A framework to drive business growth in developing countries using omni-channel strategies

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Abstract: During the past few decades, firms have undergone radical changes due to digitalisation initiatives, changing consumer behaviour and other factors, such as the pandemic. This has led to, amongst others, the implementation of online strategies such as an omni-channel strategy. However, omni-channel strategies increase supply chain complexities and have very specific managerial implications to consider. Current research addresses numerous benefits of and barriers to online strategies and provides building blocks to implement online strategies. From this, a theoretical foundation was built for this article. Interviews were conducted in a developing country to determine the extent to which the theoretical foundation can be applied within the context of a developing country. This general qualitative research proposes a framework for managers in developing countries to consider when implementing an omni-channel strategy.

Keywords: omni-channel strategy; multi-channel strategy; managerial implications; supply chain strategy; supply chain design.

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1 Introduction

1.1 Background

In supply chain management, collaborative planning and coordination of all functional operations is required, which highlights the importance and integration of inter-organisational and intra-organisational relationships, processes, and information (Queiroz et al., 2019; Stock and Manrodt, 2020). The implementation of a distinct channel strategy optimises supply chain performance (Song et al., 2019). During the past few decades, firms have undergone radical changes due to, among other things, ongoing digitalisation innovations, changing customer spending patterns and external factors such as the COVID-19 pandemic (Lewis et al., 2014; Taylor et al., 2019; Kannan and Kulkarni, 2021; Wang et al., 2021). Firms across the supply chain have been forced to reassess their business strategies (Sorkun et al., 2020) because consumers are engaging more in online buying through online channels (Kannan and Kulkarni, 2021; Wang et al., 2021). Two channel strategies to address this trend are multi-channel (MC) and omni-channel (OC) strategies. MC and OC supply chain strategies have become increasingly important as customers require a seamless shopping experience (Berman and Thelen, 2018). This trend has increased significantly during the past few years and has been emphasised during the recent pandemic (Kannan and Kulkarni, 2021).

A MC strategy is a supply chain approach where firms implement at least two, thus, multiple channels. However, operational transactions are separated, which creates isolated systems – often referred to as silo functions – for operations and logistics activities (Hübner et al., 2016), which sometimes results in internal competition between business functions (Berman and Thelen, 2018; De Borba et al., 2020). Each distribution channel requires dedicated resources, assets and facilities (Taylor et al., 2019). Coordination, planning and shared resources and information are not common across channels (Berman and Thelen, 2018). Customers interact across various channels and receive products either in-store or by means of deliveries (Hübner et al., 2016; Latini,

2019). From both a customer and a firm's perspective, processes and systems are not integrated because each channel is managed separately (Hübner et al., 2016). Breaking down and integrating organisational silos is difficult because of established organisational structures (Berman and Thelen, 2018). MCs will be implemented because market segments are expanded and customers' buying experience is improved (Berman and Thelen, 2018; De Borba et al., 2020; Silva et al., 2020).

An OC strategy always utilises multiple channels, but no distinction is made between the channels (Hübner et al., 2016). Complete integration is achieved. Internal integration allows the firm to share information and resources between previously isolated functions (Berman and Thelen, 2018; De Borba et al., 2020; Silva et al., 2020). From the firm's supply chain perspective, there is only one logistics and supply chain interface (Hübner et al., 2016). External integration allows the firm to collect and share information with customers (Berman and Thelen, 2018). Customers can engage with the firm in several ways (e.g., by visiting the physical store or by using a variety of different online channels such as mobile applications, the internet or social media to engage online and find out more about products in terms of variety, prices, availability, delivery, returns options, and so on (Chen et al., 2020; Davis-Sramek et al., 2020; Hussein and Kais, 2021).

1.2 Problem statement and research question

When firms add a channel, it creates new opportunities (or potential benefits) as well as increased complexities for the firm (Cao and Li, 2015). The benefits of implementing online channels have been researched extensively (Davis-Sramek et al., 2020; Mishra, 2020). The benefits of implementing OC strategies need to be weighed against the barriers (or challenges) of implementing the strategies. Implementing an OC strategy is complex and not much research has been conducted about the transition process towards an OC strategy (Davis-Sramek et al., 2020). Many firms have struggled to implement OC strategies to meet customer needs and operate efficiently (Jocevski et al., 2019). Managers face the challenge of successfully changing their business models to implement OCs. Mishra (2020) adds that managers need to be made aware of how different factors can impact the implementation of OCs. This is corroborated by other research outputs that show the need for more research about integrating supply chain processes, such as operations and logistics, into OC integration (Hübner et al., 2016). Mishra (2020) also highlights the fact that a lot of the research about MCs and OCs is limited to a North American or European context and that minimal efforts have been made to do research from a developing country perspective. Hussein and Kais (2021) agree and state that limited research has been conducted from an emerging market context. This research endeavours to contribute towards this gap in current research and to provide a framework that identifies how firms can develop towards OC implementation. The framework was constructed from literature by reviewing

1   the benefits of (and barriers to) OC implementation

2   analysing managerial implications to implement OC strategies.

Interviews were conducted with participants who represented firms that implement online channels to determine how applicable the framework might be from a developing country context. The firms were operational in South Africa. The article is driven by the following three research questions:

- What are the benefits of OC strategies?

- What are the barriers of OC strategies?

- Based on these benefits and barriers, what are the managerial implications to implement an OC strategy?

1.3   Theoretical foundation

The theoretical foundation for this article was built on research conducted by Berman and Thelen (2018), Jocevski et al. (2019) and Mishra (2020). Berman and Thelen (2018) suggest four criteria to assess a firm's OC capabilities. These criteria are:

- Customer experience (and how customer centred the customer is in the experience).

- Customers' ability to access trustworthy and accurate real-time information.

- The number of product lines available (and returns options).

- The firm's ability to implement and integrate technology for utilising data from each channel.

Jocevski et al. (2019) distinguish between three OC dimensions. They are:

- Seamless customer experience (which includes the use of technology).

- Integrated analytics system (i.e., the manner in which customer data from one channel is analysed and leveraged across other channels).

- Effective supply chain and logistics (i.e., the coordination and integration of different supply chain processes or drivers to create the needs of the firm and the customer).

Mishra (2020) highlights several factors that influence OC implementation. These factors are: technological capability, training and development, performance metrics, customer analytics, warehouse management, supportive organisational structure, differentiated logistics, customer relationship management, financial commitments, collaboration and knowledge sharing, offline-online information aggregation, unified information, integrated interactive marketing communication, integrated technological platform, and assortment management.

The theoretical foundation on which this article is based was derived from the above mentioned researchers' work. An analysis of their research showed that managerial implications for OC implementation can be grouped into the following categories:

- customer experience

- information technology capabilities

- supply chain and logistics network

- management of the firm across all functions.

The benefits and barriers of OCs will be viewed from this theoretical foundation.

1.4 Aim of the research

The aim of the research was to analyse the benefits and barriers of OC strategies and use them to determine specific managerial implications for OC implementation. The article is structured to address the research questions as follows. Firstly, a literature review was conducted to determine and summarise the main characteristics, benefits and barriers of OC implementation. The benefits and barriers (or challenges) highlighted from the literature review were used to establish a theoretical foundation and to identify the major managerial implications if firms consider implementing OCs. Secondly, generic qualitative research was conducted whereby 11 participants were interviewed from firms in South Africa that were implementing online channels as part of their strategy. The aim of the interviews was to get insight into online channel implementation from a developing country context. Thirdly, the research proposes a conceptual framework with factors derived from the literature review which were corroborated during interviews with participants from firms implementing OCs within a developing country context. The framework highlights factors that need consideration when implementing OC strategies. The structure of the article is depicted in Figure 1.

