacement and equips employees with necessary digital skills.	Reskilling not only improves skills but also helps maintain morale and job security during DT.	"Reskilling gives us the confidence to embrace new roles." "It's about reducing fear and giving people the tools to succeed." Key Words: Anxiety, Empowerment, Digital Skills, Reskilling, Job Security, Confidence.

P18	Mentioned that reskilling initiatives have empowered employees to embrace digital technologies.	Reskilling is essential to helping employees adapt and contribute meaningfully to DT efforts.	Empowering employees with new skills enables them to take an active role in driving digital transformation.	"The reskilling programmes have made me more confident in my ability to adapt." "When we are upskilled, we feel part of the digital future." Key Words: Adaptation, Future Readiness, Upskilling, Reskilling, Empowerment, Adaptability.
P4	Noted that reskilling helps reduce fears of job displacement and enhances employee engagement.	Reskilling opportunities not only upskill employees but also maintain job security and trust in the organisation.	Reskilling is a vital strategy for maintaining employee loyalty and trust, especially during DT transitions.	"Reskilling keeps our employees engaged and secure in their roles." "When employees see a future in the company, they invest more in the transformation." Key Words: Loyalty, Investment, Transformation, Employee Engagement, Job Security, Trust.
P17	Stressed the importance of transparent communication in building trust and confidence in employees.	Transparent communication keeps employees informed and engaged, fostering a culture of accountability and trust.	Transparency in communication helps reduce uncertainty, especially during transitions like DT.	"Transparency creates a foundation of trust and accountability." "Being informed helps us align with the company's vision." Key Words: Alignment, Vision, Communication, Transparency, Trust, Accountability.
P7	Raised concerns about the alignment of global and local DT strategies.	Misalignment between global priorities and local market needs can hinder the effectiveness of DT efforts.	Aligning global strategies with local needs ensures that digital transformation is both relevant and practical at the operational level.	"Global strategies often overlook the nuances of local needs." "We need to tailor our approach to the local market to make it work." Key Words:

				Market Relevance, Localisation, Strategy Adjustment, Alignment, Global
--	--	--	--	---

Appendix J: Summary of key insights on organisational culture and adaptability

Participant	Key Insight	Analysis	Additional Insight	Quotes & Key Words
P14	Leadership fosters a culture of innovation and encourages experimentation.	Visionary leadership is crucial in creating an environment where employees feel empowered to innovate and embrace DT, driving overall organizational success.	A leadership style that promotes experimentation can help reduce resistance to change and increase adoption of new technologies.	"Leadership creates a safe space for innovation." "Without the freedom to experiment, we wouldn't have seen the breakthroughs we have today." Key Words: Experimentation, Breakthroughs, Risk-Taking, Innovation, Empowerment, Visionary Leadership.
P13	Leadership leads by example in adapting to new technologies.	Effective leadership that embraces change and demonstrates adaptability encourages employees to be open to innovation, fostering a culture that is conducive to DT.	This leadership style helps build trust and confidence among employees, positioning them to embrace technological shifts.	"Our leaders are always the first to adopt new tools." "When the leadership adopts new technology, it sends a clear message to the team that change is positive." Key Words: Leadership, Adoption, Change Management, Adaptability, Trust, Technological Leadership.
P6	Poor leadership hinders DT and stifles innovation.	Ineffective leadership that resists change and fails to invest in new technologies creates a stagnant organisational culture, leading to missed opportunities and difficulty in	Leadership resistance to DT may also create a disengaged workforce, further slowing down transformation efforts.	"The leaders are stuck in the past; it's holding us back." "When leadership doesn't support change, we feel like we're wasting our time trying to innovate."

		adapting to market trends.		Key Words: Ineffective Leadership, Frustration, Innovation Block, Resistance to Change, Stagnation, Disengagement.
P2	Leadership focuses on short-term gains rather than long-term strategic objectives.	A narrow focus on cost-cutting and efficiency without considering broader DT strategies stifles innovation, hindering the organization's ability to remain competitive in a digital landscape.	Short-term goals can limit the flexibility required for long-term digital transformation, causing potential misalignment with evolving market needs.	"We're so focused on the next quarter, we lose sight of the bigger picture." "The pressure for quick wins often leads to missing long-term opportunities." Key Words: Quick Wins, Long-Term Vision, Missed Opportunities, Short-Term Focus, Cost-Cutting, Strategic Alignment.
P9	Continuous learning is prioritised within the organization to support DT.	A culture of continuous learning and development enables employees to acquire new skills and adapt to technological changes, ensuring the organization remains agile and competitive.	By investing in upskilling, the organization ensures employees are prepared for new technological advances, enhancing overall agility.	"There's always room to learn; it's built into our culture." "Continuous learning means we're always prepared for the next change in tech." Key Words: Preparedness, Technology, Lifelong Learning, Learning, Agility, Upskilling.
P20	Encourages collaboration and cross-functional teamwork for DT initiatives.	Collaboration across teams and departments enhances innovation, enabling the organisation to develop holistic solutions and drive	Cross-functional teamwork not only enhances problem-solving but also enables employees to view challenges from diverse	"Collaboration breaks down silos and fosters new ideas." "We're encouraged to think outside our departments and

