



Analysing the impact of COVID-19 on the digital strategies of South African retailers



Authors:

Faith Shenjere¹ 
Susanna L. Middelberg² 

Affiliations:

¹School of Accounting Sciences, Faculty of Economics and Management Sciences, North-West University, Potchefstroom, South Africa

²School of Accounting Sciences, Management Cybernetics Research Entity, Faculty of Economic and Management Sciences, North-West University, Potchefstroom, South Africa

Corresponding author:

Susanna Middelberg,
sanlie.middelberg@nwu.ac.za

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Orientation: COVID-19 pandemic led to a surge in e-commerce with retailers having to embrace digital technologies and develop, implement and/or update digital strategies.

Research purpose: This study aims to analyse the impact of the COVID-19 pandemic on the digital strategies of four JSE-listed retailers.

Motivation for the study: The e-commerce industry in South Africa is still developing, and retailers need guidance on how to plan better for and manage new customer behaviour introduced by the pandemic.

Research design/approach and method: A multiple case study approach was followed to collect qualitative data from the integrated reports of four JSE-listed retailers for the financial year-ends of 2017 until 2021. A newly developed digital strategy hexagon framework was used as the measuring instrument.

Main findings: The findings indicate that the retailers with a pre-COVID digital strategy were better positioned to address challenges associated with the pandemic and also displayed the six components of the digital strategy hexagon framework in their integrated reports.

Practical/managerial implications: E-commerce businesses could use the framework to design a digital strategy and/or build on their existing digital strategy.

Contribution/value add: A novel digital strategy hexagon framework was designed, which could be used by businesses to build or improve their digital strategy.

Keywords: COVID-19; digital disruption; digital strategy; e-commerce; retailers; South Africa.

Introduction

Information technology (IT) has become the foundation of operations – without appropriate IT systems that support business processes, organisations would not be able to operate and compete in the modern marketplace (Skae et al. 2017). An increased disruption in business models caused by digital technologies creates opportunities and challenges for retail businesses and forces them to review their digital strategy and align it with technological developments (Evanschitzky et al. 2020). According to Ritala et al. (2021), digital strategy is defined as corporate strategies developed and implemented by leveraging digital assets to create differentiated value. Although Chanias, Myers and Hess (2019) argued that digital strategy is a mix of business strategy and IT strategy, Yeow, Soh and Hansen (2018) posited that digital strategy is inspired by technology and is business-oriented to meet both business and technological needs. From the above-mentioned definitions, it could be argued that businesses need a digital strategy to ensure a successful digital transformation process. Moreover, businesses need to understand the impact of these technological changes on customer preferences for an appropriate digital strategy to be developed (Singh & Thirumoorthi 2019).

The recent COVID-19 outbreak accelerated the digital revolution, and retail was among the industries that were most affected (Evanschitzky et al. 2020), resulting in an acceleration of e-commerce incorporated into their digital strategy. The rise of digital technologies means that digitalisation – the growing use of IT in every sphere of life – has profoundly shifted society, businesses and people's lives (Bornman & Wassermann 2020). Moreover, e-commerce is increasing at a higher growth rate since the beginning of the pandemic and is expected to grow continually in the future (Jasińska-Biliczak 2022). This sudden shift to online grocery shopping during the pandemic is a relatively new development globally (Baarsma & Groenewegen 2021). Food and grocery retailers had to embrace digital technologies to facilitate their transactions, which led to a total digital revolution in the sector (Tortora et al. 2021). This meant that the digital strategy of

retailers had to be updated if one existed, or developed and implemented if one did not exist.

In 2017, e-commerce in South Africa reached approximately R10 billion (Goga, Paelo & Nyamwena 2019), whereas the total retail sales recorded were estimated to be R1 trillion in 2017 (Statistics South Africa 2017). The net result of e-commerce amounted to only 1% of total retail sales. In 2019, e-commerce accounted for 1.4% of the total retail spend, with a projection to grow to 2% of the total expected retail sales by 2022 (Pentz, Du Preez & Swiegers 2020; Wholesale & Retail SETA 2022). Mature markets have exhibited a higher percentage of e-commerce, such as in the United Kingdom (UK) with 18% of sales being online. These statistics further illustrate that South Africa is still trailing behind in e-commerce (Goga et al. 2019). In South Africa, there are five large grocery retail chains of which two – Pick n Pay and Woolworths – offered online grocery delivery services to their customers before COVID-19 (Goga et al. 2019; Weber & Badenhorst-Weiss 2018). However, the COVID-19 pandemic accelerated the growth in the e-commerce industry with such spending growing by 30% in 2020 (Wholesale & Retail SETA 2022) as more large grocery retail chains joined this industry. There is, therefore, a definite future e-commerce market growth opportunity for South African retailers.