Figure 1   Article structure
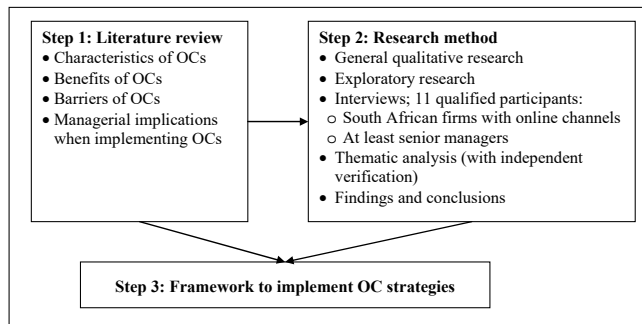
> *Source:*   Compiled by authors

2   Literature review

2.1 Supply chain management channels

A supply chain management channel can be defined as the point where the firm connects with the customer. Channel strategies define the extent of contact the focal firm will have with the end customer (Kim and Chun, 2018). Firms can use a single channel or multiple channels. A single channel is either a brick-and-mortar channel or an online channel. Multiple channels are used when a firm uses more than one channel. In the past, these channels were exclusively offline and firms used a brick-and-mortar (or physical store) approach until the introduction of online strategies (Kim and Chun, 2018; Latini, 2019; Zhang et al., 2017). Multiple channel strategies include MC and OC strategies.

2.2   From MC to OC strategies

A MC strategy adds online channels to a firm's existing offline network, or vice versa, thus bringing the firm's products and services to their customers via multiple isolated platforms. Therefore, it requires both offline and online capabilities within a firm's structure (Latini, 2019). A MC strategy provides for the offering of customer goods or services across a variety of channels; but does not aid in coordinating the management of these channels and channels are managed independently from each other (Cai and Lo, 2020; Davis-Sramek et al., 2020). This 'silo mentality' managerial approaches could potentially be overcome by encouraging integration throughout the firm's organisational levels and strategies, which ultimately transitions the MC strategy to an OC strategy (Berman and Thelen, 2018; De Borba et al., 2020; Jocevski et al., 2019).

An OC strategy takes a MC strategy further by aligning and integrating the firms' online and offline channel structures. The provision for seamless information needs to be made and real-time communication is crucial (Latini, 2019). The aim of an OC strategy is to provide customers with a seamless shopping experience through all the firm's available channels (Davis-Sramek et al., 2020). Customers can jump between channels as part of the shopping experience. An OC strategy is the improved development of the MC strategy by interconnecting the platforms to conclude a single operation, ensuring a customised and synchronised customer experience across the chosen contact points (Latini, 2019). This improved switching ability between channels allows customer data to be seamlessly integrated using innovative technology (Chen et al., 2020; Davis-Sramek et al., 2020).

2.3   Benefits of OCs

The transition from MC to OCs has been enhanced by changes in consumer behaviour and new technologies (Berman and Thelen, 2018). The integration of information, inventory, logistics, warehousing, distribution, marketing, and performance measurement systems has the potential to enhance performance significantly by servicing customers through a shared logistics network, resulting in increased sales (Berman and Thelen, 2018; De Borba et al., 2020; Jocevski et al., 2019). Inventory pooling can also allow for a higher variety of stock to be held, but also requires aligned picking processes (Hübner et al., 2016) because the picking processes will vary for shipments to stores and individual customers. Shipments to retail outlet stores may be in bulk whereas last-mile deliveries to customers may be more flexible (Rai et al., 2019).

From a market related (or sales) perspective, several benefits of OC implementation have been identified. Ultimately, successful OC implementation increases a firm's sales (Berman and Thelen, 2018) because of improved customer service (Lewis et al., 2014), trust, increased customer loyalty (Cao and Li, 2015) and customer convenience experienced by customers during the shopping experience (Berman and Thelen, 2018) irrespective of their location (Larke et al., 2018). Likewise, increased flexibility of, for example, being able to navigate between different channels or return policies increases customers' positive perceptions of an OC buying experience and reduces the time spent on a purchase (De Borba et al., 2020). Increased sales may be generated from the firm's current and new customers. Research showed that current customers spend more money and were prepared to pay higher prices when interacting in an OC environment (Berman and Thelen, 2018; Jocevski et al., 2019; Larke et al., 2018; Silva et al., 2020) and that

firms attracted new customers. Customer conversion rates were higher than for single channel or MC retailers (Berman and Thelen, 2018; Cao and Li, 2015). An increase in new customers most likely means increased sales and a potential increase in market share for firms. OCs also allow for a wider reach and may even attract international customers. In conclusion, OCs result in increased sales because of an increase in market share, market reach, customer loyalty, customer trust and increased customer spending.

From an information perspective, retailers have access to more information about customers and can customise their product and promotional offerings to better target individual customers across different channels, resulting in improved demand forecasts and increased customer awareness and convenience. It enhances customers' shopping experience (Berman and Thelen, 2018; Larke et al., 2018; Piotrowicz and Cuthbertson, 2019).

Table 1   Benefits of OCs

Category	Benefit	Source
Customer experience	• Increased sales • Increased market share • Increased market reach • Increased customer loyalty • Increased customer trust • Improved firm image	Berman and Thelen (2018), Cao and Li (2015), Lewis et al. (2014), Karim and Qi (2020), Hussein and Kais (2021) and Jocevski et al. (2019)
Information technology capabilities	• Data integration (internal and across the supply chain) • Information access to and about customers • Product information (e.g., variety, prices, availability, delivery options, returns options) • Sharing promotions opportunities with customers • Cross-channel communications • Location optimisation	Berman and Thelen (2018), Larke et al. (2018) and Karim and Qi (2020)
Supply chain and logistics network	• Integrated supply chain processes • Increased synergies • Improved cost efficiencies • Increased productivity • Increased logistics and supply chain economies • Lower inventory levels across the system • Lower inventory carrying costs • Shorter lead times • Improved delivery reliability	Berman and Thelen (2018), Karim and Qi (2020) and Marchet et al. (2018)

Source: Compiled by authors

In addition, integrated information results in real-time information being available to the firm in terms of, for example, order quantities ordered (and locations where deliveries need to be made), product availability (and location of available products). This information can be used to determine where and in which quantities inventory should be

kept. The information can also be used to determine which supply chain processes should be used to optimise customer service and achieve supply chain economies (Christopher, 2016; Chopra, 2019).

Supply chain and logistics economies can be achieved in numerous ways. Firstly, it can be obtained when firms buy huger quantities from suppliers due to aggregate buying across channels. Secondly, due to aggregate buying, less inventory can be kept in stock across the firm's facilities, which results in decreased inventory carrying costs (Christopher, 2016). Thirdly, by optimising locations of distribution facilities and stores (and from where deliveries to final customers will be made), transport and delivery costs can be minimised. This may even result in decreased warehousing costs if, say, deliveries of online orders are made to the customers from the closest store (Berman and Thelen, 2018).

