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Benefits and risks associated with time choice of innovating in retail settings

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Abstract.

Purpose- The innovation success requires a deep understanding of risks and benefits of the process, as well as of the best moment for innovating. The aim of this paper is to explore the current retailers' choice of innovating in terms of being the first innovator imitating competitors' innovations, by declining the benefits and risks associated with the both strategies.

Design/Methodology/Approach- Building on qualitative data from retail industry, with emphasis on fashion (including clothes, jewellery, and accessories), our investigation provides an empirical contribution to the emerging area on innovation management in retailing through its in-depth investigation of the strategies of eight case retailers who introduced technological innovations in the last three years, and by mapping the patterns between strategy and outcomes.

Findings - Our analysis revealed how pioneers and followers acted their strategies for achieving benefits and reducing the encountered risks. In particular, findings identify to what extend pioneers act according the technology push and followers according to the demand pull.

Originality/value- The research starts from the definition of the time choice of innovating, and the subsequent choice of being the first innovation adopter or the imitator. Our insights support scholarly exploration of innovation management by offering a new marketing management perspective, and providing practitioners with a better understanding on the time choice for innovating in retailing and also in broader empirical settings.

Keywords: pioneer; follower; innovation management; retailing; retail strategy; retail innovation

1. Introduction

Organization focus on innovating allows achieving new opportunities, and usage its resources for transforming innovative ideas in successful outcomes (Niu et al., 2013). For this reason, innovation management is acquiring importance also in retail industry, where retailers ability to innovate continuously is emerging as one of the most critical elements for successfully competing (Chiu et al., 2010; Pantano, 2014; Hristov and Reynolds, 2015). It consists on the creation of a new experience or a new service solution for consumers (it might also include a new form of customer interaction) (Grant et al., 2013).

Past studies have underlined that the ability to innovate might differ among firms operating in the same sector in terms of number and nature of innovation (Ellonen et al., 2009; Sorescu et al., 2011; Cao, 2014). In fact, innovators might succeed in the same sector with different timing (i.e. first mover/pioneer or imitator/follower), depending from their internal resources and strategic orientation (Kerin et al., 1992). For instance, retailers adopted different innovation strategies, such as introducing innovations based on self-service technologies for shifting tasks traditionally executed by employees to an automatic machine (Boeck and Fosso

Wamba, 2008; Evans, 2011; Pantano and Timmermans, 2014), introducing other technological innovations able to entertain and engage more consumers by providing new exciting shopping experiences (Kourouthanassis et al., 2007; Seck and Philippe, 2013; Demirkan and Spohrer, 2014; Poncin et al., 2014; Hristov and Reynolds, 2015), or focusing on new systems for integrating the opportunities provided by the e-tailing and e-commerce scenario within the physical point of sale (Kim and Park, 2005; Harris and Dennis, 2011). Moreover, there is still a number of retailers who did not introduce any innovation. Hence, a large heterogeneity of technological innovations and strategies has emerged in the current competitive scenario. Attempts have been made in a huge number of studies to explain the different innovation outcomes through the exploration of the effects of innovation in terms of store layout, consumer-employee interaction, quality of service, etc. (Im and Ha, 2013; Papagiannidis et al., 2013; Pantano and Timmermans, 2014; Demirkan and Spohrer, 2014; Rese et al., 2014).

While these studies agree on the importance of innovating within the points of sale, current research has still failed to empirically identify common frameworks for the development of successfully innovation strategies in retail industry. The aim of this paper is to deeply investigate the time choice of innovating, by declining the advantages for retailers acting as first innovators or as imitators. The purpose is to carry out some best practices for increasing the benefits of innovating while decreasing the encountered risks. Such insights have considerable relevance to marketing scholars and practitioners since they would be able to provide indications on the best innovation strategy to be adopted in order to generate the desirable outcomes.

Prior research focusing on the investigation of innovation management proposed that research effort should be devoted to finding out the commonalities in innovation strategies between firms (Ellonen et al., 2009). Hence, our study involves a multiple-case analysis, including eight cases from the fashion retail industry. This industry is characterized by a large innovative force mainly devoted to the improvement of supply chain management or electronic/mobile channel for selling (Moon and Ngai, 2008; Ha and Stoel, 2010; Blazquez, 2014; Tambo, 2014), while the technological innovations within physical points of sale for improving the service or creating new shopping experience is still limited. The paper is structured as follows. First, we describe the theoretical background of our study, with emphasis on the pioneer and follower innovation strategies. Thereafter, we present our research design, methods and data. Finally, we provide the findings of our empirical research, and conclude with a comparison among the cases, and a discussion concerning the theoretical and practical implications.

