

# Omni-channel Services Failure and Recovery: A Case Study Research

*João Reis (reis.joao@ua.pt)*

*Department of Economics, Management and Industrial Engineering and Tourism,  
Aveiro University, Aveiro, and CINAMIL, Academia Militar,  
Lisboa, Portugal*

*Marlene Amorim (mamorim@ua.pt)*

*Department of Economics Management and Industrial Engineering and Tourism, and  
GOVCOPP, Aveiro University  
Aveiro, Portugal*

*Nuno Melão (nmelao@estgv.ipv.pt)*

*Department of Management and CI&DETS, School of Technology and Management of  
Viseu, Polytechnic Institute of Viseu  
Viseu, Portugal*

## Abstract

This study investigates the way service providers are employing their channels to support the handling of customer complaints, using a qualitative case study research approach in a Portuguese private bank. It characterizes the omni-channel recovery practices and discusses its implications for customer satisfaction. The results suggest that the degree of customers' (dis)satisfaction is not directly linked to the nature nor the severity of the existing failure, but rather with the service recovery process. This area represents a key research opportunity regarding the customer complaint in the contemporary service industry.

**Keywords:** Omni-channel services, Service failure and recovery, Case study research

## Introduction

Complaint management has been considered an important tool for managers to deal with failures, especially in the service sector (Matos *et al.*, 2009). Yet, to the best of our knowledge, it has not been addressed in the specific context of omni-channel service delivery. Although there is no consensual definition for omni-channel service, Picot-Coupey *et al.* (2016), in a systematic literature review, defined it as a seamless and integrated shopping experience across all channels that blurs the distinction between physical and online stores, and culminates in an integrated brand experience. This concept represents, thus, an evolution of strategies such as single, multi- and cross-channel services. Where single channel is usually defined as a customer contact point (virtual or physical) and customers can gather information or purchase a service or

goods (Aradhana, 2016; Chiu *et al.*, 2011; Hsieh *et al.*, 2012). Multichannel, a widespread of channels that simultaneously offer information, products, services or support to customers through two or more synchronized channels (Physical and/or virtual) (Beck and Rygl, 2015; Fornari *et al.*, 2016; Huang *et al.*, 2016). Cross-channel, defined as a set of integrated activities that involves a widespread of channels to offer accessible services or products in-store and/or on the Internet, whereby the customer can trigger partial channel interaction and/or the retailer/service provider controls partial channel integration (Beck and Rygl, 2015; Jeanpert and Paché, 2016). The multiple channels phenomenon gathered special attention in academia for many years (Bartels, 1965), notably since the introduction of new information technologies and information systems (IT/IS). However, the evolution of these strategies is far from being straightforward. The academic research into omni-channel and its structure is only starting to emerge, aside from the basic introductions and general characteristics of omni-channel, mainly provided by retail business reports and magazines, there is a scarcity of omni-channel research work in the academic literature (Saghiri *et al.*, 2017). Thus, the shift towards an omni-channel strategy is so complex and engaging that it is impossible to evolve directly from a multi-channel to an omni-channel strategy without a transition (Picot-Coupey *et al.*, 2016). While this transition and the inherent increased complexity of service delivery systems has been studied (e.g. Verhoef *et al.*, 2015), we are not aware of any literature concerning the management of operations associated with service failure and recovery in an omni-channel context. The limited understanding of omni-channel complaint management poses new challenges to operations management and appears to provide a research opportunity worth pursuing.

## **Background**

To the best of our knowledge the first time the omni-channel term was coined by business practitioners was when Parker & Hand (2009) and Ortis & Casoli (2009) suggested that the “omnichannel” shopper is an evolution of the multichannel consumer who instead of using channels in parallel, she uses them all simultaneously (Lazaris and Vrechopoulos, 2014). The topic also gathered the attention in academia when Rigby’s (2011) mentioned the term omni-channel retailing as “an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping”. Multichannel services hold an inherent view of split between physical and online channels (Piotrowicz and Cuthbertson, 2014), meaning that channels tend to complement and sometimes to compete with each other (Sousa and Voss, 2006; Coelho and Easingwood, 2008). On the other hand, in omni-channel services, channels are put forward as means that act for a common purpose (Lazaris and Vrechopoulos, 2014), holding characteristics of interchangeability (Dennis, 2016) aiming at a unified customer experience (Piotrowicz and Cuthbertson, 2014). Omni-channel services, therefore, allow for new business models, such as e-commerce and m-commerce that promote the synergistic use of channels and touch-points (McCormick *et al.*, 2014; Picot-Coupey *et al.*, 2015), empowering customers with unprecedented access to real-time information, and creating challenges to service loyalty (Voropanova, 2015). Whereas the transition from multi- to omni-channel (Verhoef *et al.*, 2015) offers new insights on the increased sophistication, i.e. complexity of service delivery systems, so far, we are not aware of any literature concerning the management of operations associated with the management of service failure and recovery in omni-channel. According to Maxham (2001, p.11), service failures refer to “any service-related mishaps or problems (real and/or perceived) that occur during a consumer’s experience with the firm”. Bitner *et al.* (1990) advanced a model for the classification of