In e-commerce operations, the tasks of packaging, delivering, and returning goods are transferred to the seller although customers may carry the last mile delivery costs when shopping from a retail outlet. Considering last mile delivery is expensive and orders with few stock items require delivery to distant locations – various fulfilment and return options can be offered by firms (Hübner et al., 2016; Marchet et al., 2018). Densely populated areas can decrease transportation costs and allow for improved customer accessibility. Various order fulfilment options could allow an OC strategy to give the firm a competitive advantage. Furthermore, customers ordering through online channels may have higher service expectations and could require higher degrees of accuracy in complete orders and promised lead times (Larke et al., 2018).

Moreover, customers tend to use various channels simultaneously and have the expectation of having a consistent experience across the channels. Customers also switch across channels and thus channels and customer contact points need to be integrated cohesively (Hübner et al., 2016; Marchet et al., 2018; Rai et al., 2019). The different channels must match the customers' needs and market changes constantly to be successful. Through continual advancements in technology and changes in customer preferences, management approaches and resources applied in existing channels need to be adapted to align channels and customers (Mirsch et al., 2016). Table 1 provides a summary of the benefits of OCs.

2.4 Barriers to (or challenges of) OCs

Implementing an OC strategy presents multiple barriers to overcome. Although the ultimate benefits of implementing an OC strategy have been well defined, firms need to be aware that it is costly and risky to transform current business models towards an OC approach (Davis-Sramek et al., 2020). An OC strategy increases complexities (Cao and Li, 2015; Lewis et al., 2014). Logistics pressures increase which in turn complicate supply chain design decisions. Firms need to leverage their multiple channels to optimise performance by achieving synergies (Cao and Li, 2015). However, this is no simple feat. Different channels require different logistics processes in terms of, for example, inventory management, packaging requirements, warehousing and transportation requirements (Chopra, 2019). These complexities increase the pressure on logistics systems which make supply chain design and management more complicated. In essence firms need to redesign their existing supply chain networks and organisational structures to implement an OC strategy (Davis-Sramek et al., 2020; De Borba et al., 2020).

Additionally, configuring the supply chain to support forward and reverse logistics in an OC environment requires high capital investments in logistics and warehousing operations (Hübner et al., 2016). Facilities may struggle with capacity constraints and picking requirements will be different for in-store and online customers. Another barrier is due to return policies being flexible, customers have used this as an opportunity to test out products and return what is dissatisfactory. There is also a need for compatible and integrated information systems that are able to provide standardised and consistent (or reliable) information with precision. These integrated systems may delay the transition process between strategies as system design and installation is lengthy (Berman and Thelen, 2018; De Borba et al., 2020). It is complex to keep track of inventory levels.

Table 2   Barriers to (or challenges of) OCs

Category	Potential barriers	Source
Customer experience	• Increased competition • Increased complexities • Increased customer satisfaction standards • Customers' perceived risk	Berman and Thelen (2018), Davis-Sramek et al. (2020) and Hussein and Kais (2021)
Information technology capabilities	• Investment cost • Inexperience • Lack of skills • Resistance/inability to change • Inconsistent/unreliable information • Increased complexity • Security	Berman and Thelen (2018), Davis-Sramek et al. (2020), Hussein and Kais (2021), Jocevski et al. (2019), Lewis et al. (2014) and Silva et al. (2020)
Supply chain and logistics network	• Internal supply chain disruptions • External supply chain disruptions • Increased logistics pressures • Organisational structure • Current supply chain processes • Location and capacity constraints • Supply chain partner constraints • Misaligned objectives • Lack of integration • Lack of alignment • Product availability complexities • Returns complexities	Berman and Thelen (2018), Lewis et al. (2014), Silva et al. (2020) and Rai et al. (2019)

Source: Compiled by authors

In like manner, satisfying customers is becoming more difficult because it is easier for customers to compare products in terms of characteristics, variety, substitutes, and prices. The information of competing products is also more readily available (De Borba et al., 2020; Piotrowicz and Cuthbertson, 2019). Facilities' physical space must be redefined in

terms of capacity and picking requirements (De Borba et al., 2020; Piotrowicz and Cuthbertson, 2019). Thus, this strategy requires overcoming traditional managerial and communication barriers of the 'silo mentality' to achieve integration (Berman and Thelen, 2018; Mirsch et al., 2016; Piotrowicz and Cuthbertson, 2019). Firms have failed to implement an OC strategy due to them not viewing customers as a single market across channels; inventory and order management not being integrated across channels; the systems used in stores are not easily modified, and finally metrics and incentives are not aligned throughout (Berman and Thelen, 2018). Often firms lack alignment between their information technology systems and their corporate strategy to adopt an OC successfully (Mirsch et al., 2016). A final barrier to implementation is that management is not familiar with advancements in technology (Berman and Thelen, 2018). The barriers are in Table 2.

2.5 Managerial implications

Firms implement business models to achieve some form of competitive advantage over their competitors. These business models are in need of transformation when firms reposition and restructure their core business to reach their current and new markets (Davis-Sramek et al., 2020). Implementing OCs strategies thus require a transformation of current offline or MC business models because supply chains become more complex. Firms need to make significant investments into infrastructure, processes and capabilities across their supply chains to create new supply chain models. Processes need to be redesigned to meet the needs of online customers (Hübner et al., 2016; Larke et al., 2018).

In an OC, a firm's order fulfilment process directly interacts with customers (Davis-Sramek et al., 2020). Customer service is enhanced by

1   increasing the speed of the order fulfilment process, hence reducing the lead time

2   ensuring product availability

3   increasing product and service variety

4   being consistent across the different channels (Christopher, 2016; Chopra, 2019; Davis-Sramek et al., 2020).

Customer experience is tarnished if, say, products appear to be available online, but are in fact not in stock, or when prices for a specific product vary across different channels, or when delivery times are not honoured. OCs can only be implemented successfully if all the channels in the firm's supply chain are integrated and leveraged to enhance the fulfilment of customer orders (Davis-Sramek et al., 2020). Achieving this is complex because of the many logistics and supply chain variables that need to be considered. Customer service delivery is thus essential.

Chen et al. (2020) mention that the quality of information integration, the completeness of the operations and the competence of staff across all the channels as perceived by the customer are important factors for any firm implementing an OC strategy. Therefore, when implementing an OC strategy firms need to be customer focused. They need to manage the customer experience as best they can (Chen et al., 2020). Customer experience involves the pre-purchase, purchase and post purchase experience that a customer has when shopping for a product (Jocevski et al., 2019; Chen

et al., 2020). Customer experience is impacted by psychographic, socio-demographic and channel experience variables. Managers need to consider this when they plan and implement their OC strategy.

