Towards a Taxonomy for Buy Online Pick up in Store Service

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Abstract: Following the best practices in retail, along with home delivery, many companies also offer customers the option to buy online and pick up in store (BOPIS). The paper provides insights into the essential components of the BOPIS service conceptualized in the form of a taxonomy together with literature review on omnichannel retail and channel integration quality dimensions. The data were collected through semi-structured interviews and focus group discussion in the scope of case study with an Irish retailer. The study represents a valuable contribution into the existing body of knowledge on omnichannel retail.

1 INTRODUCTION

Rapid technological development and diffusion of innovations within retail industry keep changing the nature of business strategies and interactions between retailers and customers (Keeling et al., 2013). However, digitalization of retail landscape brings particular challenges to small and medium enterprises (SMEs) as they are much more vulnerable to technological disruptions than large retail networks which can afford investing substantial funds into technological development (Inman & Nikolova, 2017).

Along with adoption of the Internet technologies in retail, many companies started offering buy online pick up in store service to their customers on top of home delivery option (Gao & Su, 2017).

The general design of the BOPIS service is simple: the shopper orders online from a dedicated website or a mobile application and then comes to the pickup area to collect an order (Weber & Maier, 2020). Despite the apparent simplicity of the BOPIS process, multiple versions, inconsistent operations, and conflicting approaches of the same process model are only some of the issues (Alotaibi, 2016; Smirnov et al., 2012; Branco, 2014).

This paper attempts to systematically structure the components of the BOPIS service through answering the following research question:

RQ 1: What are the principles, requirements, and objectives for the BOPIS service model?

The rest of the paper is structured as follows. First, the author provides insights into omnichannel retail concept and the BOPIS service as an essential step towards channel integration. In the section 3, the author describes the research design and data collection methods used in the current study. Section 4 describes the BOPIS service taxonomy built upon the collected data. Discussion about limitations, future steps, and implications for research and practice is in the section 5.

2 LITERATURE REVIEW

2.1 Omnichannel Retail Concept

Along with rapid technology evolution and the ongoing trend of digitalization, various channels, such as brick-and-mortar stores, mobile phones, social media, etc. have become available to customers to interact with the retailers (Shen et al., 2018). In many cases, however, introduction of a new channel was stipulated by emerging market trends and evolving customer needs. The channel implementation process was mostly focused on encouraging customers to make a decision in favour of one or another channel (Chen et al., 2018) and has not been subjected to thorough consideration and planning (Klaus & Nguyen, 2013). And after having the multiple channels implemented, retailers keep managing these channels independently, which results in information and operations inconsistency (Saghiri et al., 2017). As a result, achieving the

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integration of information and services from multiple available channels is becoming a high priority for retailers (Lazaris & Vrechopoulos, 2014). To date the majority of papers belonging to the service research dedicated to embracement of online and offline channels were trying to define the factors determining consumers' channel preference, treating online and offline channels as competing forces (Chen et al., 2018) and summarizing it as a multichannel retailing (Beck & Rygl, 2015).

In the retail research, many authors use the term multichannel as an umbrella concept to describe different strategies, regardless of the channel configuration (Beck & Rygl 2015; Verhoef et al. 2015). However, according to Neslin et al. (2006) and Rigby (2011) incorporating all channel concepts under the single term multichannel does not appropriately describe the complexity of channel integration and the seamless and interchangeable nature of how the channels need to be designed and used. Trenz (2015) also argues that there is a mismatch between the concept of multichannel strategy used in retail research and market realities today as it cannot encompass the full complexity of an evolving multichannel environment. Omnichannel is perceived as an evolution of multichannel strategy (Piotrowicz & Cuthbertson, 2014) and represents an attempt to establish a borderless cross-channel communication ecosystem (Verhoef et al., 2015) where services and interactions with customers are coordinated across areas of advertisement, information access, inventory management, products, and pricing, order fulfilment, as well as customer service (Li et al., 2018). Therefore, the authors keep embracing the term omnichannel management to capture and express the new capabilities and features of this advanced channel management concept (Beck & Rygl 2015; Brynjolfsson et al. 2013; Verhoef et al. 2015; Trenz, 2015; Lazaris & Vrechopoulos, 2014; Shen et al., 2018; Saghiri et al., 2017).

However, since the terms multichannel and omnichannel are often used interchangeably a lack of distinction regarding the underlying concept exists. The author made an attempt to capture the unique and fundamental features of both strategic approaches to reduce ambiguity around these concepts. Based on the previous studies, the author conducted a literature review of the major differences between omnichannel and multichannel concepts, provided in Table 1.

