

## **The store and the Internet of Things: retail operations, marketing and beyond**

The contributions to this double issue are the best papers presented at the third Colloquium on European Research in Retailing held in Toulouse in June 2016 at the initiative of the Professors Xavier Brusset (Department of Projects, Information Systems, and Supply Chains, Skema Business School), Christoph Teller (Department of Marketing and Retail Management Surrey Business School, University of Surrey) and Herbert Kotzab (Institute of Logistics Management, Bremen University). The purpose of the colloquium is to bring together academic researchers on retail issues in Europe to share ideas, findings and insights. The double issue focusses on the store and the Internet of Things with special focus on retail operations, marketing and influences on consumer behaviour.

The impact of the Internet of Things on how retailers operate, how marketers approach consumer behaviour shaping or how logistics operators deliver goods is by now important. It will be even more so in the very near future as new technologies, and even more as new scientific methods are brought to bear. Several articles explain how this will take place and their importance for managerial practice. In the first paper by Alan Collins and Richard George, titled "Mavens' price and non-price on pack extrinsic cue search behaviours: implications for store brands" propose to enrol mavens into helping to shape consumer attitudes. They found that mavens' store brand purchasing behaviours are strongly linked to their price search activities and negatively related to their use of non-price extrinsic cues. This indicates that their dissemination activities are likely to stress lower prices and hence price competition rather than promote other cues used to infer quality. Thus mavens are likely to inhibit retailers' store brand premiumisation attempts. Mavens' investments in time engaged in search activities are strongly linked to social returns rather than private financial savings.

The second paper, titled "Social, local and mobile commerce practices in omni-channel retailing: insights from Germany and Turkey" by Yumurtaci *et al.* extend the knowledge of how social media, local or offline stores, and online stores can be harnessed into providing retailers enhanced omni-channel capabilities. They compare the results of Germany and Turkey and show interesting variations between the two countries. German retailers show slightly more practices especially when it comes to local commerce activities. Social and mobile commerce practices vary in their practical usage.

The third study looks into a largely ignored issue for retailers: their exposure to weather risk. Titled "No more blaming the weather: a retailer's approach to measuring and managing weather variability", the paper authored by Jean-Louis Bertrand and Miia Parnaudeau makes use of the now widely available weather data to evaluate how a retailer is exposed to the vagaries of the weather in day-to-day operations. The paper presents a methodology to identify and quantify which weather variable is the most important and how this variable influences sales of the retailer. With this methodology, any retailer has now the ability to measure how sensitive he/she is to the weather, evaluate potential risk-reducing measures and adopt insurance policies which will provide him/her with added resilience and even the capacity to embark on gaining market share.

The fourth paper, titled "Webrooming behaviour: a conceptual framework" by Sourabh Arora and Sangeeta Sahney, describe how a showroom these days is more likely to be a "webroom" and explain how retailers will be able to take advantage of the data gathered through the web-equivalent experience of a showroom to organise their effort to capture the offline purchases better.



The fifth and sixth papers present studies into consumers' attitude towards various assortment compositions and congruence with the retailer's image. The paper titled "The role of consumers' attitudes in estimating consumer response to assortment composition: evidence from Spain", written by José Luis Ruiz-Real *et al.*, demonstrate how the proportion of large retailers' private label vs national brand labels in a product assortment influences the consumer's purchases and purchasing intentions. The study also shows how the variety of products in an assortment will also influence purchasing behaviour. In particular, assortments which give a too large shelf space to private labels will not maximise the retailer's profit or consumer's utility.

The other paper, titled "A decision support system for retail assortment planning", by Alexander Hübner, models the integrated assortment planning under shelf-space constraints in order to maximise the inventory and product variety within the assortment. This model, applied to a real-life example, shows how it can fine-tuned to optimality. Both papers demonstrate that the assortment choice (width) and inventory (depth) for a retailer is still a work-in-progress with ample room for increased research and applications to managerial practice.

The seventh contribution, "When location and content matter: effects of mobile messages on intention to redeem" by Ines Beeck and Waldemar Toporowski, investigate a consumer's intention to redeem a coupon or promotional offer depending on the location and content of the offer sent to mobile appliances like smartphones. It shows that mobile targeting of a potential buyer with a text message sent to her smartphone has differing effects according to the type of message, the location of the recipient (home, city, shop). In particular, the authors warn retailers about how customers respond negatively to such messages in many circumstances, e.g. through reducing their purchases.

The eighth paper looks into the use of radio-frequency identification devices (RFID) in fashion retailing. "Tracking customer behaviour in fashion retail using RFID" by Andreas Landmark and Børge Sjøbakk looks into an application which is enjoying a huge momentum in apparel retail. The paper looks at customer behaviour in fitting rooms when apparel products are fitted with RFID tags and under different behaviours by the personnel manning the fitting area. The results enable a retail chain to hone the best practice behaviour of sales attendants.

The ninth contribution "Do channel integration efforts pay-off in terms of online and offline customer loyalty?" by Marta Frassetto and Maria-José Miquel directly challenges past knowledge in this area. They find that the construct of channel integration has two dimensions: reciprocity, which refers to the possibility of crossing the channels while shopping, and coordination, which refers to the alignment of offline and online offers. The second finding is that multichannel integration affects positively both offline and online loyalty both directly and through satisfaction, which partially mediates the relationship.

In the tenth paper, "Brand-driven retail format innovation: a conceptual framework", by Günther Botschen and Philipp Wegerer, presents the result of a 20-year longitudinal research to develop the current brand-driven retail format innovation framework that serves as a conceptual guide for the development of any type of retail format. An application to a particular case is reported.

The eleventh paper investigates the inclusion of the sense of touch into the experience of the online consumer experience by way of haptic interfaces which are now arriving on the market. "Touching the void: exploring consumer perspectives on touch-enabling technologies in online retailing" by Helena Van Kerrebroek *et al.* derive their results from focus groups. Tablets would seem to be the most promising support for such haptic devices, and, if correctly used, consumer experience would be enhanced, affecting positively purchasing intentions.

In the last paper in this double issue, Kim Willems *et al.* present findings from an in-store digital signage experience. They reveal the potential of information-enhancing technologies to enhance customer experience. In particular, the position in the store and the content of the message displayed are the variables which have been studied. The most notable result is that signs positioned at the entrance of a store have less impact than those right up next to the order-taking counter.

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