Table 3 Managerial implications of OCs

Category	Managerial implication	Source
Customer experience	• Be customer focused • Have knowledge about the firm's customers • Ensure customer service • Enhance customer experience across all stages of the buying process	Berman and Thelen (2018), Davis-Sramek et al. (2020), Hussein and Kais (2021) and Larke et al. (2018)
Information technology capabilities	• Invest and implement relevant technology • Train and upskill employees • Consider outsourcing • Build IT infrastructure • Ensure data integration across channels • Ensure holistic analysis of data • Ensure channel integration • Ensure consistency of information across all channels	Berman and Thelen (2018), Davis-Sramek et al. (2020), Hussein and Kais (2021), Jocevski et al. (2019), Lewis et al. (2014) and Silva et al. (2020)
Supply chain and logistics network	• Reassess logistics infrastructure and processes • Redesign logistics infrastructure • Invest in product availability • Invest in returns management • Invest in delivery options • Optimise inventory management • Optimise picking and packing processes • Reassess entire SC process	Berman and Thelen (2018), Lewis et al. (2014), Marchet et al. (2018), Piotrowicz and Cuthbertson (2019), Silva et al. (2020) and Rai et al. (2019)
Other management implications	• Assure strategy and resource alignment across all channels • Top management commitment and leadership • Establish culture towards OC implementation • Reassess organisational structure • Establish KPIs	Berman and Thelen (2018), Mishra (2020) and Davis-Sramek et al. (2020)

Source: Compiled by authors

To address information technology capabilities, firms may need to invest in new technologies which may be a costly exercise. Managers must ensure that the IT infrastructure is in place and that data integration (and a holistic analysis of the data) stretches across all channels (Lewis et al., 2014). In addition, it may be necessary to train and upskill staff or employ experienced staff to effectively manage the information. In some cases, outsourcing the IT department may even be considered (Chopra, 2019;

Mishra, 2020). From an operational perspective, it is important for firms to be consistent with product information across all channels, for example, in terms of prices, variety of product ranges, product availability, delivery options and dates, as well as returns options (Berman and Thelen, 2018). Data security and establishing a secure IT infrastructure is also essential (Hussein and Kais, 2021).

To ensure the timely and accurate delivery of products to customers, managers need to re-assess the current supply chain and logistics network in terms of its infrastructure and processes (Berman and Thelen, 2018). It may be necessary to redesign the logistics infrastructure (Lewis et al., 2014; Shah, 2009) as well as the organisational structure (Mishra, 2020) to ensure product availability, effectively manage product returns, be flexible with delivery options, optimise inventory management, optimise picking and packing processes, and so on (Marchet et al., 2018). Investments and employee training may be necessary here too (Mishra, 2020). Locations for (and capacities of) facilities and inventory positioning across the supply chain are essential for successful order fulfilment.

Retailers with multiple channels operate warehouses separated (also known as dedicated warehouses) or integrated (also known as shared warehouses) across channels. Integration results in advantages for inventory pooling which may result in reduced inventory holding (or carrying) costs and increased product assortments. Picking processes need to be aligned with channel needs. For example, the picking process for deliveries to a physical store will be different than for customers' deliveries at their homes (Hübner et al., 2016; Marchet et al., 2018). The extent of product ranges offered by a firm has a big impact on the warehouses' structures. Large product ranges tend to require the centralisation of stock (Shah, 2009).

Other relevant management implications include setting clear goals with key performance indicators (KPIs) as well as assuring integration across all systems and departments. Managers should show commitment to OC implementation and establish a strong leadership and culture within the firm once the decision has been made to pursue OC implementation (Berman and Thelen, 2018; Davis-Sramek et al., 2020; Mishra, 2020). The managerial implications are summarised in Table 3.

3 Research method

This study employed a generic qualitative research design to gain insights into the benefits and barriers of multiple channel and specifically OC strategies and the managerial implications that need to be considered when implementing an OC. Generic qualitative research was used to explore the perspectives, opinions or beliefs of participants based on their experience as at least a senior manager in a firm that implements an online strategy. The research conducted in this study was exploratory in nature. Exploratory research was used to gain additional insights about OCs from within a developing country context. These insights were analysed to determine to what extent the firms represented in the research were experiencing the benefits of and barriers to OC implementation and if it was aligned with current research as highlighted in the literature review. The analysis also highlighted managerial implications for the firms represented in the research.

Homogeneous sampling allows for the selection of firms based on their similarities between their operations and was used in this research. These dual-channel strategy firms

were not limited to specific industries due to the exploratory nature of investigation into broad benefits, barriers and managerial implications of OC implementation. The selected firms were required to operate at least online, although firms that operated both online and offline were preferred.

One participant each from 11 private firms in South Africa participated in semi-structured interviews conducted virtually. The sample size was thus 11 participants. Two participants represented firms from the manufacturing sector and more specifically the food industry. Eight participants represented firms in the retail sector and one participant represented a firm from the service sector. The industries represented in the research are in Table 4.

Table 4 Sectors and industries represented by research participants

Industry	Sector			Total
	Retail (8 firms)	Manufacturing (2 firms)	Service (1 firm)	
Food	3	2	-	5
Fast-moving consumer goods (FMCG)	1	-	-	1
Furniture, technology, electronics, household appliances and kitchenware	5	-	-	5
Books and stationary	1	-	-	1
Sport and other	1	-	1	2
Total	11	2	1	14

Source: Compiled by authors from the interviews

From Table 4 it is clear that the eight firms from the retail sector were operational across 11 industries. The firms included in the research had to be operational in South Africa, because the aim of the research was to explore OCs from within a developing country context.

Table 5 Participant's profiles

Participant	Position	OC/MC	Interview (mins)
P1	Operations manager for perishable warehouse	MC	22
P2	Company director	MC	25
P3	Business process architect	OC	28
P4	CEO	MC	26
P5	National logistics manager	MC	25
P6	Group information officer and IT general manager	OC	35
P7	Marketing and e-commerce executive	OC	27
P8	Operational executive	MC	21
P9	Sales executive	OC	20
P10	Managing director	OC	35
P11	Digital marketing director	OC	17

A combination of convenience and purposive sampling was used. Convenience sampling was used partially because of restrictions imposed on firms and individuals following the

COVID-19 pandemic. Purposive sampling allowed for the selection of individual participants within selected South African firms based on their knowledge of the firm. Only participants who had adequate and sufficient knowledge of the firms' sales channels (including the online channels) and were at least senior managers were considered. Participants who fell into these categories were contacted either directly or indirectly and invited to participate in the research. Therefore, the sample eventually included participants working for a South African dual-channel strategy firm who were in a position of authority and with knowledge of the firm's online operations. Individuals were either a member of the executive management team or were senior departmental managers. Table 5 offers individual participants' profiles as well the length of the interview and indicates whether the firm implements a MC or an OC strategy.

3.1   Data collection

Eleven semi-structured interviews were conducted virtually, using Google Meet and Zoom, between August and November 2021. This allowed geographically dispersed South African participants to be interviewed and for significant information to be obtained without physical observation. Semi-structured interviews aided in discovering the perspectives of participants regarding a specific research topic. This data collection method was appropriate as the researchers wanted to obtain insights of the experiences and viewpoints of participants regarding online and specifically OC strategies. In-person interviews were not permitted, because of COVID-19 and social distancing restrictions applied in South Africa at the time. Questions were asked from a discussion guide that was compiled from the literature review. The discussion guide comprised of open-ended questions that were tested during a pilot study. The questions were structured in a way to address the research questions of this article. The questions in the discussion guide focused on:

- Introductory questions to determine, for example, the participant's position in the firm, the participant's experience in years and the industry in which the firm operates.

- Characteristics of the multiple channels used by the participant's firm.

- Benefits of online strategies being implemented by the firm.

- Barriers of online strategies being implemented by the firm.

- Managerial implications with online strategies being implemented.

- Managerial implications that will have to be addressed if an OC strategy were to be implemented. This question was asked to participants from firms that were not implementing a fully integrated OC strategy at the time of the interview.

Probing questions were asked to ensure clarity of the participants' responses. Open-ended questions allowed participants to express their experiences without the researcher's biases influencing their response. A pre-test of the discussion guide was conducted, tested and adapted slightly to ensure it would be relevant and useful to gather relevant and useful information. The interviews were conducted by mutual consent and permission was given by the participants to record the interviews. The interviews were transcribed within a day of the interview, via online software. The accuracy was checked by the researchers. The interviews ranged from 17 to 35 minutes, with an average duration of 26 minutes.