organizational responses to service failures that has been widely adopted by other researchers (Hoffman *et al.*, 1995; Reynolds and Harris, 2005; Cassab and MacLachlan, 2009; Zhu *et al.*, 2013). Bitner *et al.* (1990) distinguished (figure 1): (1) *employee responses to service delivery system failures*, i.e. reactive responses from the provider following a customer complaint; (2) *employee responses to implicit/explicit customer requests*, i.e. providers' service adjustments following a request to meet customers' unique needs; 3) *unprompted and unsolicited employee actions*, i.e. events and employee behaviors that are truly unexpected from the customer's point of view.

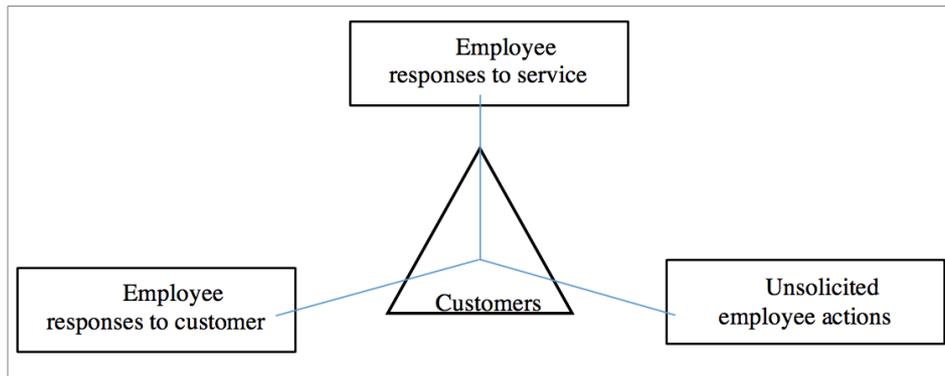


Figure 1 – Service failure categorization (Bitner *et al.*, 1990)

Bitner *et al.* (1990) triad is focused on employee actions, leaving out self-service technologies (SSTs). Later, Meuter *et al.* (2000) provided a vision on the alternative modes of contact used by customers to obtain service from the organization, identifying: (1) *technology failures*, those failures that effectively prevent the customer from getting a service (e.g. ATM not working); (2) *process failures*, failures that occur at some point after an initiated interaction (e.g. customer not receiving an item requested at the ATM); (3) *poor design*, difficulties arising from technology design problems or service design problems; (4) *customer-driven failures*, those that occur as a result of a customer mistakes. Tih and Ennis (2006) also focused their research on internet retailers' and proposed that recovery issues can arise from transaction errors, service delivery failures, mistakes in online charges and service accessibility problems. Whereas service failure and recovery encounters are considered moments of truth in the relationship between service provider and customers (Grönroos, 1988), there is a lack of conceptual and empirical research about the actual responsiveness of service providers (Kasabov and Warlow, 2010; Naylor, 2003). Complaint management has been considered an important tool for managers to deal with failures, especially in the services sector (Matos *et al.*, 2009) as recovery holds a significant impact on customers (Kau and Loh, 2006). The outcome of a recovery process can include offering tangible (e.g. refund) and/or intangible compensation (e.g. apologizing), with the potential of creating a positive customer attitude (Bambauer-Sachse and Rabeson, 2015). Roschk and Gelbrich (2014) proposed three categories for compensation: delayed or immediate monetary compensation (tangible), exchanged goods or re-performed service (tangible) and apologizing (intangible). Overall, recovery refers to the corrective actions aimed at rectifying failed or inferior service performance (Bell and Zemke, 1987). Grönroos (1988) puts forward the following definition: "the service provider's action when something goes wrong". The service literature identifies three types of service recovery (Zhu *et al.*, 2013): (1) *recovery by the firm*, (2) *recovery by the customer*, and (3) *joint recovery by the firm and the customer*. Michel and Meuter (2008) state that (1) *complaint management* and (2) *service recovery* are based on service encounter failures.