Research on the emergence of e-commerce has been conducted in the United States of America (USA) (Keels 2021) and in South Africa (Brink, Heyns & Kilbourn 2019; Childs et al. 2019; Goga et al. 2019; Masebe et al. 2020). Erasmus, Donoghue and Dobbstein (2022) considered the surge in e-commerce, because of the pandemic, by comparing consumer decision-making styles in South Africa and Germany. Several authors have focused on the concept of 'digital transformation' in organisations (Li 2020; Matt, Hess & Benlian 2015; Musaigwa & Mutula 2022; Porfírio et al. 2021; Schwertner 2017; Vial 2019). Dakora and Rambe (2022) specifically investigated the digital transformation of South African food and grocery retailers during the COVID-19 pandemic. However, limited research exists on the *implementation* of digital strategies. Leão et al. (2023) conducted a literature review on digitalisation and digital strategies in emerging countries, while Lipsmeier et al. (2020) investigated the process when a digital strategy is developed. Ritala et al. (2021) considered the role that entrepreneurial orientation and relational capital played during the implementation of a digital strategy. However, limited reflection has been found on the *impact of COVID-19* on the digital strategies of South African retailers that had to cope with a surge in e-commerce during the pandemic.

The main purpose of this study was to address this combined knowledge gap by analysing the impact of the COVID-19 pandemic on the digital strategies of four JSE-listed retailers. Firstly, an exploration was conducted on whether digital strategies related to e-commerce existed pre-COVID-19 and, secondly, the impact of COVID-19 on these strategies. This article's contribution is a newly developed digital strategy hexagon framework that could be used by scholars as a

foundation for further research, while organisations could use it to design a digital strategy and/or build on their existing digital strategy.

Literature review

This section explains how e-commerce developed and its effect on South Africa and globally. The literature then establishes the role that COVID-19 played in the acceleration of e-commerce, digital transformation and the implementation of digital strategies in the retail industry.

The emergence of e-commerce

Masebe et al. (2020) defined e-commerce as the sale of physical goods over the Internet. For this study, the concept of e-commerce is used within the context of online retailing in South Africa with the exclusion of export sales.

Before e-commerce, brick-and-mortar retail stores – also known as physical retail stores – were once the only place where people shopped. However, since the emergence of the Internet in the early 1990s, retail has faced a tsunami of disruption, such as the rapid growth experienced in mobile technology, fluctuating trends in social media and breakthrough innovations imposed by the digital revolution (Blitz 2021; Buket 2010; Keels 2021). In 2017, the retail industry was under siege when several physical stores closed permanently. This phase was known as the 'retail apocalypse' phenomenon (Isidore 2017; Keels 2021). 'Retail apocalypse' is used to describe both the catastrophic closure of an enormous number of physical retail stores and the bankruptcy of many traditional physical retail stores (Childs et al. 2019; Kaufinger & Neuenschwander 2020). The USA led the retail apocalypse with a record of about 7000 retail stores that closed and 662 filing for bankruptcy in 2017 (Isidore 2017).

In research conducted by Berman (2019), Childs et al. (2019), Goga et al. (2019) and Helm, Kin and Van Riper (2018), the main contributing factor of store closures was the rise in customer bargaining power. Competition because of online sales also escalated, as customers positioned themselves in a dominant position during the advent of e-commerce. As a result, an increased dependence on digital platforms was evident. The Internet made it possible for customers to purchase products and for retailers to advertise their products or services online. Globally, online retail has grown substantially over the years.

Food and grocery e-commerce in South Africa and globally

E-commerce is implemented and used in many business sectors, including the grocery retail industry (Brink et al. 2019). In a global survey conducted by Nielsen in 2018, 26% of digital customers purchased groceries online, showing an increase of 15% between 2016 and 2018 (Brink et al. 2019). South Korea – where 95% of the population has internet access – is considered the leader in grocery e-commerce and reported the highest market share in grocery e-commerce at

8.3% in 2018 (Garcia 2018; Statista 2022). In comparison, 56.2% of South Africans have access to the Internet. Although South Africa boasts a relatively modern economy and has seen a rise in modern customers, retailers and customers are slow to adopt and participate in online grocery retailing (Weber & Badenhorst-Weiss 2016, 2018).