2. Theoretical Background

Past literature largely investigated the time choice for innovating by wondering if it is better to be the first one to innovate in the market (pioneer) or imitating the innovation strategies of competitors (follower) (Lieberman and Montgomery, 1988; Burgelman and Wheelwright, 2008; Schilling, 2013), by considering this choice as the *innovator's dilemma* (Christensen, 1997). While defining innovation management strategies, the time sequence for acting plays an important role for the success of the process (Niu et al., 2013), which represents the time for replying to the environment stimuli and includes the identification of the best moment for innovating. This means the choice to develop new products, processes, and market (pioneer), or to imitate other innovators' efforts to improve their existing strategy (follower) (Zhou,

2006; Parra-Requena et al., 2012). These strategies synthesize the higher or lower level of leadership (pioneers) or followership (followers) in the market (Parra-Raquena et al., 2012). Therefore, the time choice for innovating is an established debate that acquired the attention of scholars and practitioners. It collected several contributions from innovation and strategic management (Teece, 1987; Lieberman and Montgomery, 1988; Griffin 1997; Verganti, 2009), information studies (Moore and Benbasat, 1991; Adamides and Karacapilidis, 2006; Lin and Lu, 2007), and marketing management perspective, which mainly analysed the innovation management under a consumers' response to innovation lens (Hauser et al., 2006; Kourouthanassis et al., 2007; Seck and Philippe, 2013; Demirkan and Spohrer, 2014; Pantano, 2014; Poncin et al., 2014; Hristov and Reynolds, 2015).

The present study focuses on the marketing management perspective, with emphasis on the process innovation, in other words by taking into account retail process innovation through the introduction of technological innovation able to enhance both the service outcome.

2.1 Innovating in retail settings as first adopter

Despite the huge risk encountered in being the first mover into the market because the first mover may be also the first to fail (Min et al., 2006; Mueller et al., 2012), prior studies outlined how acting as pioneers might reward the strategy (Parry and Bass, 1989; Covin et al., 1999; Alpert et al., 2001).

The choice of innovating as first involves several advantages: (i) acquiring a positive image and reputation of being a leader (pioneer) in the sector, (ii) reducing management costs due to the support of the innovation, (iii) maintaining extant consumers and attracting new ones, and (iv) developing a superior innovation that principal competitors cannot easily replicate (Dorde, 2008; Lee et al., 2010). Thus, successful pioneering strategies might rely on the ability to build barriers that discourage the entrance of potential competitors (followers), such as the use of innovations protected by patents (Parry and Bass, 1989). In opposite, there is a list of disadvantages to be taken into account: (i) market and technological uncertainty, (ii) unpredictable progresses in technology and unpredictable changes in consumers' needs (especially after the introduction of the innovation), (iii) benefits for follower who can easily replicate the successfully strategy by reducing the risks, and (iv) difficulties for pioneers to dramatically change the business practice for reacting, which result from the introduction of a totally new technology rather than the gradual improvement of existing technology than (Lieberman and Montgomery, 1988; Min et al., 2006; Dorde, 2008).

In addition to these elements that might discourage pioneers, another difficulties emerge from the market where they perform. In fact, innovating in service market emerges as a more complex context due to the intangibility of services, which makes them hardly to protect with patents, and due to the low costs for followers, who can innovate without the barriers of patents (Posselt and Berger 2007). Retail industry is viewed as a service-oriented industry, more devoted to the selling process than to the manufacturing one (Pantano, 2014). Hence, The both possibility for followers to easily copy retail-pioneers innovating strategies and the increasing demand of technological innovations in retail settings are eliciting higher competitive environments where operating.

The innovations for retailing might consist of new self-service systems, mobile apps, interactive touch screen displays, etc. (Pantano and Timmermans, 2014). Therefore, innovating as the first in retailing also means being the first providing a new shopping experience. A meaningful example is the introduction of automatic cash-desks for self-check out that gave pioneers the possibility to be the first offering consumers the benefit of saving

time. Similarly, the first retailers providing virtual shopping assistants are the first providing this service usually executed by physical frontline employees. In fact, consumers might be attracted by the possibility to live a new shopping experience, and subsequently prefer the retailer able to do it, by satisfying their need of new exciting in-store experiences (Pantano, 2014). In the other hand, first retailers adopting a certain technology are also the first ones exploring that technology for collecting data on market trends and predicting the future ones for the development more efficient marketing strategies. In contrast, retailers adopting pioneering strategies are the first ones encountering the risks of both technology obsolescence and consumer out of use (Pantano, 2014). Therefore, new questions arise in the new competitive scenario that might discourage this choice: will a more efficient technology substitute the current technological innovation soon? Will consumers effectively use the technological innovation? Will retailer providing a new shopping experience be always awarded?

