Shopping with a Smartphone: A French-Japanese Perspective

By Gérard Cliquet, Karine Picot-Coupey, Elodie Huré and Marie-Christine Gahinet

This paper deals with smartphone experiences related to consumption activities and, more specifically, to shopping. If several studies, based on adoption models, show that consumers are ready to use their smartphones widely while shopping, including for paying, very few research provides insights into the real usage of smartphones in shopping behaviour. Therefore, this paper investigates in-depth real smartphone experiences in real shopping settings, in a two-country study involving France and Japan. A qualitative methodology with structured and semi-structured interviews was conducted with a sample of Japanese and French consumers. A moderate inductive approach is adopted to analyse the data. With a typology of eight uses identified in both countries, the results show that, in real life, smartphones are primarily used for information, communication, and location purposes. This research also provides evidence on the roles of the smartphone as a shopping companion that assists in pre-purchase activities and as a facilitator tool at the purchase stage of a physical shopping. Overall, the research sheds light on the synchronicity value of the smartphone, specifically its capacity to answer the consumer’s needs at the right time, the right place, and in the right situation.

1. Introduction

Mobile devices, especially smartphones, are said to shape the future of the retailing sector (Shankar et al. 2010) and to delineate a “new service frontier” (Kleijnen/de Ruyter/Wetzels 2007). Given the spatial and temporal attributes of smartphones, consumers should increasingly embrace their usage in order to gain assistance in a variety of situations in daily life (Verkasalo et al. 2010), including the shopping context. Numerous market studies have attempted to depict trends in smartphone penetration and behaviour, highlighting differences in levels of equipment and levels of use. Beyond description and statistics, however, we need to understand the effective uses of the smartphone by consumers that are meaningful for retailers. What are the expectations of consumers towards the use of smartphones? What kinds of experiences do consumers live when using their smartphones? What about their experiences while shopping with a smartphone?

From an academic perspective, very little is known about the real usages of smartphones in a shopping context. However, the issues associated with such usages in terms

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of retailing strategy are widely acknowledged (Zhang et al. 2010): they are considered to change the paradigm of retailing “from one based on consumers entering the retailing environment to retailers entering the consumer’s environment through anytime, anywhere mobile devices” (Shankar et al. 2010, p. 111). They question existing business models regarding the development of omni-channel behaviours. While touch points between retailers and consumers multiply (physical stores, electronic stores, mobile apps, social networks), the latter look for seamless experiences (Aubrey/Judge 2012). Consequently, retailers cannot manage channels in silos anymore (Stuart-Menteth/Wilson/Baker 2006). They have to take into account the interactions between the experiences lived in the numerous touch points, leading to omni-channel strategies that are “an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping” (Rigby 2011, p. 67). That entails the management of an ecosystem composed of different touch points (Aubrey/Judge 2012).

Smartphones are essential in such omni-channel strategies, as they allow consumers to fill the gap between different touch points and to connect to a retailer’s application or website at anytime and anywhere. So far, research has focused on smartphone adoption rather than addressation or website at anytime and anywhere. So far, research on real usages is less numerous (see following section). This article contributes to fill this gap by adopting an experiential approach.

To investigate consumer shopping experiences with a smartphone, this study anchors on the P x O x S paradigm (Punj/Stewart 1983). Indeed, as soon as there is an interaction between a person (P), an object (O), and a situation (S), an experience occurs (Roederer 2012). This paradigm extends the experience framework to ordinary experiences instead of the peak or flow experiences (e.g., Csikszentmihalyi 1990; Ritzer 1999) much more common in the literature (e.g., Pine/Gilmore 1999). This experiential approach underlines the importance of the P x O x S interaction in the process of creating value, in opposition to a product-oriented approach of value. These are the experiences that consumers live in interaction with a smartphone that create value, not the smartphone itself, and value is an outcome of the experience (Hirschman/Holbrook 1986).

Regarding the goal of this research and its theoretical positioning, we will look at the object “smartphone” by considering its specific characteristics that give rise to the novel experiences of persons (consumers). The situation, defined by Belk (1975, p. 158) as “all factors particular to a time and place of observation” will focus first on daily activities, before examining shopping activities. Figure 1 presents the research anchored in the P x O x S paradigm.