3.2 Data analysis

Thematic analysis was used to analyse the data. Thematic analysis identifies, analyses, and reports patterns (or themes) within data (Braun and Clarke, 2006). After the researchers familiarised themselves with the data, it was coded. These codes were arranged into different themes and sub-themes that represented a collection of similar topics. The themes were recorded and analysed independently by the researchers on a shared online document and thus verified separately by the researchers.

The themes represented recurring responses that related to the research questions. Three main themes were identified, namely

1   benefits of OCs

2   barriers of OCs

3   managerial implications to implement OCs.

Three sub-themes were identified from participants' responses. The three sub-themes were noticeable across all three main themes. The sub-themes were

1   customer experience

2   information technology capabilities

3   supply chain and logistics network.

Three additional sub-themes could be identified and linked to managerial implications as the main theme. The link between the main themes and the sub-themes is illustrated in Table 6 and also corroborated with raw data extract examples from the interviews (refer to Table A1).

Table 6   Main themes and sub-themes identified in research

Main themes	Sub-themes
Benefits of OCs	• Customer experience
	• Information technology capabilities
	• Supply chain and logistics network
Barriers to OC implementation	• Customer experience
	• Information technology capabilities
	• Supply chain and logistics network
Managerial implications	• Customer experience
	• Information technology capabilities
	• Supply chain and logistics network
	• Leadership
	• Integration
	• Performance measurement

Source: Compiled by authors after analysing the interviews

3.3 Trustworthiness of the data

The research was conducted to assure that it was credible, transferable, dependable and confirmable. Credibility aims to minimise the variance between what is reported and what was truly experienced and perceived by the participants (Lietz and Zayas, 2010). Data triangulation was implemented through retrieving data from different firms on the type of online channel strategy applied. Member checking was used through asking a participant to clarify points made in the interview (Shenton, 2004). Transferability explains the degree to which a study's findings can be related to different circumstances and significance to existing and future research (Liamputtong, 2013; Lietz and Zayas, 2010). Descriptive criteria of each individual and firm interviewed was provided, such as the inclusion criteria (Shenton, 2004). A study's dependability refers to the extent to which its research methodology is understandably recorded in such a way that an individual without expert knowledge can understand and critique the research steps (Lietz and Zayas, 2010). In this case, an audit trail was kept in which changes to the methodology was recorded. Confirmability aims to ensure the accuracy of the portrayal of participant's experiences through minimising the biases of the study's researchers (Shenton, 2004). Open-ended questions formed part of the discussion guide and verbatim transcriptions of interview recordings were compiled.

4 Findings

The findings of this research are structured as follows. Firstly, the benefits of OCs – as experienced by the participants representing their firms – are discussed and compared with the benefits as derived from literature. Secondly, the same process is followed with the barriers of OCs. Lastly, managerial implications are discussed as derived from the benefits and barriers of OC implementation. From Table 5, it can be seen that 11 participants were interviewed in firms implementing either a MC or and OC strategy. Five firms implemented a MC strategy and six firms implemented an OC strategy. It must be noted that some of the firms implementing a MC strategy were already in a process of transitioning towards an OC strategy. The findings of the participants are discussed from direct answers given to specific questions or from indirect statements made by the participants during the interview. These benefits and barriers of OCs will be discussed according to the impact they will have on the managerial implications and under the following categories, namely: customer experience, information technology capabilities, and supply chain and logistics network.

4.1 Benefits of OCs

Before discussing the benefits of OCs, it must be noted that all 11 participants mentioned that ultimately it was necessary for firms to implement an OC strategy. The participants from MC firms thus stated that it was necessary for their firms to eventually transition towards an OC strategy. From this it is clear that all the participants saw benefits in implementing an OC strategy. Participants were asked what the benefits were of their firm's current online strategy. The participants from MC firms were also asked what the benefits could be if their firms implemented an OC strategy.

4.1.1   Customer experience benefits

Under benefits related to customer experience, the benefit mentioned the most by participants was related to increased customer service and customer convenience. Customer convenience, reducing lead times and serving the customer quicker in general were mentioned by some of the participants. Some participants referred to customer experience from a flexibility perspective. Quotations to highlight these findings include:

> "So, we have managed to shorten the lead time for our customers tremendously … made a big impact on our service delivery and the offering to the customer as well." (P5, national logistics manager)

> "… customers operate outside normal business hours … I mean just the convenience for both sides of you know for us and our customers, I think that is the big one." (P5, national logistics manager)

Three participants mentioned that OCs allow for a bigger market reach. Customer experience is thus enhanced by means of accessibility of a firm's products.

> "We cover a lot more ground by having an online or an electronic interaction with our customer." (P10, managing director)

One participant said that successful OC implementation has the added benefit of creating customer trust (and hence customer loyalty) and strengthening the firm's brand.

> "I think it is quite good [because] we build the trust of our clients, we build the trust of our potential clients and … it is a … brand strengthener." (P11, digital marketing director)

4.1.2   Benefits related to information technology capabilities

Effective OCs allow for data integration and effective cross channel communication. This was highlighted by some of the participants. It was also mentioned that effective OCs provide access to customer information.

> "It just makes it … simpler to have one centred ERP system … so all channels are there so I can for example view the performance by brand, by customer, by region, by regional division, by channel, which we call market sectors." (P7, marketing and e-commerce executive)

> "[The system is] fully integrated as a start, that could pull everything together." (P5, national logistics manager)

> "… and you know where your sales come from or your age groups or whatever." (P2, company director)

Participants also emphasised that effective OC implementation allows for accurate information across all channels. Customers will not find contradicting information (e.g., about product prices or ranges) in different channels.

> "… you get on time or you get correct data which is fed through." (P8, operational executive)

A participant mentioned that OCs allow for real-time information. The firm does not have to wait for the information. Ultimately, this reduces lead times which enhances customer service.

"… we can physically … monitor our performance every day in our life in real time so … as soon as a customer presses send, that order is visible to us." (P5, national logistics manager)

4.1.3   Supply chain and logistics network benefits

Supply chain integration and alignment was highlighted by two participants from firms implementing OCs.

"[Staff] can now [manage] both channels, be it … online or in-store and therefore any decisions that are made … from an executive perspective, are made taking both into consideration and there is obviously alignment because it is the same group of people …" (P3, business process architect)

"Yes, from an infrastructure point of view, that is one team … [and] one set of resources required to function … everything is aligned to one goal, one objective [and] one sales target … everything is integrated. It is one solution. It is one product range …" (P9, sales executive)

Supply chain integration allows for supply chain synergies (or cost efficiencies) to be achieved, a fact also established during the literature review. This was also highlighted by three participants in citations such as:

"I think that their overall warehousing costs would go down. And their stock holding costs will also improve because it will enable the flow of the demand requests into the warehouse from picking and warehouse flow to go to the customer." (P1, operations manager for perishable warehouse)

Three participants mentioned that lead times will be reduced and that delivery will hence be more reliable if OCs are implemented successfully.

"You can [manage the] supply chain quite easily if the orders come through the platform that we have. It can be captured quicker, it can be executed quicker, we can get more [timely] deliver[ies] [and] we can get correct deliver[ies]." (P8, operational executive)

4.2   Barriers to (or challenges of) OCs

Unfortunately, there most certainly are barriers to (or challenges of) implementing OCs successfully. This was also highlighted by the participants. OC strategies are complex to implement.