While there are some evidences from the service sector mainly examining the case of telecommunications (Fernandez and Usero, 2009; Jakopin and Klein, 2012; Sun et al., 2014), these questions still need further investigations.

2.2 Innovating in retail settings through imitation

While a large deal of research gives value to the effort of organization able to generate new knowledge, only a limited number of studies recognizes the importance of the capacity of absorbing the innovations developed by others (Hall and Densten, 2010). Pioneers challenge the introduction of innovation, whereas followers enhance the demand for the innovation and contribute to the reduction of performance uncertainty (Homburg, et al., 2009). In fact, followers usually copy or imitate the strategy of pioneers, by acting in a more established market situation (Parry and Bass, 1989). Advantages emerging from the following strategy might be summarized as (i) the direct access to the final solution (without the need of research and development of totally solutions), (ii) the possibility to use pioneer's experience for testing the innovation before effectively adopting, (iii) the access to both experienced users (who have been already educated by pioneer on the right usage of the innovation) and established market, and (iv) the opportunity to exploit pioneer's experience for transferring the innovation from a niche market to a growth market (Lieberman and Montgomery, 1988; Dorde, 2008; Hall and Densten, 2010; Lee et al., 2010). At the same time, this strategy encounters also several: (i) followers are evaluated by consumers less positively than pioneers, (ii) the entry barriers built by pioneers might be too high to be passed (Parry and Bass, 1989; Liang et al., 2010), (iii) followers might succeed only if the pioneer fails to maintain their superior innovation (Alpert et al., 2001), and (iv) users might choose among a huge number of companies providing the same innovation (Dorde, 2008).

For these reasons, Parry and Bass (1989) suggested to prefer a follower strategy when there are few or no rivals, thus the need to delay and reduce risks is more important; while choosing pioneering when the market is characterised by a huge number of competitors.

Past literature mainly analysed the pioneers and followers strategy in product innovation as a strategy for entering in a new market (Covin et al., 1999; Min et al., 2006; Zhou, 2006; Homburg et al., 2009; Mueller et al., 2012), while process innovation (as retailing) has gain little attention. Accordingly, preliminary studies in retail industry showed that in this context being brand pioneer is a more successful strategy, by emphasizing the role of consumers preferences for new products and the market homogeneity as drivers of this strategy (Alpert

et al., 2001). In opposite, follower might use the information on consumers' acceptance of innovation emerging by pioneers' experience and react properly, by improving the technology adopted by pioneers for delivering an enhanced service.

Literature on the following strategy from the marketing management perspective mainly analysed the case of the brand strategies and only little attention has been paid to retail sector (Liang et al., 2010; Alpert et al., 2011; Pantano, 2014). Therefore, it would require more evidences in the case on retail as process continuous subject to the innovative force (Pantano, 2014).

In sum, considering the benefits and disadvantages of the both pioneering and following strategies, the overall differences between the two actions emerge from the costs of innovating and cost of imitation, which include also consumers' switching cost in choice the follower's offer (Lieberman and Montgomery, 1988; Dorde, 2008). In other words, if more retailers offer the same innovation, such as the self-service cash desks, consumers might choose among many retailers offering the same innovation, with consequences for the consumer cross-retailer free riding.

Table 1 summarizes the innovation strategies in retail settings in reference to the time for replying to the innovation force.

	Benefits	Risks
First mover	<ul style="list-style-type: none"> • <i>Providing new shopping experiences</i> • <i>Collecting more efficient data for predicting market trends</i> • <i>Improving retailer image</i> 	<ul style="list-style-type: none"> • <i>Technological innovation out of date</i> • <i>Technological innovation out of use</i>
Following/Imitation strategies	<ul style="list-style-type: none"> • <i>Providing enhanced services if compared to the pioneers' ones</i> • <i>Using information on market acceptance of pioneer's innovation</i> 	<ul style="list-style-type: none"> • <i>Consumer cross-retailer free reading</i> • <i>Providing the image of a follower who is not a leader in the market</i>

Table 1: Innovation strategies in retail settings referring to the time for replying to the innovation force

Despite these advantages and risk, past studies do not provide indications on the extent to which retailers should prefer innovating as first or innovating after competitors. This study aims at providing empirical evidences on the recent introduction of innovations for supporting retailers in their time choice of innovating.

3. Research design

Given our object to understand the best timing for successfully innovating, we chose a qualitative analysis based on the multiple-case study in the research design. In the one hand, this approach supports the formulation of interpretations of the subjects under the study and to give a meaning to these interpretations (Harris and Dennis, 2011); in the other, it allows focusing only on the relationships that are replicated across most of the cases, by providing more robust evidences if compared to single-case studies (Ellonen et al., 2009).