Table 1: Differentiation of multichannel and omnichannel. Based on: Mirsch et al., 2016; Picot-Coupey et al., 2016; Juaneda-Ayensa et al., 2016; Verhoef et al., 2015; Beck & Rygl 2015.

	Multichannel	Omnichannel
Definition	A siloes approach where channels are designed and operated as independent entities.	A unified approach that manages channels and touchpoints in a synergetic way to allow consumers to have a seamless experience.
Channel characteristics	Separate channel coexist and compete with each other.	Touchpoints are integrated within unified channels to allow smooth flow of information to provide seamless experience.
Channel management	Management of the channels and touchpoints is aimed to optimize the experience with every channel separately.	The management of the channels and touchpoints is synergetic with the major aim to provide a unified experience.
Channel integration	No or limited switching between channels	Easy and seamless switching among all touchpoints and channels.
Retailers	Cannot fully control the integration of all channels	Control full integration of all channels.
Customers	Perceive interaction with a single channel.	Perceive interaction with entire brand.

The researchers working on omnichannel concept argue that although the retailers have recognized the significance of omnichannel concept, the extent to which such strategy can achieve the desired business goals greatly depends on customers' perception and usage of the delivered omnichannel service (Shen, 2018; Payne et al., 2017; Pantano & Viassone, 2015). Previous research has regarded channel integration and the resulting fluency of experience as the essential enablers of omnichannel business success (Saghiri, 2017; Verhoef et al., 2015; Cao & Li, 2015). In their study Lee et al. (2019), Shen (2018) and Hossain et al. (2019) state that channel integration quality has a critical role in creating a positive customer experience in the context of omnichannel retailing. Therefore, the integration quality of parallel channels should be regarded as the core element that distinguishes omnichannel from multichannel services.

2.2 Channel Integration Quality

Channel integration quality refers to omnichannel retailer's ability to provide customers with seamless shopping experiences across channels (Sousa & Voss, 2006; Lee et al., 2019). Subscribing to social exchange theory (Blau, 1968) researchers argue that omnichannel retailers' efforts invested into channel integration quality will be valued by customers which in turn will lead to enhanced experience among customers and, ultimately, to desirable business outcomes (Lee et al., 2019).

Following the systematic literature review approach, proposed by Levy and Ellis (2006) the author explored the channel integration quality dimensions in the current literature and presented them in the form of a concept matrix, demonstrated in Table 2.

Google Scholar, Web of Science, Ebsco Host, and Science Direct databases were searched for the keywords namely "channel integration quality", "channel integration", "integrated channels", "omnichannel" OR "omni-channel" with the established time limit from 2004 and 2019. The first round of search resulted in in 86 papers for further elaboration. The author was further looking for the keywords in the titles, abstracts, and sub-titles of the selected papers. The major criterion at this step was a sufficient number of keywords e.g. the manuscripts should have contained at least three channel integration quality criteria described in detail in order to be considered. This step resulted into a pool of 43 papers. During the second part, the author read, analysed, and interpreted the full texts to identify

elements that could assist in composing the concept matrix and identified 19 papers, which were explicitly describing the channel integration quality criteria. These papers became a foundation for the concept matrix.

2.3 Concept Matrix Construction

The systematic literature review resulted in the concept matrix of channel integration quality dimensions in their work identified new dimensions of channel integration quality by conducting a qualitative study through organizing twenty in-depth interviews and two focus group discussions. Hossain et al. (2019) identified the sub-dimensions of privacy and security and service recovery accessibility which were parts of the assurance quality dimension. These dimensions in the current study due to their infancy and insufficient literature coverage.

The thorough analysis of the concept matrix of channel integration quality dimensions clearly demonstrates that:
1. Process consistency dimension is less covered in the literature to date compared to channel-service configuration and content consistency dimensions
2. Those authors who addressed the dimension of process consistency in their work in the majority of cases also covered both integrated order fulfilment and channel reciprocity sub-dimensions.

According to Sousa and Voss (2006) process consistency in the context of channel integration refers to the consistency of processes within organization associated with managing different channels. According to literature analysed, process consistency dimension is comprised of two sub-dimensions namely integrated order fulfilment and channel reciprocity.

Integrated order fulfilment enables retailers to provide logistical support at one channel for products purchased at other channels (Oh et al., 2012). Usually it realized in the form of buying a product online and picking it up in store (BOPIS), returning a product which has been purchased online in-store or providing post-purchase service by online support team for products purchased in brick-and-mortar store (Oh et al., 2012; Wu & Chang, 2016; Yong-zhi, 2014).