4.2.1   Barriers related to customer experience

The literature review revealed that firms need to ensure that customers receive accurate and reliable information across the different channels. However, due to the complex nature of OCs, it often happens that information is unreliable or inconsistent. This may also result in customers not enjoying their shopping experience, losing trust in the firm and even switching to competitors. Information can also be inconsistent when the channels do not have information about the same product ranges. It may spoil the customer experience.

"Yes, consistency … You understand it has to be the same name and it has to be the same price … The answer has to be the same … which relates to reliability." (P7, marketing and e-commerce executive)

> "Making everything very personalised and making everything very consistent. It takes a lot of time. You have to be consistent … It takes a lot of energy, a lot of time." (P11, digital marketing director)

> "… you know, if you walk into one of our stores, we might have 7000 products. On our current website there might only be 1800 products, so how do we get both of them to 7000?" (P4, CEO)

Due to increased customer convenience, customer expectations have also increased. Customers almost demand superior service. Competition amongst firms has also increased. Customers can easily compare firms' value offerings with those of competitors. If firms are ignorant about this and do not try to enhance their customers' experiences, customers may switch to competitors.

> "We have customers that are very enlightened customers." (P7, marketing and e-commerce executive)

> "… customers operate outside normal business hours so they are busy in the evenings when everyone it is at home and they're busy over weekends and they work on public holidays and those sort of things …" (P5, national logistics manager)

4.2.2 Barriers related to information technology capabilities

One of the major barriers of information technology implementation is its investment costs. Three participants highlighted this either directly (i.e., the costs needed to invest in the technologies) or indirectly (i.e., the opportunity costs related to the investment and how long it will take to breakeven).

> "The huge barrier is that it is expensive and it is very technical to get all the systems to talk to each other in an accurate way." (P10, managing director)

> "[It] would be around 150 to 200 million Rand to get an integrated ERP system and an execution program like a warehouse management system." (P1, operations manager for perishables warehouse)

In theory, data integration seems easy enough to achieve. However, a huge barrier is a lack of data integration across the channels. This can be seen in the following quotes.

> "… we have management reports, but they do not get used like they should be used." (P2, company director)

> "Because to a large extent all their management platforms are not interconnected in terms of one business unit being able to see what the other business unit is doing." (P1, operations manager for perishables warehouse)

4.2.3 Supply chain and logistics network

OC strategy implementation increases supply chain and logistics network complexities and the need for integration across the network. A barrier may be a lack of integration in the network. This was highlighted by a participant.

> "The thing that is evident in the companies that I worked in is a lot of different areas of the business functions [are] totally in their own silos, and there is very little intercommunication which has a detrimental effect on executing supply chain principles effectively and an omni-channel approach would make that more effective …" (P1, operations manager for perishable warehouse)

When additional channels are added to an existing strategy, the infrastructure needs to be reassessed and even redesigned if necessary. This requires a massive effort and was also mentioned as a barrier of successful OC implementation.

> "… we need to determine whether we basically start from scratch and we build a complete facilities warehouse management system, building system fleet system, to basically integrate with our operating system that we have at the moment." (P5, national logistics manager)

> "So sometimes the online [sales channel] is being held back… by the speed at which the in-store processes can keep up [at] …" (P3, business process architect)

The supply chain and logistics network is essential in fulfilling customers orders. Orders are placed with a click of a button in some cases. Sometimes, this puts a lot of pressure on the supply chain network to be able to make timely and accurate deliveries.

> "When a customer [makes an] enquiry and … we want to do a sale … [Can] we get it through to a customer? When can we deliver? Is stock [available] in that area? The [mode] of transport that is available and everything." (P4, CEO)

> "… the barriers … [are] mainly based on getting our distribution and logistics correct which would then enhance our distribution to our customers via the online process or even store delivery as well." (P6, general manager of IT)

One participant mentioned the poor service delivery that a service provider gave the firm. This highlights the risk of selecting the wrong supply chain partners.

> "That was a big problem because a lot of people [service providers] promised that they could integrate the two [sales channels] and they could not integrate the two." (P2, company director)

A last barrier worth mentioning in this category is the time needed to successfully implement OCs. One quote will suffice.

> "That [integrating sales channels] is probably what I have been busy with for the last four years …" (P4, CEO)

4.3   Managerial implications

Participants were asked to discuss the managerial implications of implementing an OC strategy. Several important issues were mentioned.

4.3.1   Managerial implications to enhance customer experience

Managerial implications in terms of customer experience included the following suggestions from the participants. Customers must enjoy their buying experience. If necessary, it may include opening new channels via social media.

> "You must make it as easy as possible for him [the customer], whichever way." (P7, marketing and e-commerce executive)

> "For me, the most important thing is customer experience. Because we want the customer to have the same experience online as what I've got in a store." (P4, CEO)

> "So, some three years ago we started developing our social media platforms – Facebook, LinkedIn, Instagram." (P7, marketing and e-commerce executive)

Firms need to ensure consistency across all the channels. Consistency entails ensuring that all product related information is accurate. This also includes honouring delivery dates promised. Consistency will establish trust and can be used to enter more markets.

> "You understand it [the product] has to be the same name and it has to be the same price. So those are the benefits, consistency and of course with that comes reliability." (P7, marketing and e-commerce executive)

> "Making everything very personalised and making everything very consistent. It takes a lot of time. You have to be consistent … It takes a lot of energy, a lot of time." (P11, digital marketing director)

> "The main focus of management is to ensure that … the customer value proposition is catered for, whether it is online and in-store … that is why we have got to focus the managers on ensuring that it is catered for …" (P6, general manager of IT)

4.3.2 Managerial implications to ensure adequate information technology capabilities

Managers need to ensure that their firms have adequate information technologies that are able to communicate across all channels. They need to integrate customer needs with what is realistically possible for their firms. They also need to make sure that these technologies are updated periodically. Here are some quotes to justify this.

> "… communication … to everybody. Whether it is [a] customer, whether it is stores, whether it is online teams, whether it is warehousing, whether it is head office, staff, financial staff. Everybody [is] involved in this as well, so communication is critical to keep everybody involved in terms of what is required." (P6, general manager of IT)

> "When we redid it all a few years ago, we made sure that it was as automated as possible. Which meant that if you were updating the ERP, the online channels were updating [and] the iPads were updating." (P10, managing director)

> "To ensure that everything is integrated and to ensure that your IT system is upgraded continuously to cope with the additional volume of transactions." (P9, sales executive)

> "I would say in ensuring that this channel still works; the omni-channel approach works; is to ensure that the central source of information – the ERP system – is accurate." (P7, marketing and e-commerce executive)

4.3.3 Managerial implications in terms of the supply chain and logistics network

The supply chain and logistics networks need to be reassessed and most probably to be redesigned as well. The organisational structure may also need to be restructured depending on what the firm needs to ensure that customers' orders are fulfilled. Here are some quotations highlighting these managerial implications.

> "So we have done a lot of work of changing our architecture to bring products out of the channel and into the centralized environment." (P4, CEO)

> "As you grow you have got to put new structures in place." (P2, company director)

> "So, we … re-evaluated the processes, cut down what was not needed." (P11, digital marketing director)

> "… there was a lot of reengineering of the systems to bring things more centrally and away from living within each of the channels. And then from a people perspective, it was the restructuring of the departments of the org structures, of the job profiles [and] of the KPI's." (P3, business process architect)

From an operational perspective, this may entail reassessing all the different supply chain processes. Examples highlighted in the quotations below include, amongst others, delivery options, facilities and product availability.