In each case retailer, we interviewed the key people responsible for the introduction of innovation within the point of sales. The primary data collection was the semistructured interview, which consists of three main sections. The first one investigated the nature of innovation, the second one the adopted strategy (in terms of timing and place for innovating), and the third part the changes (both benefits and disadvantages) triggered by the introduced innovation.

Starting from the principle that the ability to innovate might differ among firms operating in the same sector in terms of number and nature of innovation (Ellonen et al., 2009; Sorescu et al., 2011; Cao, 2014), we identified 8 retailers operating in fashion industry, where four acted as pioneers and the remaining four as followers.

In particular, the pioneers are characterized by the introduction of a new technology within the last 6 months that has not replied yet by other retailers (followers); whereas the followers adopted a new technology within the last 6 months that has been previously introduced by other retailers (pioneers). In the case of pioneer, the technological innovation refers to a particular touch screen displays offering different functions, higher level of interactivity, context aware systems, etc.. Although we include these technologies in the same category (smart touch screen display), they deliver different services through different functionalities interaction modalities, and interfaces. Similarly, the main category for the innovations introduced by follower consists of a mobile virtual catalogue. To date, this technology provides limited functionalities and a limited level of interactivity, mainly consisting of the possibility to access the products catalogue directly by own mobile, and access more information, without the possibility to effectively buy the product.

Table 2 describes the 8 cases explored in our research.

Strategy	Typology of adopted innovation	Number of interviewees
<i>Pioneer</i>	Smart touch screen display	7
<i>Pioneer</i>	Smart touch screen display	5
<i>Pioneer</i>	Smart touch screen display	7
<i>Pioneer</i>	Smart touch screen display	4
<i>Follower</i>	Mobile virtual catalogue	5
<i>Follower</i>	Mobile virtual catalogue	4
<i>Follower</i>	Mobile virtual catalogue	4
<i>Follower</i>	Mobile virtual catalogue	5
		Tot= 41

Table 2: Description of cases.

All the interviews have been recorded and transcribed with the permission of the respondents. Usually, they lasted 45-60 minutes. Subsequently, we investigated the data for each retailer case through a content analysis, in order to emphasize the similarities and differences in the achieved outcomes.

4. Findings

In this section we summarize the findings emerging from the content analysis of collected interviews. Firstly, we investigated the strategy for innovating, in terms of timing and number of points of sale where the innovations have been immediately introduced. Secondly we focused on the achieved outcomes (i.e. quality of final services, larger amount of consumers, etc.). Lastly, we compared the results between pioneers and followers and pointed out the meaningful patterns.

4.1 Innovating as the first

Concerning the specific strategy for innovating, we identified that P1 introduced the technology only in a limited number of points of sale for testing the system before extending the innovation to each store.

We have chosen a sort of trial period before extending the service to all POS, to be sure that the technology will work, (and reduce the cost of investment in case of not). We wanted to attract more consumers thanks to the novelty of our new service, and we actually did!

A similar strategy has been acted by P2 and P3, whereas P4 didn't test in few selected stores the technology before the effective introduction, by directly proposing the new system in all points of sale.

We didn't need to test the technology before the introduction because we are confident to predict the positive effects of its introduction on our clients, and we want to consider all our points of sale with the same importance. Otherwise, it could seem that the store with the new technology is more important than the other, and we could attract more clients there, while reducing the number in the other points.

Moreover, all retailers introduced the technology permanently. P1, P2 and P3 indicated that in the case of not successful outcomes, the technology would not be introduced in the other stores, while P4 suggested that in case of failure in catching consumers interest they would identify new strategy for pushing consumers to make a more extensive usage of the technology for achieving more benefits.

Although the technology is not fully exploited yet by consumers due to the novelty of the system, which needs more time for interest consumers after the introduction of the innovation, retailers provided an enhanced service and noticed a subsequent sales increase. While only P3 emphasized improvements also in the store image.

After the introduction of this system, the image of our store has increased. We look innovative, with interest in the new technologies able to support our clients, and our clients currently reward our strategy. They like our system and new clients come to our store for trying, the number of clients using it increases day by day. We expect that within a couple of months the most of clients will use it!

We note that the four cases acted similar innovator profiles. For instance, P1, P2 and P3 decided to test the technology in few selected stores, while P4 directly introduced in all the points of sale. Correspondingly, the cases all introduced the technology permanently with similar outcomes.

Despite the still limited consumers usage of the technological innovation, these findings suggest a positive judgment of retailers toward their innovation strategy.

4. 2 Innovating after competitors

We note that the four case followers adopted different innovators behaviour. Concerning the introduction of the technology, F1 and F2 introduced the new technology without a trial period, and directly in all the points of sale.