COVID-19 and the surge in e-commerce

COVID-19 was not, to the best of our knowledge, previously identified in humans before 2019. The World Health Organization (WHO) declared COVID-19 a global pandemic on 11 March 2020, and countries were requested to take urgent and aggressive action to prevent the spread of the virus (WHO 2020). Subsequently, the South African government mandated active control measures to try and minimise the spread of COVID-19. Strict measures were imposed, such as a national lockdown – all non-essential shops and businesses had to close, and South Africans were confined to their homes unless they needed medical services, to buy food or to collect a grant (Department of Co-operative Governance and Traditional Affairs 2020).

Of all the industries impacted by the COVID-19 pandemic and the subsequent preventative measures, brick-and-mortar stores were undoubtedly the worst affected. Preventative measures caused unprecedented challenges to retail management (Erasmus et al. 2022; Keels 2021). These challenges included panic buying and how to manage it, crowd management when only a certain number of customers were allowed, out-of-stock situations and staff safety (Dakora & Rambe 2022; Pantano et al. 2020). Several customers resorted to buying their essential items online. Furthermore, older and less digitally proficient customers, such as baby boomers (born between 1946 and 1964) and Generation X (born between 1965 and 1980), started discovering and enjoying online retailing, because of the safety measures involved (Eger et al. 2021). This resulted in a pronounced increase in online retailing and compounded the quagmire, as overwhelmed retailers strived to operate during the global pandemic (Baarsma & Groenewegen 2021; Siawsolit & Gaukler 2021). Many grocery store retailers resorted to building their own online retailing platforms to increase their sales while adhering to the COVID-19 measures in place (Shen, Namdarpour & Lin 2022). Research conducted by World Wide Worx in 2021 illustrates that the total growth for e-commerce in South Africa amounted to 66%, bringing the total to R30.2 billion (World Wide Worx 2021). Deloitte's (2021) research indicated that growth could increase significantly, as consumers move from in-store shopping to e-commerce.

Digital transformation and digital strategies

COVID-19 fast tracked the digital transformation of businesses in different industries, such as retail (Soto-Acosta 2020). The COVID-19 pandemic intensified the problem retailers face: They lack digital technology to serve their customers effectively, emphasising the urgency of embracing digital

transformation (Musaigwa & Mutula 2022). During the peak of the pandemic, retailers were under pressure to adopt digital technologies almost overnight to survive – and even in the post-pandemic era, an effective digital transformation would have usually taken years 3 years to 5 years to become fully fledged (Acquila-Natale et al. 2022).

Digital transformation does not imply that a typical project or programme is quickly launched and implemented immediately, but it should rather be understood as a dynamic and continual process (Lipsmeier et al. 2020). Nasiri et al. (2020) described digital transformation as tools that are used to transform aspects of business processes, culture and organisations to meet the changing market demands caused by digital technology. Nevertheless, many organisations struggle with digital transformation, because they initiate technological change without building an overall plan or consistent digital strategy (AlNuaimi et al. 2022). It is clear from the literature that a digital strategy forms part of the overall strategy of organisations (Leão et al. 2023; Matt et al. 2015). However, to understand digital strategy within context, the concept of 'strategy' has to be understood.

Strategy is often viewed as a powerful tool to boost the performance of a business and to gain a competitive advantage. Without a clear strategy, vision, mission and a good understanding of the external and internal business environment, businesses often flounder (Van den Steen 2021). The Chartered Institute of Management Accountants (CIMA) compared the definitions of the strategy of various authors and concluded that strategy is a long-term organisational direction and scope that is used to realise the advantage of an organisation by organising resources in a changing environment to meet market needs and manage stakeholder expectations (CIMA 2020). However, Van den Steen (2021) criticised the definitions of Skae et al. (2017) and the CIMA (2020) by positing that 'maximising shareholder value' is almost too generic to provide guidance and should, therefore, not form part of a strategy. Van den Steen (2021) defined strategy as a small set of core decisions that guide the decisions of corporate managers and employees.

However, traditional strategic thinking and execution have become ineffective presently. Organisations need to develop and implement transformation strategies that provide the necessary flexibility to deal with unexpected and unpredictable changes in the environment. The development of a digital strategy that embraces business strategies is, therefore, the predominant digital transformation success factor (Porfirio et al. 2021). Moreover, a digital strategy helps companies to accomplish digital transformation by emphasising their digitally empowered customers, digital leadership skills, flexible and agile digital operations and emerging digital innovations (Porfirio et al. 2021).

The post-pandemic acceleration of digital technology resulted in a likely outcome: 'Going back to normal' is not a realistic scenario, as some of the newly adopted behaviours

of retailers and customers during the COVID-19 are likely to become the 'new normal' (Beckers et al. 2021; Roggeveen & Sethuraman 2020). As a result, organisations focusing on their digital strategy may contribute to digital transformation, as numerous retailers are now driving digital transformation to survive post-pandemic challenges (Li 2020). This study analysed the digital strategies of four retailers as disclosed in their integrated reports, especially during the post-pandemic era when they needed to embrace digitalisation to remain relevant and competitive.