		DT initiatives forward.	perspectives, enriching the digital transformation process.	tackle challenges together." Key Words: Teamwork, Problem-Solving, Holistic Solutions, Cross-Functional, Collaboration, Innovation.
P17	Agility and adaptability are essential for staying competitive in a rapidly changing environment.	Organisations need to foster a culture of flexibility and responsiveness, empowering employees to adapt quickly to market changes and technological advancements to maintain competitiveness.	Fostering adaptability encourages employees to act quickly, ensuring that the organization remains relevant in the face of technological disruptions.	"We must adapt or risk falling behind the competition." "Adaptability is key to surviving in today's fast-paced market." Key Words: Survival, Flexibility, Market Shifts, Agility, Adaptability, Market Competitiveness.
P18	Emphasizes a culture of adaptability that enables employees to pivot quickly in response to changes.	Organisations that cultivate adaptability in their culture enable employees to quickly respond to market shifts, positioning the company to take advantage of emerging opportunities.	Adaptability also enhances resilience, helping the organisation withstand economic or technological disruptions.	"We don't just react to change; we anticipate it." "Being able to pivot quickly means we don't get stuck when things change." Key Words: Pivoting, Quick Response, Market Opportunities, Adaptability, Resilience, Proactive Response.
P8	Exchange programmes with tech companies provide exposure to new technologies and innovative practices.	Exchange programmes with tech organisations are a strategic initiative to ensure employees gain hands-on experience and exposure to cutting-edge technologies, fostering innovation	These programmes help the organisation stay updated on global tech trends, making employees more equipped to contribute to the digital	"Working with tech companies opens our eyes to the latest trends." "We bring back ideas from tech companies that keep us competitive." Key Words: Global Trends, Knowledge

		and knowledge-sharing that benefits the organisation in staying competitive within the digital landscape.	transformation efforts.	Transfer, Competitive Edge, Exchange Programmes, Innovation, Exposure.
P20	Collaboration with tech companies promotes knowledge sharing and keeps the organisation competitive.	Collaboration with tech organisations through exchange programmes fosters knowledge-sharing and innovation, allowing employees to bring new insights and technologies back to their organisation, ensuring continuous growth and competitiveness in the DT journey.	Such collaborations enable the organisation to remain at the forefront of innovation, adapting rapidly to changes in the digital ecosystem.	"We learn directly from industry leaders, which keeps us ahead." "The exchange of ideas with tech companies has been a game-changer for our Digital transformation efforts." Key Words: Knowledge Exchange, Game-Changer, Digital Transformation, Knowledge Sharing, Collaboration, Competitiveness.

Appendix K: Personal reflections on the research journey

Embarking on this research journey was both insightful and challenging, offering a profound learning experience that extended beyond academic inquiry. The study began with a keen interest in understanding how DT is reshaping CPG companies in South Africa. While DT is widely researched globally, I quickly realised that literature specific to South Africa's CPG industry was limited, reinforcing the significance of this study. The process of conducting interviews with industry professionals was both enriching and eye-opening. Engaging with executives, middle managers and frontline employees provided diverse perspectives on how digital tools and automation are transforming their workplaces. Many interviewees shared first-hand experiences of how their roles had evolved, some expressing excitement over increased efficiency, while others voiced concerns about job security, skill gaps and resistance to change. What stood out was the willingness of participants to share their insights candidly, which added depth to the findings. Despite being able to conduct these interviews, I had challenges in securing interviews with senior executives, as many were reluctant to discuss internal digital transformation strategies in detail due to corporate confidentiality concerns.

One of the biggest challenges was navigating the balance between objectivity and empathy. Many employees shared personal stories of job displacement, uncertainty and adaptation, making it crucial to maintain a scholarly approach while acknowledging the human impact of digital transformation. Some interviews had to be rescheduled due to busy participant schedules, while others required follow-up questions to clarify specific points. The virtual nature of some interviews, conducted via Microsoft Team calls occasionally led to technical disruptions, however overall, the depth of responses compensated for these minor setbacks.

Another key challenge was data analysis. The rich, qualitative nature of the interviews meant that transcribing, coding and categorising responses required significant time and effort. It was imperative

to ensure that themes emerging from the data were accurately represented and linked to theoretical frameworks. Ensuring that the participants' voices were accurately reflected without oversimplification was a critical part of this process. Despite these challenges, this research has been a rewarding and intellectually stimulating experience. It has deepened my understanding of how businesses navigate digitalisation, how leaders drive organisational change and how employees adapt to new technological realities. Personally, this study reinforced the importance of inclusive digital transformation strategies. It also highlighted that CPG companies that prioritise upskilling, leadership buy-in and employee engagement had better success chances at implementing DT initiatives than those companies that focused on the efficiency path whilst neglecting the human element.

Looking back, this journey has been both academically rigorous and personally transformative. It has provided me with valuable research skills (which I will hopefully use towards my PhD), deeper industry knowledge and a greater appreciation for the complexities of digital transformation in emerging markets like South Africa. I hope that this study contributes meaningfully to the ongoing discourse on digitalisation and serves as a foundation for future research that further explores the evolving digital landscape in the CPG industry and beyond.