Channel reciprocity refers to the absence of any one type of channel dominance over another channel; instead, both channels are designed to support each other (Chan & Pan, 2005).

Table 2: Channel integration quality dimensions.

Authors	Channel-service configuration		Integrated interactions					
	Breadth of channel choice	Transparency of channel-service configuration	Content consistency				Process consistency	
			Information	Transaction	System	Image	Integrated Order Fulfillment	Channel Reciprocity
Sousa & Voss (2006)	✓	✓	✓	✓	✓	✓		
Chan & Pan (2005)								✓
Berman & Thelen (2004)			✓	✓			✓	✓
Banerjee (2014)	✓	✓	✓	✓	✓	✓		
Seck & Philippe (2013)	✓	✓	✓	✓				
Hsieh et al. (2012)	✓		✓	✓				
Lee & Kim (2010)	✓		✓				✓	✓
Oh et al. (2012)			✓	✓		✓	✓	✓
Wu & Chang (2016)		✓	✓		✓	✓	✓	
Madaleno et al (2007)	✓	✓	✓	✓		✓		
Pantano & Viassone (2015)			✓	✓	✓	✓		
Bapat & Bapat (2015)				✓				
White et al. (2013)			✓	✓	✓	✓		
Yu et al. (2011)					✓	✓		
Hammerschimdt (2016)				✓				
Yong-zhi (2014)		✓	✓		✓		✓	
Li et al. (2018)				✓			✓	✓
Lee et al. (2019)	✓	✓	✓		✓			
Shen et al. (2018)	✓	✓	✓		✓			

In the context of channel reciprocity, customers utilize both channels, not because they prefer one channel to another, but because there are more advantages to using both channel synergistically (Lee & Kim, 2010). When channels are designed reciprocally customers can purchase products via online channels and then pick them up at the brick-and-mortar retailer at their convenience (Lee & Kim, 2010).

When asked about omnichannel priorities, the retail companies surveyed by Forrester Research reported that fulfilment initiatives is a top priority among the other channel integration programs. Furthermore, among all omnichannel fulfilment activities, that enable customers to buy online and pick up in store (BOPIS) is regarded as the most important one (Forrester, 2014). According to Retail Systems Research (RSR), as of June 2013, 64% of retailers have implemented or consider implementation of BOPIS (RSR, 2013).

2.4 BOPIS Service

After introduction of the Internet in the customer buying process, retailers, which used to operate a single brick and mortar strategy, based on a physical network of stores, were enabled to introduce a click-and-mortar approach and combine the strength of each channel (Dinner et al., 2014). In addition to carrying out their traditional in-store shopping, customers were enabled to do online purchases, with an ease of offering 24/7 access, with home delivery or in-store pickup (Jara et al., 2018). As BOPIS

"combines the strength of physical and online stores" (Beck & Rygl, 2015), it can be classified into cross-channel retailing. The concept of cross-channel retail is also in line with the omnichannel management paradigm, which views channels as seamlessly integrated touchpoints, regardless of their position (Verhoef et al., 2015).

Existing research on BOPIS has addresses a range of aspects and concepts associated with this service. In their work, Lewis et al. (2014) examined the technology-related challenges that retailers encounter when they aim to offer BOPIS service. Chatterjee (2010) undertook an effort to establish which customer characteristics (e.g., higher price consciousness) can be used as a potential moderator variable as a driver towards implementing BOPIS service. In their research, Weber and Maier (2020) explored how BOPIS can be used as a mean of channel integration targeted at reducing competitive research shopping. Gao and Su (2017) explored how information availability and convenience serve as drivers towards selecting BOPIS service among shoppers. Oh et al. (2012) found out that BOPIS options increase perception of convenience, which leads to overall increase of consumer value of the retailer.

Despite the seeming straightforwardness of the BOPIS process, different design approaches, inconsistent steps, and conflicting versions of the same process model are only some of the issues that have been listed (Alotaibi, 2016; Smirnov et al., 2012; Branco, 2014). Existing research on channel integration in the form of the BOPIS service in this

regard and does not provide a full picture on what are the essential elements of this process. The problem addressed in this work is collection and systematization of the elements required to build an efficient BOPIS service within retail organizations. This is an important step towards creation of a reference BOPIS service model which would help retailers configure and customize their existing models to meet their business requirements (van der Aalst et al., 2010; Reinhartz-Berger et al., 2010) which is the step for further investigation and lies beyond the scope of the current study.