Our clients expected this innovation, thus we had to introduce in all the stores. They pushed us to do it. We didn't need to test it before, because our competitors already tested previously. We were confident of the result.

In opposite, F3 and F4 introduced the technology in their stores all in different moments. A justification might relay in the choice to adapt the technology previously introduced by their competitors (pioneers). In fact, F1 and F2 adopted a technology quite similar to the one of their competitors, while F3 and F4 modified the technology by enriching the functionalities and adding a sort of emphasis on their specific brand.

We learn from our competitors the importance of a virtual and complete catalogue for our clients. We used the same technology, but we decided to adapt for our needs. For instance, we added the possibility to share via Facebook the chosen products.

Similarly to the case of pioneers, the follower cases all introduced the technology permanently.

In opposite, followers adopted an established technology, thus the novelty of the system was limited and consumers already experienced its usage. Although technology is largely used by consumers (both adults and youth), the sales didn't show relevant increase. Correspondingly, the benefits for the store image were still limited. A justification may relay in the fact that experienced consumers did not perceived the innovation as an added value, while its missing might be perceived as a lack.

We introduced this system only because our clients expected it. We wanted to reply to their expectations, otherwise they could prefer our competitors already offering their technology. Moreover, we were afraid that our clients consider as an "old" company, paying no attention to the innovation. The introduction of the system was for reducing the disadvantages rather than for acquiring more clients. In fact, the most of our clients uses our systems (they already knew it).

Despite the similar motivations to innovate, followers showed different innovator profiles while achieving similar outcomes.

4.3 First moving versus imitating

Above, we have presented the case of retailers who recently innovated, as well as the modality for acting this process. Table 3 summarizes our findings.

Cases	Time	Technology	Place	Standing	Consumers usage	Benefits
P1	Trial period	New	Selected stores	Permanent	Limited	Sales increase
P2	Trial period	New	Selected stores	Permanent	Limited	Sales increase
P3	Trial period	New	Selected stores	Permanent	Limited	Sales increase
P4	No trial	New	All stores	Permanent	Limited	Sales increase and better image
F1	No trial	Established	All stores	Permanent	Large	Satisfying consumers expectations
F2	No trial	Established	All stores	Permanent	Large	Satisfying consumers expectations
F3	Trial period	Enhanced existing technology	Selected stores	Permanent	Large	Satisfying consumers expectations
F4	Trial period	Enhanced existing technology	Selected stores	Permanent	Large	Satisfying consumers expectations

Table 3: Summary of main findings.

All our cases are innovators who acted differently for replying to the market, in terms of technology, time and place for innovating) and generated different outcomes.

While all the pioneers (P1, P2, P3 and P4) introduced totally new technologies, few followers (F1 and F2) introduced the some technologies previously introduced by pioneers (we defined these technologies as established), while others (F3 and F4) adapted the established technology to their specific case. Since the technology consisted of the enhancement of an existing technology, they opted for a trial period before the introduction in all the points of sale.

Turning to the consumers usage of the technological innovation, in the case of pioneers, consumers still make a limited usage of the innovation. They need more time for approaching the technology and learning how to exploit for increasing the perceived advantages; whereas in the case of followers, the technology is established, consumers already experienced the systems and learned the best usage, thus they tend to make a more extensive usage if compared with consumers of totally new systems introduced by pioneers. Focusing on the benefits, we should note that the pioneers and followers achieved different advantages from their strategy. Pioneers noticed an increase in sales, while attracting new consumers; whereas followers felt obliged to innovate for maintaining existing consumers (demand pull).

5. Discussion and conclusions

Successfully innovating is a critical process also for retail industry, which needs to maintain and increase the competitive advantages (Pantano and Timmermans, 2014; Demirkan and Spohrer, 2014; Hristov and Reynolds, 2015). While a large deal of research stressed the importance of innovating in retailing for achieving competitive advantages (Pantano, 2014; Kourouthanassis et al., 2007; Seck and Philippe, 2013; Demirkan and Spohrer, 2014; Poncin et al., 2014), there is still a lack of knowledge on the best practices for performing it successfully.

The aim of the paper was to deeply investigate the best timing for successfully innovating, and to figure out some practices able to support this choice. Starting from a qualitative approach involving a multiple-case study analysis in fashion retail industry, we achieved interesting insights for managing the innovation in retail settings.

Firstly, we analysed the current innovation management strategies in retail settings, by emphasizing the extent to which retailers performing in the same sector adopted different innovation strategies with successful outcomes. This result confirms in retailing the results achieved in other fields that stated the ability to innovate as idiosyncratic (Kerin et al., 1992; Ellonen et al., 2009).