2.2. The smartphone experience in daily life

As Shankar et al. (2010) pointed out, the smartphone has a personal nature and has to be considered not only as a technological device but also as a cultural object used to perform several activities. These activities are varied and reflect the multiple usages conducted by consumers when experiencing the smartphone, from which they derive value (Wagner 2011). However, despite the rapid growth of smartphone adoption, there is a lack of academic research about the actual use of smartphones. First, most of the previous studies on mobile phones

2. Evolving shopping experience with smartphone usages

2.1. The consumption experience framework

The consumption experience framework places the consumer at the heart of the consumer behaviour research (Holbrook 1987). This framework focuses on real usages, rather than on perceived utility and expected usages, as real usages are the basis for designing the strategies of companies (Holbrook/Hirschman 1982). Regarding smartphones, research in marketing is rich when it concerns the adoption or the intention to use smartphones for m-shopping (e.g., Cliquet et al. 2013; Yang 2012), m-promotions and m-advertising (e.g., Sultan/Rohm/Gao 2009; Gao et al. 2013), and m-transactions (e.g., Khalifa/Shen 2008; Khalifa/Cheng/Shen 2012; Lin et al. 2011; Kleijnen/de Ruiter/Wetzels 2007). However, research on real usages is less numerous (see following section). This article contributes to fill this gap by adopting an experiential approach.

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were conducted before the adoption of smartphones and thus do not capture the specificities of smartphone experiences, as these mobile devices have specific characteristics and functionalities. A smartphone exhibits four unique characteristics:

1. Enhanced usability: the ability of the smartphone to enable users to enjoy seamless Internet services (Okazaki/Navarro-Bailón/Molina-Castillo 2012);
2. Ubiquity: the possibility of using the smartphone anywhere and anytime (Cox 2004; Wagner 2011);
3. Synchronicity: the ability of the smartphone to synchronize temporally and spatially consumers’ needs (Shankar et al. 2010);
4. All in one: the ability to perform multiple tasks and to use multiple applications in one tool (Barkhuus/Polichar 2011).

These characteristics allow the development of services based on location information (LBS: Location Based Services) (Barnes 2003) and on context information (CAS: Context Aware Services) (Kwon/Choi/Kim 2007).

Moreover, downloadable applications enlarge the range of functionalities on a smartphone and contribute to evolutions in usages (Shankar et al. 2010). Therefore, when studying the various experiences of consumers with their smartphone, one cannot ignore the importance of applications usages. Some researches empirically study the possible usages of mobile applications and propose taxonomies based on users’ sensitivity to location or time (Balasubramanian/Peterson/Jarvenpaa 2002) or on whether they diffuse content or favour a transaction (Mahatanankoon/Wen/Lim 2005). These were still intended usages in a period preceding the arrival of smartphones in the market. Hence, these works should be revisited and actual smartphone usages investigated in order to build an adapted typology of smartphone usage.

Finally, the literature review shows that they are very few research dedicated to a holistic approach on smartphone usage. Wagner (2011) studies how consumers integrate smartphones in their daily lives and shows evidence that location-based services are essential in making the smartphone a truly resourceful device. The holistic experience still needs to be investigated in depth, as understanding the whole range of experiences helps provide a better understanding of the shopping experience with a smartphone in a retailing perspective. Barkhaus/Polichar (2011) investigate how people adapt and adopt the different functions of the smartphone to suit their needs and lifestyle. They give evidence on the pragmatic and seamless ways people use their smartphones.

2.3. The smartphone experience while shopping

Previous research has focused either on the intention to use smartphones in a shopping setting or on very specific steps of the shopping process. In the first stream of research there is no consensus on the factors influencing the intention to adopt, the main factors being time convenience, space convenience, privacy, perceived value, user control, cognitive effort, perceived enjoyment, and technical, financial, and performance perceived risks (e.g., Al-Alaak/Alnawas 2010; Byramjee et al. 2010; Cliquet et al. 2013; Kleijnen/de Ruyter/Wetzels 2007; Okazaki/Mendez 2013). The question arises about the match between the consumers’ expectations and the consumers’ real usages (Mahatanankoon/Vila-Ruiz 2007). In the second stream of research, studies focus on specific mobile marketing services and their acceptance, missing the holistic view of the smartphone experience: for example communication or promotions (e.g., Hanley/Boostrom 2011; Watson/McCarthy/Rowley 2013) and QR codes as a bridge between offline and mobile media (e.g., Cochuy 2012; Okazaki/Navarro-Bailón/Molina-Castillo 2012; Okazaki/Li/Hirose 2012; Watson/McCarthy/Rowley 2013).

Nonetheless, given the characteristics and functionalities of smartphones, we could expect shopping behaviour to be impacted as a whole, as theoretically suggested by Shankar et al. (2010), from the pre-purchase to the post-purchase stages. We could notably expect influences on three sensitive aspects of shopping behaviours, namely, (1) location behaviour, (2) information behaviour, and (3) payment behaviour.