3 RESEARCH METHOD

3.1 Case Study

The case study is a research strategy, which focuses on understanding the dynamics present within specific context. Case studies typically combine data collection methods such as archives, interviews, questionnaires, and observations with the subsequent qualitative and quantitative evidence. Case studies can be used to accomplish a number of goals: to provide description, test theory, or generate theory (Eisenhardt, 1989).

The retail company involved in the case study was established over 50 years ago by the Irish government with the aim to help local designers and manufacturers grow into independent entrepreneurs and to create extensive market of handcrafts in Ireland. Today the company is one of the largest Irish companies that sells high-quality design products through numerous stores across the country and e-Commerce platform with over 25 000 stock keeping units (SKUs) including fashion, knitwear, accessories, jewelleries, cutlery, art and other.

3.2 Semi-Structured Interviews

In order to reinforce the theoretical foundation, the author was looking for eliciting the real business challenges the company faces in their practice. The most suitable approach at this stage of the research was a semi-structured interview method. Semi-structured interviews imply the use of an interview guide with the set of predetermined questions aimed to collect similar types of data from all interviewees, where the researcher, however, is free to seek clarification (probing) and vary the order and wording of the questions (Doody & Noonan, 2013; David & Sutton, 2004). Semi-structured interviews enable researchers to word questions instinctively and

develop a conversational style during the interview that focuses on the topic (Patton, 2002). According to Dearnley (2005) the open nature of the questions in semi-structured interviews encourages depth and vitality, which can help researchers develop new concepts and gain a deeper understanding of the research topic.

3.3 Focus Group Discussion

Focus groups are aimed to investigate a clearly defined area or set of issues (focus) in the context of a group discussion (Stewart et al., 1990). With the help of a moderator, a group of people discusses ideas and thoughts on open-ended questions (Krueger, 2014).

In line with the method proposed by Tremblay et al. (2010) the author has defined a sample size of six participants for focus group discussion. Participants were informed about the project before conducting a discussion and participation in the discussion was without any remuneration.

The questioning route designed according to Trembley et al. (2010) provided a clear structure for the moderator which enabled an extensive communication. The questions were open-ended and not suggestive and moderator was requested to be only asking questions without indicating possible answers. The questioning route consisted of 5 questions:
1. Principles: what are the principles for the BOPIS process to be built upon?
2. Objectives: what are the key objectives when designing BOPIS service?
3. Requirements: what are the requirements when designing BOPIS service?
4. Planning: which steps of process planning are systematic?
5. Methods: which methods and tools are applied to support design of the BOPIS service?

The main objective of conducting the focus group discussion at the partner organization was to elicit practically relevant principles, requirements, and objectives applied in real business settings when designing BOPIS service model.

In order to reinforce findings collected during the focus group discussion at the company, the author conducted two semi-structured interviews with Financial Director and Logistics Manager.

The objective of conducting the focus group discussion and semi-structured interviews was to enrich and improve the knowledge required to design the taxonomy by collecting practically relevant process principles, objectives, and requirements

considered by practitioners when designing BOPIS service.

4 RESULTS

4.1 Taxonomy Development

Taxonomies represent a classification of objects that helps researchers understand and analyse complex domains (Nickerson et al., 2013). Taxonomies provide a structure and an organization to the knowledge of a field, thereby enabling researchers to study the relationships between concepts and hypothesize about these relationships (Glass & Vessey, 1995).

In the course of the current work, the author applied the deductive approach towards taxonomy development. According to Nickerson et al. (2013) the deductive approach implies that dimensions, and characteristics are derived not from empirical cases but instead from a solid theoretical and conceptual foundation through a logical process.

The major purpose was to develop a useful taxonomy and not necessarily the 'best' one as this cannot be defined (Nickerson et al., 2013). According to Nickerson et al. (2013) the usefulness of the taxonomy can be measured through the range of qualitative attributes:

- the taxonomy is concise and contains a limited number of dimensions and characteristics;
- the taxonomy is robust and has a sufficient number of dimensions and characteristics to clearly classify and differentiate the objects of research;
- the taxonomy is comprehensive and according to Doty and Glick (1994) 'provides complete descriptions of each type using the same set of dimensions';
- the taxonomy is extendible and allows for being compounded with additional elements and new dimensions when new types of objects discovered.