Secondly, we declined the innovation process as first mover or imitator approach in retail settings as a particular case of service industry (Pantano, 2014). Our definition starts from the main features of these innovation strategies (Zhou, 2006; Parra-Requena et al., 2012; Covin et al., 1999; Min et al., 2006; Zhou, 2006; Homburg et al., 2009; Mueller et al., 2012; Alpert 2001), and explains these elements in retail settings (see Table 1).

Thirdly, our analysis figures out the benefits and risks of innovating while choosing of being the first innovators of the imitators. It further shows the awarding practices currently acted by some successful retailers. In particular, our data emphasize the extent to which the retailers who imitate the technological innovations (followers) achieve limited benefits if compared with the pioneers. Correspondingly, retailers who play as pioneers seem to achieve more

relevant advantages in terms of sales increase. Therefore, it is possible that those retailers who do not have strong motivation to innovate as first in the market are unable to exploit all the benefits, and thus their innovation strategies do not rely on existing ability to innovate rather than the necessity to satisfy the increasing demand of innovations. Hence, as they imitate practices of pioneers to leverage their ability to innovate, they are pushed to pursue adapted innovation and develop new capabilities for successfully absorbing this external force, in accordance with Niu and colleagues (2013). As a consequence, retailers that have not strong motivation to innovate as first movers run the risk of introduce innovations that they are unable to successfully absorb, due to the dramatic changes in practices while reconfiguring extant resources that they require. For instance, pioneers of our analysis (P1, P2, P3, and P4) recognized the market opportunities and decided to explore through the introduction of a technological innovation, while followers (F1, F2, F3 and F4) acted consequently by replicating an established technology (F1 and F2) or adapting the established technology according their specific needs (F3 and F4). These latter also needed to set a trial period for testing the modified technology before its introduction in all the points of sale. These insights declines the situations in which a retailer is awarded if acts as first movers, and when he/she is awarded as imitator. Summarizing, findings identify to what extend the first movers as innovator act according the technology push and imitators according to the demand pull. Therefore, findings suggest some limits of providing a new shopping experience through technological innovations.

Concerning the contribution to the literature, the present research extends previous studies on the time choice of innovating (Parry and Bass, 1989; Lieberman and Montgomery, 1988; Kerin et al., 1992; Christensen, 1997; Zhou, 2006; Schilling, 2013), by proposing a marketing management perspective, with emphasis on retail sector. Similarly, our findings contribute to the current knowledge on pioneer-follower debate on service industry mainly focusing on telecommunications (Posselt and Berger, 2007; Fernandez and Usero, 2009; Jakopin and Klein, 2012; Sun et al., 2014), with the focus on retailing. Finally, it adds new evidences in the emerging topic of innovation management in retailing (Sorescu et al., 2011; Blazquez et al., 2014; Demirkan and Spohrer, 2014; Hristov and Reynolds, 2014; Pantano, 2014) on the specific time choice for innovating and place (i.e. when preferring only a limited number).

From a managerial point of view, our study underlines some important insights for practitioners, by identifying the key benefits and risks/costs related to the different innovation strategies for retailers and the related practices for successful innovating. In particular, retailers with a strong image that build on their ability to develop innovations should act as pioneers, and reinforcing the capability to integrate the emerging innovations into their management strategies for the business profitability. These retailers are further required to have a constant and updated overview of market and emerging trends to reduce encountered risks (and subsequent costs). In opposite, retailers with a lower propensity to risk act as followers, by developing strong capabilities for identifying the best innovation for their target, and for adapting and improving it into an enhanced version of the new technology, due to the high accumulated knowledge. In addition, both pioneer and follower are forced to identify the best practices for enhancing the innovation absorptive capacity, which would lead them to the successful innovation outcomes.

Despite the insights emerging from our study, it shows some limitations. The first is related to the 8 cases representing the fashion retail industry. Future studies might focus on cases from other retail contexts, for improving the generalizability.

Moreover, future studies might focus on the development of new measurement tools for evaluating and improving the absorptive capacity of the technology accordingly. Other limitations are associated with the disruptive force of each innovation. Similarly, this study does not distinguish in radical or incremental innovation, while future study might assume a different strategy according to the level of novelty of the technology in order to contribute to the generalization of the findings. On this direction, other researchers might further distinguish on the time of imitation, by considering early followers and late entrants.