Currently, there is a limited amount of literature available on a specific framework that analyses the existence or progression of a digital strategy. For this reason, the researchers developed a digital strategy hexagon framework to identify whether the framework's components are highlighted in the integrated reports of retailers. This proposed digital strategy hexagon framework could be utilised to identify whether a digital strategy exists and whether the digital strategy has evolved.

Digital strategy hexagon framework

The digital strategy hexagon framework is not mutually exclusive and was developed to fill the current gap in the literature on components that should be included and/or disclosed in digital strategies. The six identified themes represent individual components included in the digital strategy hexagon framework (Figure 1) and were identified through a literature review.

Understanding the concept of 'digital transformation' is important when a digital strategy is needed to implement digital transformation. Digital transformation does not exist on its own – it changes the business environment, and without proper planning, organisations could fail a transformation process dismally. Digital transformation does not only entail advanced technologies that are constantly evolving but also fluctuates the customer behaviour that changes (Lipsmeier et al. 2020; Porfírio et al. 2021; Schwertner 2017). Digital transformation should be decided upon at the strategic level and should be fused with business strategies (Bharadwaj et al. 2013; Leão et al. 2023; Matt et al. 2015). Leão et al. (2023) concurred by arguing that the formulation and implementation of a digital strategy are required to conduct digital transformation. The first identified component is, therefore, the inclusion of digital transformation in business strategic planning.

According to Musaigwa and Mutula (2022), a company without a strategy tends to focus more on technology rather than its customers when digital transformation is implemented. A customer-centred focus during digital transformation was, therefore, identified, and as the second identified component, it represents an understanding of the impact of advancing technology on customers. This viewpoint is supported by other authors, including Acquila-Natale et al. (2022), Correani et al. (2020) and Li (2020).

Organisations should have supporting platforms in place to implement digital transformation, as maintained by Bharadwaj et al. (2013). Supporting platforms were, therefore, identified as the third component when building a digital strategy and entail the designing of platforms that link with the business retailing environment. Supporting platforms could be, but are not limited to, websites, mobile applications and social media platforms.

Erjavec, Indihar Štemberger and Jaklič (2023) argued that digital transformation projects must be executed by interdisciplinary teams with the IT department providing operational backbone capabilities. The fourth identified component is, therefore, that a digital strategy should ideally be developed and implemented by a dedicated and knowledgeable individual or a team of experts.

According to Schwertner (2017), digital transformation should not occur in isolation and needs to be part of the daily business operations. This idea was included as the fifth component of the framework.

The last component was identified as understanding digital transformation as a continual process – businesses need to understand the constant changes that take place in the digital market and the risks associated with constant changes (Lipsmeier et al. 2020; Matt et al. 2015; Vial 2019).

The digital strategy hexagon framework (Figure 1) was utilised as the measurement instrument to collect the empirical data.

Research design

A qualitative research method was employed adopting an interpretative paradigm. A multiple case study design was used to compare and contrast the results (Bryman & Bell 2011)

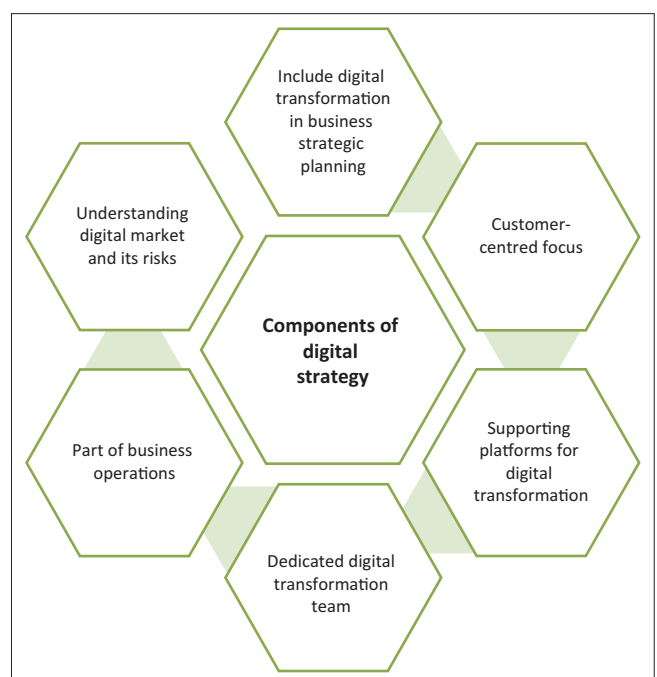


FIGURE 1: Digital strategy hexagon framework.

obtained from the disclosure of digital strategies applied by the sample of South African retailers. Qualitative data were collected before (2017–2019) and during (2020 and 2021) the COVID-19 pandemic. The main purpose of this study was to analyse the impact of the pandemic on the digital strategy of four JSE-listed retailers by exploring whether these retailers had a digital strategy related to e-commerce in place before the pandemic occurred and the impact of COVID-19 on these strategies.