> "So it is almost a separate process within the DC of managing large, bulky orders to our store, to replenish the stores – versus single parcels that need to go to an end-customer." (P3, business process architect)

> "To ensure that we have got enough ordered product." (P9, sales executive)

> "… will come into place when you have got … more shops." (P2, company director)

> "To ensure that you update your fleet of vehicles that you can cope with a wider distribution." (P9, sales executive)

Current employees may need training and new employees with the right skills may be required (which can be challenging). Firms may even consider outsourcing some of the processes or partnering with supply chain partners. Staff requirements were mentioned by several participants which highlights the importance of this factor.

> "Because their counterpart of online is doing things in a certain way, we need to bring the in-store guys up to speed." (P3, business process architect)

> "… you need to invest in additional people to cope with the workload." (P9, sales executive)

> "… how do we make 100% sure … the type of staff that you need and how many staff you need … because we do not have all the … expertise … experience within the group." (P4, CEO)

> "… we are partnering with a logistics partner which is going to manage our distribution and then we are going to be migrating our environment [to an omni-channel environment] … so we have taken key, experienced managers across the board and we have involved them in the project …" (P6, general manager of IT)

Another managerial implication to OC implementation is a reluctance from employees within the firm to change. Implementing OCs will most certainly introduce employees to new processes. The following citation highlights this.

> "I think people are a little bit reluctant in doing it in a new way … changes are difficult things to do so people do not like changes." (P8, operations executive)

4.3.4 Other managerial implications

An important managerial implication mentioned by participants was leadership. Firms' management needed to show leadership and a commitment towards OC implementation. They needed to establish a culture for it and get buy-in from all employees. The following quotations reveal this.

"… but it will also mean that your senior managers need to pool the different areas of the business into a proper communication channel and be able to understand the challenges and the issues that every party faces and then collectively resolve the issues." (P1, operations manager for perishables warehouse)

"… change management in terms of people understanding what needs to be done for us to migrate from a MC to an OC as well and then going back to management and management ensuring that it is accepted by everybody within the environment." (P6, general manager of IT)

"So, from my perspective it was easy to manage it because everyone was on board and everyone was excited to do it … there was complete buy-in by everybody … You cannot ask for better as a manager to have a whole team who is willing to do what needs to be done and understand what they need to do." (P10, managing director)

In closing, several participants mentioned the importance of integrating all systems and processes across all departments and the SC. Without complete integration, an OC strategy is doomed for failure. Also, it is necessary to set new performance measures to be able to measure progress. Here is what some of the participants said.

"It is one team of product managers [and] it is one team of account managers distributions to specific areas. So, it just makes sense to do everything under one umbrella." (P9, sales executive)

"Yes, probably just redefining their KPI's – the way that they are measured in achieving success. Those indicators need to be updated and transformed to now incorporate the different channels that they are now looking after." (P3, business process architect)

5 Conclusions and recommendations

Based on the findings of this research a framework is proposed for OC implementation. Managerial implications were derived from the benefits of OCs as well as from the barriers to (or challenges of) OCs. The findings highlighted definite benefits if OCs are implemented successfully. However, OC implementation is complex and complete integration is required across several channels and processes. The potential benefits need to be weighed against the barriers to show what managers need to consider as matter of priority. The framework is illustrated in Figure A1.

Based on research conducted by Berman and Thelen (2018), Jocevski et al. (2019) and Mishra (2020), a theoretical foundation was established for this research. It included the foundations or building blocks necessary for successful OC implementation. These building blocks were

1 customer experience

2 information technology capabilities

3 supply chain and logistics network.

These three dimensions need to be integrated completely across all dimensions and need an effective and committed management team. Literature was reviewed to establish benefits of and barriers to OC implementation. These benefits and barriers were then linked to the three dimensions mentioned above. Interviews were conducted with

participants from private firms in South Africa to determine if there was an alignment and if firms in South Africa were implementing OCs according to findings from literature.

Most of the benefits of OCs were mentioned by the participants in this research albeit that all of them did not mention all the benefits. However, if the findings are consolidated the benefits were all mentioned or implied. The same conclusion can be made for the barriers to OC implementation. Although barriers were not really elaborated on during the interviews, there were enough barriers implied to suggest that OCs need thorough planning.

It was in the 'managerial implications' section that the biggest overlap was found between the literature review and what the participants shared during the interviews.

5.1 A framework for OC implementation

The framework starts with the customer experience (refer to I in Figure A1). Ultimately the aim of OCs is to increase profits by means of increasing sales. Customers experience a level of satisfaction during the pre-purchase, purchase and post-purchase stages of their buying process. This satisfaction is either enhanced or tarnished based on customer service levels experienced. If customer service perception (based on the service received) surpasses what the customer expected to receive, then customer satisfaction is achieved which in turn most probably leads to increased sales, increased customer loyalty, an improved brand image and customer trust. Perceived risks may be reduced and even eliminated. Customer satisfaction may result in more markets being reached. However, if customer service perception is lower than expectation, then it may be detrimental to the firm. Managers must be aware of this.

To fulfil customers' orders, firms need information technology capabilities and supply chain and logistics networks. These need to be integrated with each other as well as with the customer's experience. The entire integrated supply chain needs to be managed effectively.

Information technology capabilities (refer to II in Figure A1) require specific resources in the form of, say, staff and technology applications. These capabilities provide

1 access to information linked with customers

2 product information in terms of prices, variety, availability, delivery options, and returns policies

3 cross channel communication

4 information to assist with location optimisation

5 real-time information about customer orders downstream and how these orders can be honoured.

Data integration is essential.

Supply chain and logistics networks (refer to III in Figure A1) include the infrastructure and processes necessary to deliver products to customers across all the supply chain drivers, which include facilities, inventory, and transportation. These processes (and the infrastructure necessary to manage the processes) require resources and need to be aligned with each other and the other dimensions. If this is done, firms

may benefit from logistics economies, lower inventory levels (which reduce inventory holding costs), shorter lead times, increased delivery reliability and increased product availability. Again, it must be mentioned that managers need to take cognisance of this because failing to integrate these processes will result in negative customer experiences.

OCs will present managers a very unique challenge to manage information technology capabilities and the supply chain and logistics networks. This was discussed in the literature review. To successfully manage and integrate the mentioned dimensions (refer to IV in Figure A1), will require a strong and committed leadership with clear measurable goals. Management may need to restructure the firm and this may require specific staffing needs in terms of new hires or training.

Integrating all the dimensions in Figure A1 will result in increased cost efficiencies and synergies across the entire supply chain, which will result in increased customer satisfaction and increased sales.

5.2   Limitations of the study

The following limitations were experienced in this research. Firstly, it is acknowledged that the participants did not sufficiently represent the sectors and industries they were from. Future research may attempt to focus on more specific sectors and industries and include more participants from the selected sectors and industries. However, the aim of this research was exploratory in nature and was conducted to gain insights about OCs from within a developing country context. Care needs to be taken as to how the findings are interpreted. In this research, the findings were used to construct a framework to drive business growth in developing countries using OC strategies.

Secondly (and following on the first limitation) it is acknowledged that the research focused primarily on private firms and products from the retail sector. Future studies can focus more specifically on non-private firms as well as manufacturing and services sectors and even other industries within the retail sector.