References

- Alpert, F., Kamis, M., Sakano, T., Onzo, N., and Graham, J. (2001), "Retail buyer beliefs, attitude and behaviour toward pioneer and me-too follower brands. A comparative study of Japan and the USA", *International Marketing Review*, Vol. 18 No. 2, pp. 160-187.
- Blazquez, M. (2014), "Fashion shopping in multichannel retail: the role of technology in enhancing the customer experience", *International Journal of Electronic Commerce*, Vol. 18 No. 4, pp. 97-116.
- Boeck, H., and Fosso Wamba S. (2010), "RFID and buyer-seller relationships in the retail supply chain", *International Journal of Retail & Distribution Management*, Vol. 36 No. 6, pp. 433-460.
- Burgelman, R.A., Wheelwright, S.C. (2008). *Strategic Management of Technology and Innovation*. McGraw-Hill Education.
- Cao, L., (2014), "Business model transformation in moving to a cross-channel retail strategy: a case study", *International Journal of Electronic Commerce*, Vol. 18 No. 4, pp. 69-95.
- Chiu, Y.-T.H., Fang, S.-C., and Tseng, C.-C. (2010), "Early versus potential adopters, exploring the antecedents of use intention in the context of retail service innovations", *International Journal of Retail & Distribution Management*, Vol. 38 No. 6, pp. 443-459.
- Christensen, C.M. (1997), *The innovator's dilemma: the revolutionary book that will change the way you do business*. Collins Business Essentials.
- Covin, J.G., Slevin, D.P., and Heeley, M.B. (1998), "Pioneers and followers: competitive tactics, environment, and firm growth", *Journal of Business Venturing*, Vol. 15, pp. 175-210.
- Demirkan, H., and Spohrer, J., (2014), "Developing a framework to improve virtual shopping in digital malls with intelligent self-service systems", *Journal of Retailing and Consumer Services*, Vol. 21 No. 5, pp. 860-868.
- Dorde, K. (2008), "A question strategy: to be a pioneer or a follower?", *Economic Annals*, Vol. 53 No. 177, pp. 89-102.
- Ellonen, H.-K., Wikstrom, P., and Jantunen, A. (2009), "Linking dynamic-capability portfolios and innovation outcomes", *Technovation*, Vol. 29, pp. 753-762.
- Evans, J.R. (2011), "Retailing in perspective: the past is a prologue to the future", *International Review of Retail, Distribution and Consumer Research*, Vol. 21 No. 1, pp. 1-31.
- Grant, K., Alefantos, T., Meyer, M., and Edgar, D. (2013), "Capturing and measuring technology based service innovation- a case analysis within theory and practice", *International Journal of Information Management*, Vol. 33 No. 5, pp. 899-905.
- Griffin, A. (1997). "PDMA research on new product development practices: updating trends and benchmarking best practices". *Journal of Product Innovation Management*, Vol. 14 No. 6, pp. 429-458.

- Ha, S., and Stoel, L. (2012), "Online apparel retailing: roles of e-shopping quality and experiential e-shopping motives" *Journal of Service Management*, Vol. 23 No. 2, pp. 197-215.
- Hall, P., and Densten, I.L. (2002), "Following Successfully: Followership and Technology Adoption", *Prometheus: Critical Studies in Innovation*, Vol. 20 No. 2, pp. 87-105.
- Harris, L., and Dennis, C. (2011), "Engaging customers on Facebook: challenges for e-retailers", *Journal of Consumer Behaviour*, Vol. 10, pp. 338-346.
- Hauser, J., Tellis, G.J., Griffin, A. (2006), "Research on innovation: a review and agenda for marketing science", *Marketing Science*, Vol. 25 No. 6, pp. 687-717.
- Homburg, C., Bornemann, T., and Totzek, D. (2009), "Preannouncing pioneering versus follower products: what should the message be?", *Journal of the Academy of Marketing Science*, Vol. 37, pp. 310-327.
- Hristov, L., and Reynolds J. (2015), "Perceptions and practices of innovation in retailing, challenges of definition and measurement", *International Journal of Retail & Distribution Management*, Vol. 43 No. 2, pp. 126-147.
- Kim, J., and Park, J. (2005), "A consumer shopping channel extension model: attitude shift toward the online store," *Journal of Fashion Marketing and Management*, Vol. 9 No. 1, pp. 106-121.
- Kerin, R.A., Varadarajan, R.P., and Peterson, R.A. (1992), "First-mover advantage: A synthesis, conceptual framework, and research propositions", *Journal of Marketing*, Vol. 56 No. 4, pp. 33-52.
- Kourouthanassis, P.E., Giaglis, G.M., and Vrechopoulos, A.P. (2007), "Enhancing user experience through pervasive information systems: the case of pervasive retailing", *International Journal of Information Management*, Vol. 27 No. 5, pp. 319-335.
- Im, H., and Ha, Y. (2013), "A model of permission-based marketing: Enablers and inhibitors of mobile coupon adoption", *Journal of Retailing and Consumer Services*, Vol. 20, pp. 495-503.
- Lee, S.-G., Koo, C., and Nam, K. (2010), "Cumulative strategic capability and performance of early movers and followers in the cyber market", *International Journal of Information Management*, Vol. 30 No. 3, pp. 239-255.
- Liang, B., Cherian, J., and Fu, W. (2010), "Can followers overcome pioneers? The role of superior alignable differences in consumer evaluation of brand extensions", *Journal of Product and Brand Management*, Vol. 19 No. 2, pp. 85-93.
- Lieberman, M.B., and Montgomery, D.B. (1988), "First-mover advantages", *Strategic Management Journal*, Vol. 9 No. S1, pp. 41-58.
- Lin, L.H., Lu, I.-Y. (2007), "Process management and technological innovation: an empirical study of the information and electronic industry in Taiwan", *International Journal of Technology Management*, Vol. 37 No. 1-2, pp. 178-192.
- Min, S., Kalwani, M.U., and Robinson, W.T. (2006), "Market pioneer and early follower survival risks: a contingency analysis of really new versus incrementally new product-markets", *Journal of Marketing*, Vol. 70, pp. 15-33
- Moon, K.L., and Ngai, E.W.T. (2008), "The adoption of RFID in fashion retailing: a business value-added framework", *Industrial Management and Data Systems*, Vol. 108 No. 5, pp. 596-612.
- Moore, G.C., Benbasat, I. (1991), "Development of an instrument to measure the perceptions of adopting an information technology innovation", *Information Systems Research*, Vol. 2 No. 3, pp.192-222.