Complaint management is the firm's reaction to a customer complaint, whereas service recovery also addresses the firm's ability to react immediately to a failed service encounter, pleasing the customer before he or she finds it necessary to complain (see also Miller *et al.*, 2000). Michel *et al.* (2009) summed up service recovery in three different discipline-grounded perspectives. Marketing literature focuses on customer experience and satisfying the customer after a service failure (cf. Zhu *et al.*, 2013); operations literature addresses the processes and how to learn from failures to prevent them in the future (cf. Meuter *et al.*, 2000) and management literature focuses on employees and how to prepare them to recover from service failures (cf. Bitner *et al.*, 1990). These discipline-based perspectives are displayed in figure 2. This study builds on the operations perspective, as suggested by Reis *et al.* (2014).

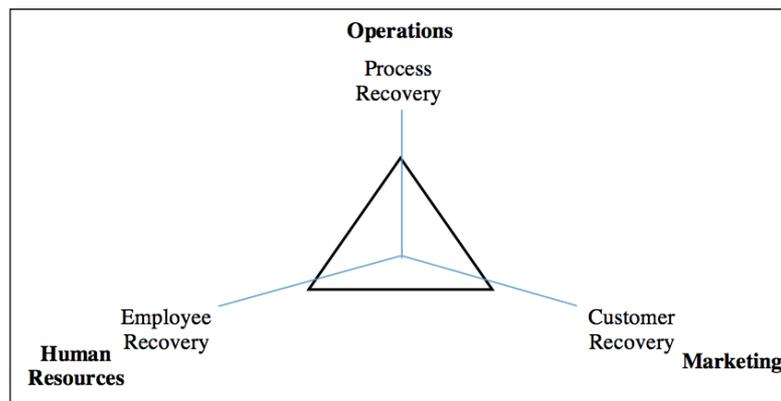


Figure 2 – Discipline perspectives on service recovery management (Michel *et al.*, 2009)

When customer satisfaction is hurt by a service failure, subsequent service recovery reactions may include negative word-of-mouth behavior (Hocutt *et al.*, 2006), whereas the positive recommendations will occur when recovery is understood as satisfactory (Matos *et al.*, 2009). Satisfaction with service recovery is defined by Webster and Sundaram (1998) as positive customer evaluations of the service recovery experience (Spreng *et al.*, 1995; Bambauer-Sachse and Rabeson, 2015).

### Methodology

This study employed a qualitative case study research approach in a Portuguese private bank. It reports on a documental examination of 50 records of customers' interactions with the client ombudsman and 10 semi-structured interviews with bank employees in order to seek corroboration and clarification. These records were obtained from the customer ombudsman, who is an independent entity acting as an intermediary agent in the context of conflicts emerging between customers and the bank. Complaints, sent to customer ombudsman, usually derive from customers' perception of a lack of responsiveness from the bank channels. Thus, the customer ombudsman mission is to provide proper follow-up to complaints, requests for information or suggestions. The number of participants selected for the interviews is justified by theoretical saturation (Saunders and Townsend, 2016). We interviewed highly knowledgeable informants, who were able to view the phenomenon from different perspectives, as they were chosen according to different functional areas and different levels of responsibility within the bank's physical branch. The main purpose of these interviews was to complement the complaint records obtained from the customer ombudsman, as bank employees were often hesitant when they were asked about private customer complaints. Once the respondents realized the researchers had full access to the complaint records

they were more receptive to explain parts of the complaining processes. For triangulation purposes, the case study relies on other data collection methods as well, including, documental analysis and direct observations. During the visits and tours of the facilities it was possible to take field notes and observe operations in first-hand. It was also possible to establish informal conversations that contributed to clarify data from the interviews. The analysis of internal documents had corroboration purposes and they mainly came from the official website and financial reports; those documents allowed to establish relations between several channels that were not previously taken into consideration. The data analysis software NVivo 10 allowed the researcher to handle a large volume of data. First, a hierarchy of categories and subcategories was built based on a theoretical model. Then, excerpts from interviews were allocated to existing categories and subcategories, and new ones were created when needed. Finally, the categorization system was revised, making adjustments until all redundancies and contradictions were eliminated. The case study research offered an opportunity to explore and explain the phenomenon for which little or no empirical data exists (Yin, 2003).