The population for this study consisted of five JSE-listed retailers in the food and wholesale sub-sectors. The study sample focused on four of the five JSE-listed retailers, as shown in Table 1. These retailers were selected by making use of purposive sampling, which is a non-probability sampling approach wherein subjects are purposely selected based on the researcher's judgement (Giri & Biswas 2019). This sampling technique in qualitative research is supported by Yilmaz (2013), who argues that a small number of participants are purposively selected to gather in-depth knowledge. The two inclusion criteria used by the researcher to select the participants were that only JSE-listed retailers with head offices in South Africa were used and that the retailers offer online retail sales. The fifth retailer did not meet either of these two criteria. To adhere to the institutional ethical requirements, the retailers are referred to as Retailers A to D to protect their identities. For this reason, no reference to the integrated reports of these four retailers is included in the reference list.

From Table 1, it is evident that the sampled retailers have different financial year-ends. The year-end of Retailers B to D is June, while Retailer A's year-end is February. The sampling period extends from the financial years (FY) ending 2017–2021 with 2017–2019 being the pre-COVID and 2020–2021 being during COVID-19. This particular period was chosen to reflect on the impact that the COVID-19 pandemic had on the disclosure of e-commerce on the digital strategies of South African retailers. These periods are in line with a study conducted by Roberts, Jang and Mubako (2023), where integrated reports published prior to January 2020 were considered as before the pandemic and after this date as influenced by COVID-19.

Qualitative data were collected from the integrated reports of the retailers dating from the financial year-ends of 2017 to 2021 by making use of 'content analysis' as the data collection method. According to Steenkamp and Northcott (2007:12), content analysis is a popular method used in accountancy research to 'reveal useful insights'. Content analysis is defined by Smith (2003:147) as a 'method that uses a set of

procedures to make valid inferences from texts'. Two approaches to content analysis have been identified by Smith, namely, 'form-oriented' (objective) and 'meaning-oriented' (subjective). The former involves routine counting of words, themes or concepts, while the latter focuses on analysing the underlying meanings in the investigated texts (Smith 2003; Steenkamp & Northcott 2007). In this study, meaning-oriented content analysis was applied. In this regard, the six-stage process of Creswell and Creswell (2018) guided the qualitative content analysis.

Step 1: Organise and prepare the data for analysis

Integrated reports of the four JSE-listed retailers were downloaded from their respective websites. Integrated reports are used to communicate with stakeholders by presenting information about the historical operations and future prospects of companies with regard to strategies, risks and opportunities (International Integrated Reporting Council 2011; Varachia & Yasseen 2020). For this reason, integrated reports were used for the data analysis.

Step 2: Read through all of the data

The integrated reports were read intensively to gain an overall understanding of how information is presented and disclosed to stakeholders.

Step 3: Begin a detailed analysis with a coding process

Coding involves breaking down data into blocks or segments of text before meaning is given to the information (Creswell & Creswell 2018). The newly developed digital strategy hexagon framework (Figure 1) was used as the measuring instrument by using keywords from the framework to search whether such disclosures were evident in the integrated reports of the retailers. A similar study that focused on digital strategies could not be found, but studies that followed a comparable research design were assimilated. Botha, Oberholzer and Middelberg (2022) developed a water governance disclosure index from the literature and utilised the index as a measuring instrument to content-analyse integrated reports. Similarly, Korera (2020) developed a disclosure and transparency index to evaluate disclosure and transparency in the annual reports of Zimbabwean firms. The current analysis explored the existence of and changes made to digital strategies related to e-commerce in multiple case studies.

Step 4: Use the coding process to generate descriptions

The six components of the digital strategy hexagon framework were used to investigate whether the disclosure of the components found in the digital strategies of the retailers was prevalent pre-COVID-19 and subsequently evolved in the integrated reports pre-COVID-19 and during the COVID-19 pandemic.

TABLE 1: Sampled case studies and their financial year-ends.

Retailer name	Financial year-end
Retailer A	28 or 29 February
Retailer B	30 June
Retailer C	30 June
Retailer D	28 June

Step 5: Decide how the description and themes would be represented in the qualitative narrative

A narrative passage approach was used to convey the findings of the content analysis.