- Mueller, B.A., Titus, Jr. V.K., Covin, J.G., and Slevin, D.P. (2012), "Pioneering orientation and firm growth: knowing when and to what degree pioneering makes sense", *Journal of Management*, Vol. 38 No. 5, pp. 1517-1549.
- Niu, Y., Wang, C.L., and Dong, L.C. (2013), "Firm resources and entry-related advantages: An empirical study in China", *Industrial Marketing Management*, Vol. 42, pp. 595-607.
- Pantano, E. (2014), "Innovation drivers in retail industry", *Journal of Information Management*, Vol. 34, pp. 344-350.
- Papagiannidis, S., Pantano, E., See-to, E., and Bourlakis, M. (2013), "Modelling the determinants of a simulated experience in a virtual retail store and users' product purchasing intentions", *Journal of Marketing Management*, Vol. 29 No. 13/14, pp. 1462-1492.
- Pantano, E., and Timmermans, H. (2014), "What is smart for retailing?", *Procedia Environmental Sciences*, Vol. 22, pp. 101-107.
- Parra-Requena, G., Ruiz-Ortega, M.J., and Garcia-Villaverde, P.M., (2012), "Towards pioneering through capabilities in dense and cohesive social networks", *Journal of Business & Industrial Marketing*, Vol. 27 No. 1, pp. 41-56.
- Parry, M., and Bass, F.M. (1989), "When to lead or follow? It depends", *Marketing Letters*, Vol. 1 No. 3, pp. 187-198.
- Poncin, I., and Momoun, M.S.B. (2014), "The impact of "e-atmospherics" on physical stores", *Journal of Retailing and Consumer Service*, Vol. 21 No. 5, pp. 851-859.
- Posselt, T., and Berger, P. (2007), "Sustainable advantages in service industries: how can early entrants outperform latecomers in service markets", *Advances in Services Innovations*, pp. 187-203.
- Rese, A., Schreiber, S., and Baier, D. (2014), "Technology acceptance modelling of augmented reality at the point of sale: can surveys be replaced by an analysis of online reviews?", *Journal of Retailing and Consumer Services*, Vol. 21 No. 5, pp. 869-876.
- Seck, A.M., and Philippe, J. (2013), "Service encounter in multi-channel distribution context: virtual and face-to-face interactions and consumer satisfaction", *The Service Industries Journal*, Vol. 33 No. 6, pp. 565-579.
- Schilling, M.A. (2013), *Strategic management of technological innovation*, 4th Edition. McGraw-Hill Education.
- Sorescu, A., Frambach, R.T., Singh, J., Rangaswamy, A., and Bridges, C. (2011), "Innovations in retail business models", *Journal of Retailing*, Vol. 87 No. S1, pp. s3-s16.
- Tambo, T. (2014), "Collaboration on technological innovation in Danish fashion chains: a network perspective", *Journal of Retailing and Consumers Services*, Vol. 21 No. 5, pp. 827-835.
- Teece, D.J. (1987), *The competitive challenge: strategies for industrial innovation and renewal*. Ballinger Pub.Co.
- Verganti, R. (2009), *Design driven innovation*. Harvard Business School Press.
- Zhou, K.Z. (2006), "Innovation, imitation, and new product performance: the case of China", *Industrial Marketing Management*, Vol. 35, pp. 394-402.