## Findings

The study data revealed that the bank employed different channels for interacting with customers for queries and requests for the different services provided. Likewise, several channels are available to customers for addressing the bank in case of an omni-channel service failure. The key channels used by employees for interactions concerning service failure and recovery involved (figure 3): (1a) *Bank mail*, the possibility of contact with the bank by electronic mail; (1b) *Social Networks*, the possibility of posting questions and interacting with the bank via social networks; (1c) *Click to call*, is a virtual place that allow customers to receive a contact from a bank, free of charge; (1d) *Call center*, a physical facility offering customer interaction, by request (click to call) or by a customer call; (1e) *Click to chat*, is a virtual service that allow customers to interact with the bank using a chat box; (1f) *Brick and mortar bank* (branch office) the possibility of face-to-face interaction in the physical facilities of the bank.

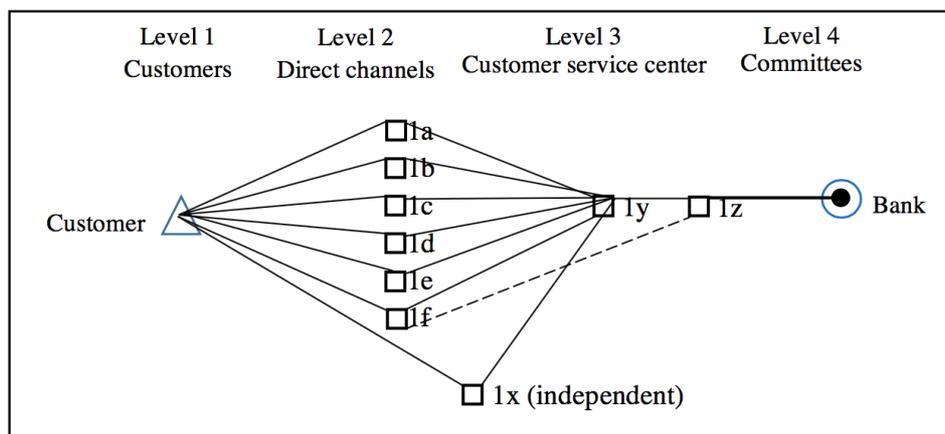


Figure 3 – Empirical illustration for Omni-channel service failure and recovery

In addition, the (1x) *Customer ombudsman*, is an independent entity which acts as intermediary agent in the context of conflict between customers and the bank. (1y) *Customer service center*, was a service dedicated to recover the level of relationship, mainly dealing with areas related to online banking and the call center. (1z) *Committees*,

were composed of business areas (e.g. retail bank, private banking) and support units (e.g. bank steering operations) representatives intended to facilitate the articulation of current management decisions involving top management. The call center (1d) was considered a direct channel because it is in direct contact with the customers. Another feature was the fact that the branch office (1f) could provide direct inputs to the committees (1z).

The analysis records from customer complaints revealed that the most relevant service failures were connected to issues regarding bank fees (13 failures), bank charges (5 failures) and account closures (4 failures), about 1/3 of the sample (figure 4). The register of the customers' complaints revealed that 82% of the claims were related to automatic services, brick and mortar services and ATM services. The most frequently reported service failure was derived from the automated services that charged fees disregarding the customer profile. Thus, the most frequent contact point for customer complaints was the branch office and the call center.

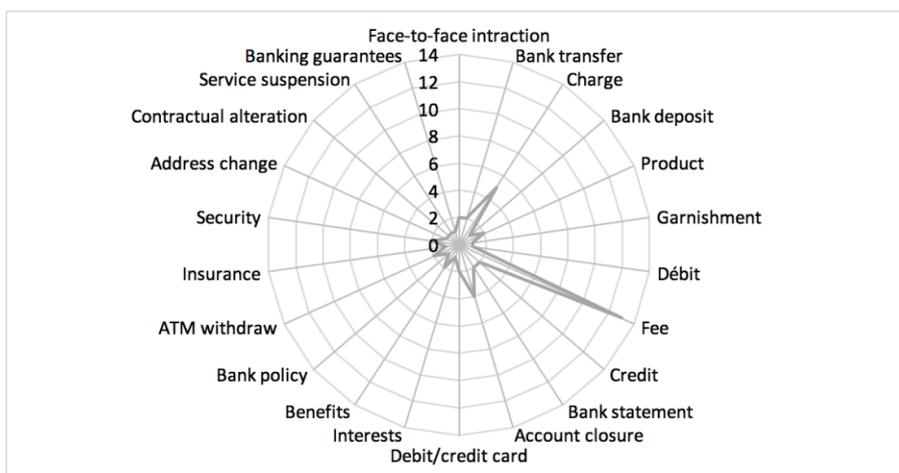


Figure 4 – Reported service failures (Customer ombudsman)