In the current study, the author has formalized a taxonomy of the key elements required for creation of the BOPIS service model: service principles, service requirements, service objectives, enterprise resources, and enterprise capabilities (higher-level and lower-order capabilities). The proposed taxonomy can be considered useful in line with the qualitative characterises of the taxonomy usefulness defined by Nickerson et al. (2013) as it has a concise yet robust and comprehensive list of the elements

which can be extended if new dimensions of the BOPIS service model appear.

Taxonomy is an essential step in building conceptual model of the BOPIS service in the course of the current study as "concepts and conceptual frameworks at this level aim at identifying essences in the research territory and their relationships" (Iivari, 2007).

4.1.1 Service Principles, Requirements, and Objectives

Service principles, requirements, and objectives were elicited during focus group discussion and two semi-structured interviews at the company. The mentioned characteristics are essential components in the BOPIS service model as they enable the BOPIS service provision and serve as key constructs for the process design. The identification of the principles, requirements, and objectives for developing BOPIS service is important for guiding the design of the actual process model based on those elements. The investigation of these service model components provides the justification behind the design decisions in relation to definition of the new strategic concepts.

4.1.2 Enterprise Resources & Capabilities

In line with the resource-based paradigm, resources are considered as inputs that enable a firm to carry out its activities through utilizing tangible and intangible assets, organizational processes, firm attributes, information, or knowledge which organization owns, controls or has access to on a semi-permanent basis to achieve business goals (Barney, 2001; Mata et al., 1995; Helfat & Peteraf, 2003).

An enterprise capability represents an abstract construct and refers to the ability of an organization to perform, using organizational resources, with the purpose of achieving a particular business goal (Helfat & Peteraf, 2003; Henkel et al., 2014). In the course of the current study, the author has included the resources and capabilities outlined in the taxonomy, as those are the essential ones for supporting the design, development, deployment, and operation of the BOPIS service according to the data from practitioners the author has collected in the scope of the current case study.
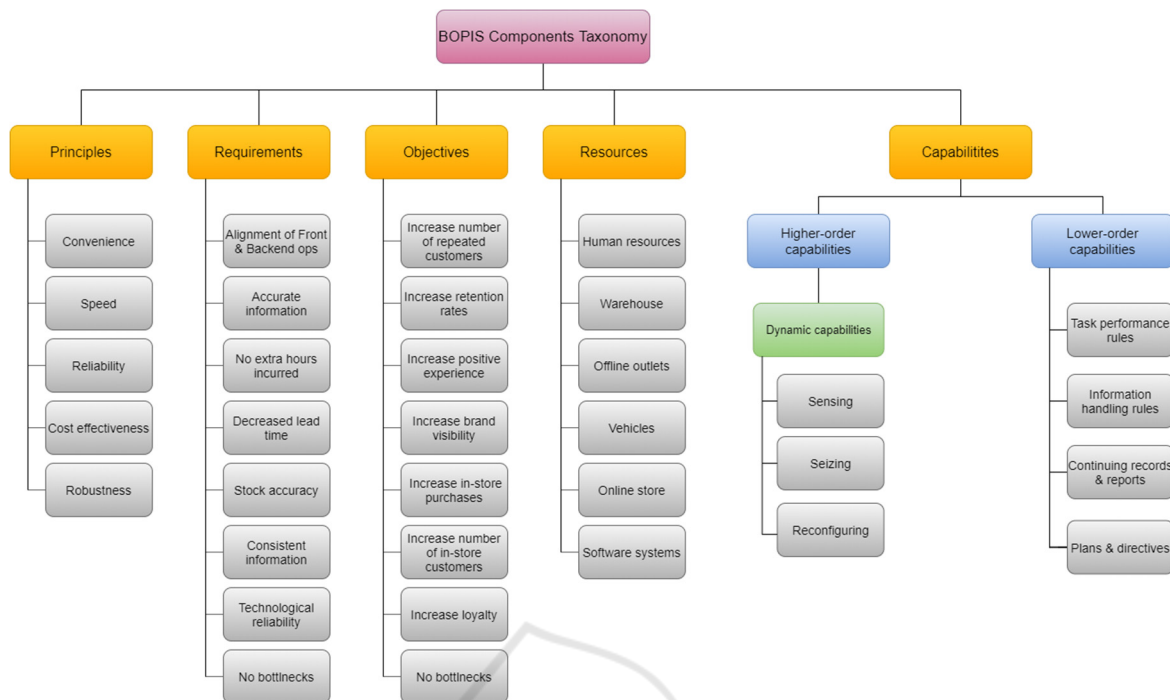
Figure 1: Taxonomy of the key elements of the BOPIS reference model.