Step 6: Interpretation of the data

Lastly, the data that were collected by making use of the digital strategy hexagon framework as the measuring instrument were then interpreted.

The reliability in recording and analysing the data using content analysis was increased in line with the methods suggested by Guthrie et al. (2004) of firstly selecting and defining the disclosure categories from relevant literature and secondly developing a reliable coding instrument – the digital strategy hexagon framework – with specified decision categories.

The results from the content analysis are presented further in the text.

Ethical considerations

Ethical clearance to conduct this study was obtained from the North-West University Economic and Management Sciences Research Ethics Committee (EMS-REC) (No. NWU-00718-22-A4).

Results

The impact of the COVID-19 pandemic on the digital strategies of the identified retailers was analysed by making use of the newly-developed digital strategy hexagon framework (refer to Figure 1) as the measuring instrument. The results of the content analysis are presented in a discussion of each component of the digital strategy hexagon framework disclosed in the integrated reports of the retailers from 2017 to 2019 (before the COVID-19 pandemic) and from 2020 to 2021 (during the pandemic).

Component 1: Include digital transformation in business strategic planning

The first component of the digital strategy hexagon framework assessed whether the digital transformation was included in the overall business strategic planning of the retailers as presented in their reports for each financial year.

Retailer A's main strategic objective since FY2014 has been 'to restore the business to a position of long-term sustainable growth'. This includes changing the trajectory of the company, and a change in trajectory means:

'[D]eveloping a multi-channel retailer, with a focus on convenience, including smaller format stores, a strong and innovative online offer, and a broad range of value-added services.' (Retailer A, 2017)

Retailer B referred to:

"Embracing e-commerce solutions for customer and product engagement" in their "recipe for success" as they believed "Just like a truly great dish, a dynamic and successful food service partnership requires the right ingredients." (Retailer B, 2017)

'Recipe for success' in this instance referred to their strategic planning for sustainable growth.

For FY2017, Retailer C reported that they intended to participate in the online shopping growth trend as 'online shopping is rapidly growing on a global scale'. Since 2017, the three retailers (A, B and C) continued to keep their strategic focus in mind regarding digital transformation and 'growing the retail offer for mobile-savvy customers' (Retailer A 2017–2019; Retailer B 2017–2019; Retailer C 2017–2019).

When the pandemic struck in March 2020, all four of the retailers updated their strategic planning to accommodate the anticipated e-commerce digital transformation in the retail environment (Retailer A 2021; Retailer B 2020; Retailer C 2020; Retailer D 2020). Retailer A disclosed that it intended to capture growth and invest in its digital infrastructure to further develop as a forward-looking omnichannel retailer. Cambridge (2022) defined 'omnichannel shopping' as a method of selling products that are the same and equally suitable for customers, whether they purchase these products through a computer, a mobile application or in a brick-and-mortar store. Retailer C's strategic objective was to grow its digital commerce propositions to match the digital market. Retailer D highlighted 'implementing an online shopping solution that meets the needs of all our retailers and fits in with the omnichannel strategy of the business'.

From the above discussion, it is evident that three of the four retailers included digital transformation in their business strategic planning since pre-COVID-19.

Nonetheless, for the strategic planning to be executed, digital transformation's focus should be customer-centred.

Component 2: Customer-centred focus

The next component of the digital strategy hexagon framework considers the fact that the focus of digital transformation should be customer-centred.

Retailers A and B kept abreast with the changes in customer shopping behaviour as technology advanced. Moreover, they continued supporting their digital technology platform trends since FY2017 to ensure they remain ahead of the e-commerce market (Retailer A 2017–2019; Retailer B 2017–2019).

Retailers C and D kept track of 'changing trends in customer preferences and consumption behaviours'. However, Retailers C and D only paid attention to the changes in IT and how to communicate efficiently with customers in the new 'digital world'. These retailers did not report on how these changes would affect the shopping behaviour of customers.

Moreover, they did not keep abreast with supporting digital technology platforms. It was only in FY2019 that Retailer C disclosed a digital transformation project that would 'place customers at the centre of every business decision, deepen our customer intelligence and personalise every customer's experience' (Retailer C 2017–2019; Retailer D 2017–2019).

Only in the financial year FY2020, when the COVID-19 pandemic changed customer shopping behaviour, did Retailers C and D start to disclose information about the 'mobile-savvy customers and digital platforms' (Retailer C 2020; Retailer D 2020).