Notwithstanding, the effective number of contacts that customers had with the various channels when dealing with a failure may well be underestimated, because not all of them are registered by the bank (and the study relied on what was reported by customers, which may leave some pieces of information out). Furthermore, whereas there are legal obligations for the bank to register the interactions with the customers, there is no enforcement in recording contacts between employees. For this reason, it was difficult to account for all the interactions inside the bank, especially the informal interactions between employees (e.g. employees allocated to the management of different interaction channels) in order to solve the omni-channel service failures presented by customers. To mitigate this limitation, researchers often considered data provided from the descriptions of the customers, during their contacts with the bank, which provided some clues about the interactions inside the bank. In addition, we sought, through interviews with bank employees, to have knowledge of the formal path to the resolution of certain service failures. The data suggested that the number of service recovery interactions could span from one to five channels, but a great extent of service recovery involved at least three different types of channel interaction.

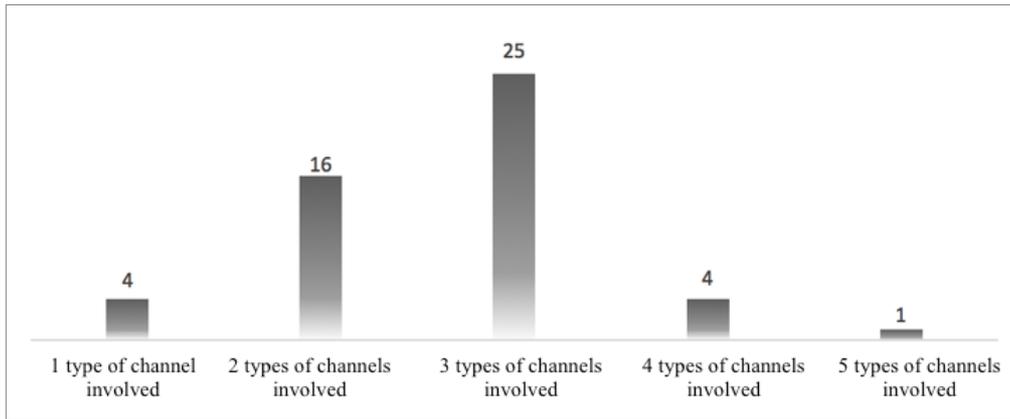


Figure 5 – Reported service interactions

For instance, as illustrated in figure 5, from the 50 failures reported, 25 types of failures were involved with 3 different type of channels. These numbers are consistent with Cortiñas *et al.* (2010), when they argued that customers used an average of 2.5 channels in their relationship with a multi-channel banking institution, in order to justify that the number of channels customers use is one of the indicators that describes multi-/omni-channel behavior (Kumar and Venkatesan, 2005; Sousa and Voss, 2006). However, the higher number of channels used for filling a complaint, the greater the number of interactions and cross channel flows. The case analysis revealed that the degree of customers' (dis)satisfaction is not directly linked to the nature nor the severity of an existing failure, but rather with the service recovery process. Evidence suggested that customers were often forced to use physical channels when the bank virtual response is not appropriate, ending up losing the freedom that supposedly the omni-channel services offer. This phenomenon occurred whenever the direct channels were not prepared to provide other than standard answers, in complaint cases where high level decision-making needs to be called to act. Customers are not willing to interact with a large number of channels, leading to a high number of interactions; instead, they are willing to wait when a service failure requires a high level of decision-making. To improve the recovery and customer acceptance, banks should reduce the number of interactions during the failure recovery process. Non-permanent recovery solutions, such as apologizing and monetary compensations (Roschk and Gelbrich, 2014) are two of the most used methods to generate a positive customer attitude (Bambauer-Sachse and Rabeson, 2015). However, this argument is not enough, as non-permanent solutions are inefficient in the long term, because most part of these compensations implies financial losses. Despite the investment that is required, this investigation advocates for permanent recovery solutions, involving the improvement of complaint handling processes as the way to definitely recover customer satisfaction. This approach would translate into monetary gains and customer-switching resistance (N'Goala, 2007). As Michel *et al.* (2009) argue, what seems to annoy customers after a failed service recovery is not that they were not satisfied but rather their belief that the system remains unchanged. To avoid service failures and complex recovery processes it is possible that companies may also be looking for new strategies and/or seeking new organizational synergies that allows services to encompass simultaneously physical and virtual purchases (Reis *et al.*, 2017). However, these new strategies may also pose new challenges when service failures occur, as there are no scientific studies focused on the recovery of failures when channels of several integrated companies are entailed (multi-brand experience). To the best of our knowledge, to date there are only records about