5 SUMMARY & CONCLUSION

This work adds to the existing body of knowledge on omnichannel retailing by examining the growing phenomenon of cross-channel retail strategy through the adoption of BOPIS service by small and medium retailers. The efforts undertaken in this paper were primarily aimed at the collection of key principles, requirements, and objectives which were arranged into a comprehensive BOPIS service taxonomy. The author has carried out the empirical analysis using the data from real business practitioner, hence biases due to faulty recollection, false reporting, and demand effects are reduced. This paper makes a contribution to our understanding of service models through providing an empirical support for a BOPIS service modelling not previously found in the literature and insights into structuring principles, requirements, and objectives of the service.

Mapping the elements within service models in an omnichannel environment can be often performed by different employees, from different departments, for different projects who have limited technical expertise which results in multiple models of the same process and can lead to losing a significant number of person-days and open up possibilities to introduce errors into the process (Branco et al., 2014). This study helps retail managers identify and

distinguish components required to design a successful BOPIS service.

The future step is structuring the discovered BOPIS process elements into a comprehensive BOPIS reference service model which would be able to capture proven practices and in the retail domain and meet the requirements of individual companies.

The findings and contributions of the current work are constrained by a certain number of limitations, which provide opportunities for further research. The first thing to consider is that the author follows the interpretivist approach where the results conform to the available action-prospects and the researcher's "world view" is the strongest determining factor in explaining the phenomenon (Mullarkey & Hevner, 2019). It should be also noted that the actual use of the taxonomy in order to design and implement a long-term oriented BOPIS service in organizational practice would not be possible in the short term. Furthermore, the implications the service implementation is going to bring in the form of the concrete results e.g. new processes or increased turnover would take additional time to be visible and measurable. It would hardly be possible to identify the direct causal relation between actions and measures taken due to process model implementation and specific quantifiable outcomes in organizational practice.

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REFERENCES

Alotaibi, Y. (2016). Business process modelling challenges and solutions: a literature review. Journal of Intelligent Manufacturing, 27(4), 701-723.

Banerjee, M. (2014). Misalignment and its influence on integration quality in multichannel services. Journal of Service Research, 17(4), 460-474.

Bapat, D. (2017). Exploring the antecedents of loyalty in the context of multi-channel banking. International Journal of Bank Marketing.

Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. Journal of management, 27(6), 643-650.

Beck, N., & Rygl, D. (2015). Categorization of multiple channel retailing in Multi-, Cross-, and Omni Channel Retailing for retailers and retailing. Journal of Retailing and Consumer Services, 27, 170-178.

Berman, B., & Thelen, S. (2004). A guide to developing and managing a well‐integrated multi‐channel retail strategy. International Journal of Retail & Distribution Management.

Blau, P. M. (1968). Social exchange. International encyclopedia of the social sciences, 7, 452-457.

Branco, M. C., Xiong, Y., Czarnecki, K., Küster, J., & Völzer, H. (2014). A case study on consistency management of business and IT process models in banking. Software & Systems Modeling, 13(3), 913-940.

Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). Competing in the age of omnichannel retailing (pp. 1-7). Cambridge, MA: MIT.

Cao, L., & Li, L. (2015). The impact of cross-channel integration on retailers' sales growth. Journal of Retailing, 91(2), 198-216.

Chan, C. M., & Pan, S. L. (2005, August). Intertwining Offline and Online Channels In Multi-Channel Public Service Delivery: A Case Study. In Academy of Management Proceedings (Vol. 2005, No. 1, pp. C1-C6). Briarcliff Manor, NY 10510: Academy of Management.

Chatterjee, P. (2010). Causes and consequences of 'order online pick up in-store'shopping behavior. The International Review of Retail, Distribution and Consumer Research, 20(4), 431-448.

Chen, Y., Cheung, C. M. K., & Tan, C. W. (2018). Omnichannel business research: Opportunities and challenges. Decision Support Systems, 109, 1–4.

David, M., & Sutton, C. D. (2004). Social research: The basics (Vol. 74, No. 3). Sage.

Dearnley, C. (2005). A reflection on the use of semi-structured interviews. Nurse researcher, 13(1).

Dinner, I. M., Heerde Van, H. J., & Neslin, S. A. (2014). Driving online and offline sales: The cross-channel effects of traditional, online display, and paid search advertising. Journal of marketing research, 51(5), 527-545.

Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. Nurse researcher, 20(5).

Doty, D. H., & Glick, W. H. (1994). Typologies as a unique form of theory building: Toward improved understanding and modeling. *Academy of management review*, *19*(2), 230-251.