It is, therefore, evident that all four of the retailers disclosed the second component of a digital strategy, although Retailers C and D started only in FY2020. To implement digital transformation successfully, these retailers should have supporting platforms in place to complement the process of digital transformation.

Component 3: Supporting platforms for digital transformation

The third component of the digital strategy hexagon framework refers to whether platforms exist that support digital transformation in companies. Before the COVID-19 pandemic, Retailers A and B had supporting online shopping platforms in place. Customers could use these platforms to order groceries for home delivery or in-store collection. Moreover, these retailers continually improved their online shopping platforms to provide customers with a quick and easy online shopping experience.

Retailer C only launched a digital mobile shopping application in FY2020. In the following financial year, Retailer D reported that they were 'developing an e-commerce platform' that would support all of their retailers and would be launched in FY2022 (Retailer C 2020–2021; Retailer D 2020–2021).

All four of the retailers included the third component of digital strategy in their strategic planning, although Retailers C and D did that only in financial year 2020 and 2021, respectively. For a business to move forward in digital transformation, a dedicated team with the necessary skills, competencies and capabilities is needed.

Component 4: Dedicated digital transformation team

The fourth component of the digital strategy hexagon framework is the existence of a dedicated digital transformation team in a company. Retailers A and B had dedicated teams with the necessary capabilities and skills for their food and grocery online shopping market since FY2017. These retailers disclosed in their integrated reports that the teams kept up to date with the latest online shopping trends and developed supporting online shopping platforms.

Retailers C and D did not disclose anything specifically about a dedicated digital transformation team in their integrated reports. However, in FY2019, Retailer C referred to an existing digital transformation project. It could, therefore, be assumed that a dedicated team was assigned to that project (Retailer C, 2019).

The digital strategy of three of the four retailers included the fourth component. However, even the most competent digital transformation team could not single-handedly transform a business. As a result, a digital transformation plan should be part of the business operations of companies.

Component 5: Part of business operations

The digital transformation plan of companies and support platforms should form part of business operations and is, therefore, the fifth component of the digital strategy hexagon framework. Pre-COVID-19, Retailers A and B included online shopping as part of their business operations:

'Online retail remains a relatively small but growing part of our business.' (Retailer A, 2017)

and the retailer would:

'[C]ontinue to invest in enhancements to our online platform.' (Retailer B, 2018)

Moreover, Retailer A has two dedicated online distribution centres – one in the Western Cape and the other in Gauteng, South Africa (Retailer A 2017).

The online services team of Retailer B is managed in a separate division of the company and has dedicated online distribution centres across South Africa that are conveniently located to enable a faster and better response rate execution of customers' orders (Retailer B 2018).

Pre-COVID-19, online shopping was not part of the business operations of Retailers C and D. In FY2021, Retailer C disclosed that they changed their core business in food retailing to include 'digital commerce' (Retailer C 2021). In contrast, Retailer D indicated that they were in the planning phase of digital transformation:

'[D]igital transformation is an opportunity for us to shape the future of Retailer D.' (Retailer D, 2021)

All four of the retailers disclosed information about the fifth framework component of a digital strategy, although Retailers C and D addressed this only post-COVID-19. Digital transformation is a continual process, and companies need to understand the constant changes occurring in the digital market and the risks associated with these changes.

Component 6: Understanding the digital market and associated risks

The sixth and final component of the digital strategy hexagon framework is evidence of an understanding of the digital market and associated risks. Retailers A and B both disclosed

that they understood that digital transformation is a continual and dynamic process. As a result, they kept their digital transformation-related risks updated and addressed digital transformation in food and grocery retail in South Africa before the COVID-19 pandemic.

For example, one of Retailer B's digital transformation risks in FY2017 was:

'The ever-changing landscape of how we engage in the world today, combined with the real-time immediate gratification requirements of business to date has seen new technologies and entrants into our market, changing the expectations of our customer base.' (Retailer B, 2017)

Their response to a changing digital transformation landscape was that they:

'[I]nvested in solutions development capability, driving online innovation to an established customer base.' (Retailer B, 2017)

Retailers C and D did not disclose any digital transformation or e-commerce-related risks before the COVID-19 pandemic. During the pandemic, Retailer C reported a 'change in trading environment' risk, while Retailer D reported an 'inability to meet changing consumer needs in all aspects' as a risk (Retailer C 2020–2021; Retailer D 2020–2021). Since then, both of these retailers have been trying to understand the new digital market, as is evident in the following comment:

'[T]he lack of appropriate digitalised offering to consumers can result in a decrease in market share.' (Retailer D, 2020)

Retailers A and B noticed a possible opportunity to expand their online presence in the likely 'new normal' post-COVID crisis. Retailer B, reported in their FY2020 that:

'[N]ot all players in the food service industry entered this crisis in as strong a market position as Retailer B. There is the possibility of market share gains should competitors exit the industry.' (Retailer B, 2020)

Retailer A expanded its online capacity and reach with its acquisition of a liquor delivery application and its delivery times (Retailer A 2020–2021; Retailer B 2020–2021).