Thirdly, there were very specific limitations in terms of participants who were willing to be included in the research. This was due to, amongst others, the COVID-19 pandemic and regulations put in place to combat the spread of the virus. Moreover, the interviews were conducted via Zoom and Google Meet, which limited the personal interaction between interviewer and interviewee. The findings might have been more substantial if more time could have been spent with the participants.

5.3   Future research

Some areas for possible future research have been identified. Firstly, the framework proposed in this research to implement an OC strategy may be tested more rigorously from a developing country context. It is suggested that the testing of the framework should also be more sector and industry specific which may imply some adaptations of the framework depending on the sector and industry in which the OC strategies are implemented. Future research can be conducted in the form of a case study and can be more longitudinal in nature. In conclusion, more research can be conducted on each of these dimensions to provide more depth to the framework provided in Figure A1.

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Appendix

Figure A1   Framework to implement an OC strategy
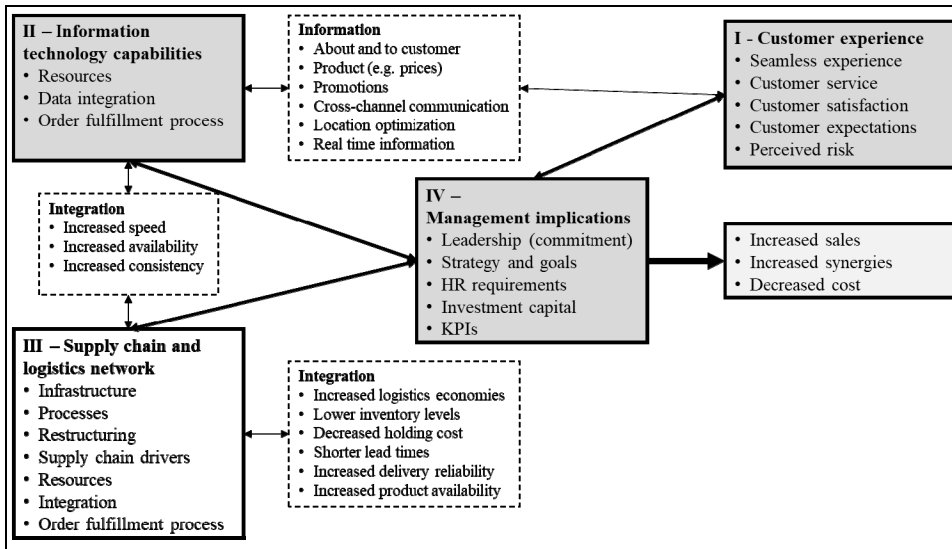
Source: Berman and Thelen (2018), Cao and Li (2014), Davis-Sramek et al. (2020), Jocevski et al. (2019), Mishra (2020), Larke et al. (2018) and Hübner et al. (2016)

Table A1   The link between the main themes and sub-themes of the research

RQ	Main theme	Sub-theme	Participant code	Raw data extract examples from interviews to link main theme and sub-themes
1	Benefits of OCs	Customer experience	P5	"… customers operate outside normal business hours … I mean just the convenience for both sides of you know for us and our customers, I think that is the big one."
			P11	"I think it is quite good [because] we build the trust of our clients, we build the trust of our potential clients and … it is a … brand strengthener."
		Information technology capabilities	P5	"[The system is] fully integrated as a start, that could pull everything together."
			P8	"… you get on time or you get correct data which is fed through."

Table A1   The link between the main themes and sub-themes of the research (continued)

RQ	Main theme	Sub-theme	Participant code	Raw data extract examples from interviews to link main theme and sub-themes
1	Benefits of OCs	Supply chain and logistics network	P1	"I think that their overall warehousing costs would go down. And their stock holding costs will also improve because it will enable the flow of the demand requests into the warehouse from picking and warehouse flow to go to the customer."
			P8	"You can [manage the] supply chain quite easily if the orders come through the platform that we have. It can be captured quicker, it can be executed quicker, we can get more [timely] deliver[ies] [and] we can get correct deliver[ies]."
2	Barriers of OCs	Customer experience	P11	"Making everything very personalised and making everything very consistent. It takes a lot of time. You have to be consistent … It takes a lot of energy, a lot of time."
			P4	"… you know, if you walk into one of our stores, we might have 7000 products. On our current website there might only be 1800 products, so how do we get both of them to 7000?"
		Information technology capabilities	P10	"The huge barrier is that it is expensive and it is very technical to get all the systems to talk to each other in an accurate way."
			P1	"[It] would be around 150 to 200 million Rand to get an integrated ERP system and an execution program like a warehouse management system."
		Supply chain and logistics network	P1	"The thing that is evident in the companies that I worked in is a lot of different areas of the business functions [are] totally in their own silos, and there is very little intercommunication which has a detrimental effect on executing supply chain principles effectively and an omni-channel approach would make that more effective …"
			P3	"So sometimes the online [sales channel] is being held back … by the speed at which the in-store processes can keep up [at] …"
			P6	"… the barriers … [are] mainly based on getting our distribution and logistics correct which would then enhance our distribution to our customers via the online process or even store delivery as well."

Source: Compiled by authors from the interviews

Table A1 The link between the main themes and sub-themes of the research (continued)

RQ	Main theme	Sub-theme	Participant code	Raw data extract examples from interviews to link main theme and sub-themes
3	Managerial implications	Customer experience	P4	"For me, the most important thing is customer experience. Because we want the customer to have the same experience online as what I've got in a store."
			P6	"The main focus of management is to ensure that … the customer value proposition is catered for, whether it is online and in-store … that is why we have got to focus the managers on ensuring that it is catered for …"
		Information technology capabilities	P9	"To ensure that everything is integrated and to ensure that your IT system is upgraded continuously to cope with the additional volume of transactions."
			P7	"… ensuring that this channel still works; the omni-channel approach works; is to ensure that the central source of information – the ERP system – is accurate."
		Supply chain and logistics network	P5	"… we basically start from scratch and we build a complete facilities warehouse management system, building system [and] fleet system to … integrate with our operating system that we have at the moment."
			P3	"So it is almost a separate process within the DC of managing large, bulky orders to our store, to replenish the stores – versus single parcels that need to go to an end-customer."
			P9	"To ensure that we have got enough ordered product."
			P9	"To ensure that you update your fleet of vehicles that you can cope with a wider distribution."
		Leadership	P1	"… but it will also mean that your senior managers need to pool the different areas of the business into a proper communication channel and be able to understand the challenges and the issues that every party faces and then collectively resolve the issues."
		Integration	P6	"… change management in terms of people understanding what needs to be done for us to migrate from a MC to an OC as well and then going back to management and management ensuring that it is accepted by everybody within the environment."

Source: Compiled by authors from the interviews

Table A1 The link between the main themes and sub-themes of the research (continued)

RQ	Main theme	Sub-theme	Participant code	Raw data extract examples from interviews to link main theme and sub-themes
3	Managerial implications	Integration	P10	"So, from my perspective it was easy to manage it because everyone was on board and everyone was excited to do it … there was complete buy-in by everybody … You cannot ask for better as a manager to have a whole team who is willing to do what needs to be done and understand what they need to do."
		Performance measurement	P3	"Yes, probably just redefining their KPI's – the way that they are measured in achieving success. Those indicators need to be updated and transformed to now incorporate the different channels that they are now looking after."

Source: Compiled by authors from the interviews