service failures that have occurred in one type of service delivery interaction, either through physical or virtual channels, but never when provided by simultaneous channels.

### **Conclusions**

To the best of our knowledge, this study is the first to characterize customer expectations for complaint management in omni-channel service contexts. The evidence suggested that customers are not generally aware of the channel recovery attributes and are often forced to search for help from front-line employees when the bank's virtual response is not in accordance to their expectations. This way, they end up losing the freedom that supposedly omni-channel services offer. Additionally, customers are also not willing to interact with a large number of channels, leading to a high number of interactions; instead, they are willing to wait for a customized recovery, when they perceive that a specific failure may require a high level of decision-making. This tolerance occurs when customers realize that a company is realizing all the necessary efforts over the service recovery, in order to ensure that the failure will not be repeated again. As a final contribution, this study also discusses the implications from existing misalignments between the failure and the omni-channel recovery processes. The results highlighted the importance of recovery permanent solutions and operations management to enable effective recovery processes in the omni-channel service context. To improve the recovery and customer acceptance, banks should reduce the number of interactions during the failure recovery process, which is likely to be converted into monetary gains and customer-switching resistance.

### **Limitations**

Research on complaint management is not an easy task, as it involves dealing with confidential data, which usually brings some constraints to the research. These constraints are largely due to the data collection, related to the omni-channel service recovery mapping, since, not all interactions between bank employees are officially registered. Due to confidential reasons, we have also not provided any information about key informants and the respective organization in this paper. However, this paper intends to fill a gap in the literature, concerning the limited understanding of the omni-channel complaint management and, for that purpose, this paper may be a relevant contribution.

### **Future directions**

We instigate academics and practitioners to provide new contributions to this emergent topic as it represents a fertile opportunity for future research. Further investigation may focus on the omni-channel service failure and recovery in an online-to-offline (O2O) context. The migration from O2O has gained popularity in recent years, as customers search for offline support to recover from service failures that apparently they cannot resolve online by themselves. Another research opportunity is to focus on the recovery of simultaneous purchases service failures as depicted above. A study of this nature might bring positive outcomes to organizations and alert scholars for these new dynamics and possible trends.

### **Acknowledgments**

Financial support from the Portuguese Military Academy Research Center is gratefully acknowledged.