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review, 14(4), 532-550.

Forrester (2014). Customer desires vs. retailer capabilities: Minding the omni-channel commerce gap. Technical report, Forrester Consulting.

Gao, F., & Su, X. (2017). Omnichannel retail operations with buy-online-and-pick-up-in-store. Management Science, 63(8), 2478-2492.

Glass, R. L., & Vessey, I. (1995). Contemporary application-domain taxonomies. *IEEE Software*, *12*(4), 63-76.

Hammerschmidt, M., Falk, T., & Weijters, B. (2016). Channels in the mirror: An alignable model for assessing customer satisfaction in concurrent channel systems. *Journal of Service Research*, *19*(1), 88-101.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource‐based view: Capability lifecycles. Strategic management journal, 24(10), 997-1010.

Henkel, M., Bider, I., & Perjons, E. (2014, June). Capability-based business model transformation. In International Conference on Advanced Information Systems Engineering (pp. 88-99). Springer, Cham.

Hossain, T. M. T., Akter, S., Kattiyapornpong, U., & Dwivedi, Y. K. (2019). Multichannel integration quality: A systematic review and agenda for future research. Journal of Retailing and Consumer Services, 49, 154-163.

Hsieh, Y. C., Roan, J., Pant, A., Hsieh, J. K., Chen, W. Y., Lee, M., & Chiu, H. C. (2012). All for one but does one strategy work for all?. Managing Service Quality: An International Journal.

Iivari, J. (2007). A paradigmatic analysis of Information Systems as a design science, forthcoming in Scandinavian Journal of Information Systems. Draft 27p.

Inman, J.J. and Nikolova, H., 2017. Shopper-facing retail technology: A retailer adoption decision framework incorporating shopper attitudes and privacy concerns. Journal of Retailing, 93(1), pp.7-28.

Jara, M., Vyt, D., Mevel, O., Morvan, T., & Morvan, N. (2018). Measuring customers benefits of click and collect. Journal of Services Marketing.

Juaneda-Ayensa, E., Mosquera, A., & Sierra Murillo, Y. (2016). Omnichannel customer behavior: key drivers of technology acceptance and use and their effects on purchase intention. Frontiers in psychology, 7, 1117.

Keeling, K., Keeling, D., & McGoldrick, P. (2013). Retail relationships in a digital age. Journal of Business research, 66(7), 847-855.

Klaus, P., & Nguyen, B. (2013). Exploring the role of the online customer experience in firms' multi-channel strategy: An empirical analysis of the retail banking services sector. Journal of Strategic Marketing, 21(5), 429–442.

Krueger, R. A. (2014). Focus groups: A practical guide for applied research. Sage publications.

Lazaris, C., & Vrechopoulos, A. (2014, June). From multi-channel to "omnichannel" retailing: review of the literature and calls for research. In 2nd International Conference on Contemporary Marketing Issues,(ICCMI) (Vol. 6).

Lee, H. H., & Kim, J. (2010). Investigating dimensionality of multichannel retailer's cross-channel integration practices and effectiveness: shopping orientation and loyalty intention. Journal of Marketing Channels, 17(4), 281-312.

Lee, Z. W., Chan, T. K., Chong, A. Y. L., & Thadani, D. R. (2019). Customer engagement through omnichannel retailing: The effects of channel integration quality. Industrial Marketing Management, 77, 90-101.

Levy, Y., & Ellis, T. J. (2006). A systems approach to conduct an effective literature review in support of information systems research. Informing Science, 9.

Lewis, J., Whysall, P., & Foster, C. (2014). Drivers and technology-related obstacles in moving to multichannel retailing. International Journal of Electronic Commerce, 18(4), 43-68.

Li, Y., Liu, H., Lim, E. T. K., Goh, J. M., Yang, F., & Lee, M. K. O. (2018). Customer's reaction to cross-channel integration in omnichannel retailing: The mediating roles of retailer uncertainty, identity attractiveness, and switching costs. Decision Support Systems, 109, 50–60.

Madaleno, R., Wilson, H., & Palmer, R. (2007). Determinants of customer satisfaction in a multi-channel B2B environment. Total Quality Management & Business Excellence, 18(8), 915-925.

Mata, F. J., Fuerst, W. L., & Barney, J. B. (1995). Information technology and sustained competitive advantage: A resource-based analysis. MIS quarterly, 487-505.

Mirsch, T., Lehrer, C., & Jung, R. (2016). Channel integration towards omnichannel management: a literature review.