The final component of the framework was evident in all four of the retailers' digital strategies, although Retailers C and D only addressed associated risks after the start of the COVID-19 pandemic.

Discussion

This study addressed the purpose by exploring whether digital strategies related to e-commerce existed before COVID-19 and the impact of the pandemic on these strategies for the four sampled JSE-listed retailers. From the results, it is evident that digital strategies existed pre-COVID-19 and the pandemic impacted the digital strategies of the sampled retailers although to varying extents. It could be inferred that Retailers A and B had an existing and effective digital strategy

pre-COVID-19, as they disclosed all of the components of a digital strategy identified in the digital strategy framework. Retailer A displays the most comprehensive history of an engaged focus on e-commerce. In contrast, it could be argued that Retailers C and D had a digital strategy presence merely as a 'me-too' strategy – it seems as if a digital strategy was implemented by a market leader, as most of the components of the digital strategy hexagon framework were only disclosed from FY 2020 onwards.

Retailers C and D mainly focused their investments on their brick-and-mortar stores rather than on digital transformation pre-COVID-19. It would seem that they were comfortable pre-COVID-19 with respect to their sales and profits generated from their physical stores. They reported year-on-year sales growth (Retailer C, 2017–2019; Retailer D, 2017–2019). As a result, these retailers did not feel the need to invest in or accelerate their digital transformation pre-COVID-19. Incidentally, it does not mean that Retailers A and B were not comfortable with their sales and profit generated from their physical stores; these retailers wanted to stay ahead of the competition curve. Retailer A continually reinvested in their online platform to ensure they 'grow sales in line with, or ahead of the market' (Retailer A, 2018).

The presence of a digital strategy played a significant role during the COVID-19 pandemic. All four of the retailers turned to their digital strategy during COVID-19 to reach customers. However, both Retailers A and B had an effective digital strategy in place before COVID-19 struck and were able to respond swiftly and effectively to the rapid rise in online grocery shopping. Moreover, they performed very well during the COVID-19 pandemic. Retailers C and D, who had an immature digital strategy pre-COVID-19 in place, stepped up to meet the competitive pressure and started *implementing* a digital strategy to their core business in FY2020. Retailer D has not yet presented an online presence option to its South African customers, but intends to do so from FY2022 onwards.

Conclusion

The main purpose of this study was to analyse the impact of the COVID-19 pandemic on the digital strategies of four JSE-listed retailers. The findings not only indicate that the retailers with an existing pre-COVID digital strategy in place were better positioned to address the pandemic's challenges but also highlight the significance of the prominent presence of the six components of the digital strategy hexagon framework in the integrated reports of these retailers. It is recommended that other retailers should also consider a digital transformation by introducing e-commerce platforms to their customers. Retailers should adopt a digital strategy, as this will assist them in navigating new possibilities to increase sales. Moreover, a broader digital strategy and e-commerce framework should be considered and developed by innovative retailers. The latter could utilise the components of the digital strategy hexagon framework as guidance for the development of such a strategy.

One of the limitations of the study is that while the study population was considered adequate to draw conclusions, it was limited to JSE-listed retailers only. Moreover, the analysis was limited to a period ranging from 2017 to 2021. Integrated reporting guidelines do not require companies to disclose their IT or digital strategies specifically. Furthermore, integrated reports have various shortcomings, as some retailers limit their disclosures for various reasons – the absence of disclosures is not necessarily indicative of perceived flaws. The results could not be compared to previous research, because of a lack of literature on digital transformation and digital strategies. This paucity creates areas for future research considering that this is an exploratory study. The sample could be expanded to include other countries and industries to gain more insight into the impact of COVID-19 on digital transformation and digital strategies.

The study illustrates the importance of a sound digital strategy to navigate the surge in e-commerce. Moreover, the study presents a newly developed digital strategy hexagon framework, which could be used by scholars as a foundation for further research, while businesses could utilise the framework to design a digital strategy and/or build on their existing digital strategy.

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Competing interests

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Authors' contributions

F.S. designed and conducted the research and also drafted the article; S.L.M. acted as a supervisor, reviewed and amended the article and acted as the corresponding author.

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Data availability

The data that support the findings of this study are not openly available but available from the corresponding author, M.S.L., upon reasonable request.

Disclaimer

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