## References

- Aradhana, G. (2016), "Technological Profile of Retailers in India", *Indian Journal of Science and Technology*, Vol. 9, No. 15, pp. 15–16.
- Bambauer-Sachse, S. and Rabeson, L. (2015), "Service recovery for moderate and high involvement services", *Journal of Services Marketing*, Vol. 29, No. 5, pp. 331–343.
- Bartels, R. (1965), "Marketing technology, tasks, and relationships", *The Journal of Marketing*, Vol. 29, No. 1, pp. 45–48.
- Beck, N. and 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*, Vol. 27, pp. 170–178.
- Bell, C. and Zemke, R. (1987), "Service Breakdown: The Road to Recovery", *Management Review*, Vol. 76, No. 10, pp. 32–35.
- Bitner, M., Booms, B. and Tetreault, M. (1990), "The service encounter: Diagnosing favourable and unfavourable incidents", *Journal of Marketing*, Vol. 54, No. 1, pp. 71–84.
- Cassab, H. and MacLachlan, D. (2009), "A consumer-based view of multi-channel service", *Journal of Service Management*, Vol. 20, No. 1, pp. 52–75.
- Chiu, H., Hsieh, Y., Roan, J., Tseng, K. and Hsieh, J. (2011), "The Challenge for Multichannel Services: Cross-channel Free-riding Behavior", *Electronic Commerce Research and Applications*, Vol. 10, No. 2, pp. 268–277.
- Cortiñas, M., Chocarro, R., and Villanueva, M. (2010), "Understanding multi-channel banking customers", *Journal of Business Research*, Vol. 63, No. 11, pp. 1215–1221.
- Dennis, C., Alamanos, E., Papagiannidis, S., and Bourlakis, M. (2016). "Does social exclusion influence multiple channel use? The interconnections with community, happiness, and well-being", *Journal of Business Research*, Vol. 69, No. 3, pp. 1061–1070.
- Fornari, E., Fornari, D., Grandi, S., Menegatti, M. and Hofacker, C. (2016), "Adding Store to Web-migration and Synergy Effects in Multi-Channel Retailing", *International Journal of Retail and Distribution Management*, Vol. 44, No. 6, pp. 658–674.
- Grönroos, C. (1988), "Service quality: the six criteria of good perceived service quality", *Review of Business*, Vol. 9, No. 3, pp. 10–13.
- Haynes, R. (1990), "Service typologies: A transaction modeling approach", *International Journal of Service Industry Management*, Vol. 1, No. 1, pp. 15–26.
- Hocutt, M., Bowers, M. and Donovan, T. (2006), "The art of service recovery: fact or fiction?", *Journal of Services Marketing*, Vol. 20, No. 3, pp. 199–207.
- Hoffman, K., Kelly and S., Rotalsky, H. (1995), "Tracking service failures and employee recovery efforts", *The Journal of Services Marketing*, Vol. 9, No. 2, pp. 49–61.
- Hsieh, Y., Roan, J., Pant, A., Hsieh, J., Chen, W., Lee, M. and Chiu, H. (2012), "All for one but does one Strategy Work for All? Building Consumer Loyalty in Multi-Channel Distribution", *Managing Service Quality*, Vol. 22, No. 3, pp. 310–335.
- Huang, L., Lu, X., and Ba, S. (2016), "An Empirical Study of the Cross-channel Effects Between Web and Mobile Shopping Channels", *Information and Management*, Vol. 53, No. 2, pp. 265–278.
- Jeanpert, S. and Paché, G. (2016) "Successful Multi-Channel Strategy: Mixing Marketing and Logistical Issues," *Journal of Business Strategy*, vol. 37, No. 2, pp. 12-19.
- Kasabov, E. and Warlow, A. (2010), "Towards a new model of "customer compliance" service provision", *European Journal of Marketing*, Vol. 44, No. 6, pp. 700–729.
- Kau, A. and Loh, E. (2006), "The effects of service recovery on consumer satisfaction: A comparison between complainants and non-complainants", *Journal of Services Marketing*, Vol. 20, No. 2, pp. 101–111.
- Kumar V. and Venkatesan R. (2005), "Who are the multichannel shoppers and how do they perform?: Correlates of multichannel shopping behavior", *Journal of Interactive Marketing*, Vol. 19, No. 2, pp. 44–62.
- Lazaris, C. and Vrechopoulos, A. (2014), "Omnichannel retailing: Review of the literature and call for research", *Conference 2<sup>nd</sup> International Conference on Contemporary Marketing Issues (ICCM)*, pp. 18–20 June 2014, Athens, Greece.
- Matos, C., Rossi, C., Veiga, R., and Vieira, V. (2009), "Consumer reaction to service failure and recovery: the moderating role of attitude toward complaining", *Journal of Service Management*, Vol. 23, No. 7, pp. 462–475.
- Maxham, J. (2001), "Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions", *Journal of Business Research*, Vol. 54, No. 1, pp. 11–24.
- McCormick, H., Cartwright, J., Perry, P. Barnes, L. Lynch, S. and Ball, G. (2014), "Fashion retailing – past, present and future", *Textile Progress*, Vol. 46, No. 3, pp. 227–321.