Mullarkey, M. T., & Hevner, A. R. (2019). An elaborated action design research process model. European Journal of Information Systems, 28(1), 6-20.

Neslin, S. A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M. L., Thomas, J. S., & Verhoef, P. C. (2006).

Challenges and opportunities in multichannel customer management. Journal of service research, 9(2), 95-112.

Nickerson, R. C., Varshney, U., & Muntermann, J. (2013). A method for taxonomy development and its application in information systems. European Journal of Information Systems, 22(3), 336-359.

Oh, L. B., Teo, H. H., & Sambamurthy, V. (2012). The effects of retail channel integration through the use of information technologies on firm performance. Journal of operations management, 30(5), 368-381.

Pantano, E., & Viassone, M. (2015). Engaging consumers on new integrated multichannel retail settings: Challenges for retailers. Journal of Retailing and Consumer Services, 25, 106-114.

Patton, M. Q. (2014). Qualitative research & evaluation methods: Integrating theory and practice. Sage publications.

Payne, E. M., Peltier, J. W., & Barger, V. A. (2017). Omni-channel marketing, integrated marketing communications and consumer engagement. Journal of Research in Interactive Marketing.

Picot-Coupey, K., Huré, E., Piveteau, L., Towers, N., & Kotzab, H. (2016). Channel design to enrich customers' shopping experiences: synchronizing clicks with bricks in an omni-channel perspective-the Direct Optic case. International Journal of Retail & Distribution Management.

Piotrowicz, W., & Cuthbertson, R. (2014). Introduction to the Special Issue Information Technology in Retail: Toward Omnichannel Retailing. International Journal of Electronic Commerce, 18(4), 5–16.

Reinhartz-Berger, I., Soffer, P., & Sturm, A. (2010). Extending the adaptability of reference models. IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans, 40(5), 1045-1056.

Rigby, D. (2011). The future of shopping. Harvard business review, 89(12), 65-76.

RSR (2013). Omni-channel 2013: The long road to adoption

Saghiri, S., Wilding, R., Mena, C., & Bourlakis, M. (2017). Toward a three-dimensional framework for omni-channel. Journal of Business Research, 77, 53-67.

Seck, A. M., & Philippe, J. (2013). Service encounter in multi-channel distribution context: virtual and face-to-face interactions and consumer satisfaction. The Service Industries Journal, 33(6), 565-579.

Shen, X. L., Li, Y. J., Sun, Y., & Wang, N. (2018). Channel integration quality, perceived fluency and omnichannel service usage: The moderating roles of internal and external usage experience. Decision Support Systems, 109, 61-73.

Smirnov, S., Weidlich, M., Mendling, J., & Weske, M. (2012). Action patterns in business process model repositories. Computers in Industry, 63(2), 98-111.

Sousa, R., & Voss, C. A. (2006). Service quality in multichannel services employing virtual channels. Journal of service research, 8(4), 356-371.

Stewart, D. W., & Shamdasani, P. N. (2014). Focus groups: Theory and practice (Vol. 20). Sage publications.

Tremblay, M. C., Hevner, A. R., & Berndt, D. J. (2010). Focus groups for artifact refinement and evaluation in design research. Communications of the association for information systems, 26(1), 27.

Trenz, M. (2015). The blurring line between electronic and physical channels: Reconceptualising multichannel commerce.

van der Aalst, W. M., Dumas, M., Gottschalk, F., Ter Hofstede, A. H., La Rosa, M., & Mendling, J. (2010). Preserving correctness during business process model configuration. Formal Aspects of Computing, 22(3-4), 459-482.

Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing. Journal of retailing, 91(2), 174-181.

Weber, A., & Maier, E. (2020). Reducing Competitive Research Shopping With Cross-Channel Delivery. International Journal of Electronic Commerce, 24(1), 78-106.

White, R. C., Joseph-Mathews, S., & Voorhees, C. M. (2013). The effects of service on multichannel retailers' brand equity. Journal of Services Marketing.

Wu, J. F., & Chang, Y. P. (2016). Multichannel integration quality, online perceived value and online purchase intention. Internet Research.

Yong-zhi, Q. (2014). Empirical study on multi-channel service quality and customer loyalty of retailers. Journal of Electronic Commerce in Organizations (JECO), 12(4), 1-12.

Yu, U. J., Niehm, L. S., & Russell, D. W. (2011). Exploring perceived channel price, quality, and value as antecedents of channel choice and usage in multichannel shopping. Journal of Marketing Channels, 18(2), 79-102.