- Meuter, M., Ostrom, A., Roundtree, R. and Bitner, M. (2000), "Self-service technologies: understanding satisfaction with technology-based service encounter", *Journal of Marketing*, Vol. 64, No. 3, pp. 50–64.
- Michel, S. and Meuter, M. (2008), "The service recovery paradox: true but overrated?", *International Journal of Service Industry Management*, Vol. 19, No. 4, pp. 441–457.
- Michel, S., Bowen, D. and Johnston, R. (2009), "Why service recovery fails: Tensions among customer, employee, and process perspective", *Journal of Service Management*, Vol. 20, No. 3, pp. 253–273.
- Miller, J., Craighead, C. and Karwan, K. (2000), "Service recovery: a framework and empirical investigation", *Journal of Operations Management*, Vol. 18, No. 4, pp. 387–400.
- N'Goala, G. (2007), "Customer switching resistance (CSR): The effects of perceived equity, trust and relationship commitment", *International Journal of Service Industry Management*, Vol. 18, No. 5, pp. 510–533.
- Naylor, G. (2003), "The complaining customer: a service provider's best friend", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 16, No. 1, pp. 241–8.
- Ortis, I., and Casoli, A. (2009), "Technology selection: IDC retail insights guide to enabling immersive shopping experiences", IDC Retail Insights report.
- Parker, R., and Hand, L. (2009), "Satisfying the omnichannel consumers whenever and wherever they shop", IDC Retail Insights report.
- Picot-Coupey, K., Huré, E., and Piveteau, L. (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 and Distribution Management*, Vol. 44, No. 3, pp. 336–368.
- Piotrowicz, W. and Cuthbertson, R. (2014), "Introduction to the special issue information technology in retail: Toward omnichannel retailing", *Guest Editors International Journal of Electronic Commerce*, Vol. 18, No. 4, pp. 5–16.
- Reis, J., Amorim, M. and Melão, N. (2014), "Research opportunities in multi-channel services: A systematic review", *Proceedings of the 21<sup>st</sup> EurOMA Conference*, Palermo, Italy, 20–25<sup>th</sup> of June.
- Reis, J., Amorim, M., and Melão, N. (2017), "New Ways to Deal with Omni-Channel Services: Opening the Door to Synergies, or Problems in the Horizon?" In *International Conference on Exploring Services Science* (pp. 51-63). Springer, Cham.
- Reynolds, K. and Harris, L. (2005), "When service failure is not service failure: An exploration of the forms and motives of "illegitimate" customer complaining", *Journal of Services Marketing*, Vol. 19, No. 5, pp. 321–335.
- Rigby, D. (2011), "The future of shopping", *Harvard Business Review*, Vol. 89, No. 12, pp.64–75.
- Roschk, H. and Gelbrich, K. (2014), "Identifying appropriate compensation types for service failures: a meta-analytic and experimental", *Journal of Service Research*, Vol. 17, No. 2, pp. 195–211.
- Saghiri, S., Wilding, R., Mena, C., and Bourlakis, M. (2017), "Toward a three-dimensional framework for omni-channel", *Journal of Business Research*, Vol. 77, pp. 53–67.
- Saunders, M. and Townsend, K. (2016), "Reporting and justifying the number interview participants in organizational and workplace research", *Journal of Management*, Vol. 27, pp. 836–852.
- Sousa, R. and Voss, C. (2006), "Service quality in multichannel services employing virtual channels", *Journal of Service Research*, Vol. 8, No. 4, pp. 356–371.
- Spreng, R., Harrell, G. and Mackoy, R. (1995), "Service recovery: impact on satisfaction and intentions", *Journal of Services Marketing*, Vol. 9, No. 1, pp. 15–23.
- Tih, S. and Ennis, S. (2006), "Cross-industry analysis of consumer assessments of Internet retailers' service performances", *International Journal of Retail & Distribution Management*, Vol. 34, No. 4/5, pp. 290–307.
- Verhoef, P., Kannan, P. and Inman, J. (2015), "From multi-channel retailing to omni-channel retailing introduction to special issue on multi-channel retailing", *Journal of Retailing*, Vol. 91, No. 2, pp. 174–181.
- Voropanova, E. (2015), "Conceptualizing smart shopping with a smartphone: Implications of the use of mobile devices for shopping productivity and value", *The International Review of Retail, Distribution and Consumer Research*, Vol. 25, No. 5, pp. 529–550.
- Webster, C. and Sundaram, D. (1998), "Service consumption criticality in failure recovery", *Journal of Business Research*, Vol. 41, No. 2, pp. 153–159.
- Yin, R. (2003), *Case study research: Design and methods*, SAGE Publications, Thousand Oaks.
- Zhu, Z., Nakata, C., Sivakumar, K. and Grewal, D. (2013), "Fix it or leave it? Customer recovery from self-service technology failures", *Journal of Retailing*, Vol. 89, No. 1, pp. 15–29.