In terms of location behaviour, shopping with a smartphone can be a way of shopping “anytime and anywhere”, in mobility or not, outside or inside a brick-and-mortar store. It calls to the concept of ubiquity shopping (Cox 2004; Watson et al. 2002). While the time-related dimension of the shopping behaviour was impacted with the e-commerce development (Chaffey 2009), we could expect smartphone usage to impact it spatially. Golledge (1993) enhances the importance of the behaviour space perception and describes necessary cognitive efforts to compare locations (e.g., stores) in order to select poten-
tial destinations. Smartphones could alleviate this cognitive effort by helping to locate places with the GPS, and to get information about places through LBS (Barnes 2003) and more recently CAS (Kwon/Choi/Kim 2007), which could enable more personal alternatives than LBS but may pose privacy concerns (Lwin/Wirtz/Williams 2007).

In terms of information behaviour, the smartphone can extend information search opportunities. Instead of being limited to information collected before visiting the store or provided by the store itself, consumers can consult their smartphones while visiting the store. This latter behaviour can lead to showroming behaviours (Rigby 2011). Consumers can also search for information in mobility situations, outside the store, following maps and recommendations while walking in the city or in the store. Such enlarged possibilities of search information can lead to a more efficient purchase preparation.

In terms of payment behaviour, the use of a smartphone is recognized as a very sensitive step in the purchase process, as it transforms a browser into a purchaser (Carte-ron 2013). The smartphone can make this step more fluid, thanks to mobile payments, defined as the act of paying for goods or services with a mobile device (Pernet-Labrano 2010). Past research has focused on the intention to use m-payment (Kim/Mirusmonov/Lee 2010) but does not provide evidence on the way smartphone usage impacts the experience of paying.

In summary, the literature review shows that the experience of smartphones in daily activities, including shopping, still needs to be deeply investigated as, up to our knowledge, there is no empirical evidence on the way the smartphone integrates into the shopping experience. Our empirical research aims to contribute in addressing this gap.

3. Methodology

Our research adopts the consumer-centric approach of the experiential theoretical framework, aimed at understanding the “how and why” of these consumers’ experiences with a smartphone, an objective for which the qualitative methodology is considered suitable (Miles/Huberman/Saldaña 2013) with a moderate inductive approach.

3.1. Field research: a French-Japanese perspective

France and Japan were chosen as the two research fields. Such a two-country study allows deriving findings in markets at two different maturity stages regarding smartphone usage: an established market – Japan – and a recently adopting market – France. Indeed, Japan has one of the world’s highest feature phone penetration rate (sophisticated, connected, and cheap mobile phones) (Oka-zaki/Li/Hirose 2012). Its experience with feature phones is particularly long, given the “Keitai” context. In Japan, “Keitai” refers to portable phones with high-specific functions, allowing access to the Internet since 1999 in Japan, although the 3G technology was launched only in December 2002. Their pervasiveness and the extent of their usage led to the development of a mobile phone culture or “Keitai culture”. Contrastingly, France has had a recent but fast-growing adoption of smartphones. Since 2011, smartphones have become more affordable to the majority of French consumers, and the adoption of smartphones has increased considerably, leading to a surge in smartphone usage. The established situation in Japan can provide insightful evidence to better understand usage in France in order not to derive findings related to a learning process. Moreover, considering France and Japan, payment preferences exhibit differences: while French consumers prefer credit cards (Bou-nie et al. 2008), Japanese consumers extensively use cash (Amoroso/Magrier-Watanabe 2012; Fitzpatrick 2013). Given the contrasted contexts, it is worth analysing how the m-payment system could add to or substitute existing systems. With a two-country study, our research exhibits variety sampling in order to reach a qualitative – not statistical – representativeness (Miles/Huberman/Sal- daña 2013).

3.2. Sample choice

The studied population corresponds to rather young women and men (less than 40 years old) who are the heaviest users of smartphones worldwide (Sultan/Rohm/Gao 2009). People were selected on purposeful sampling, to reach variation on a characteristic that is consid-ered influential in smartphone user behaviour (Barkhuus/Polichar 2011): the level of interest in new technologies (low – intermediate – high). Table 1 provides key information on the eleven participants in Japan and the twelve participants in France.

3.3. Data collection and data analysis method

Data were collected in Japan in February 2013 and in France in April 2013 by three French researchers in total. The data collection technique consisted of interviews, as this data collection method focuses on the participants’ expression of their personal experiences (Denzin/Lincoln 2000). Interviews enable a better understanding of consumer experiences with a smartphone in everyday life and when shopping. The interviews were semi-structured in France and structured in Japan to account for equivalence in research methods (Sinkovics/Penz/Ghauri 2005). Different data collection techniques were necessary to derive comparable results in our two research fields, as Japanese participants are less talkative than French participants. Interviews were organized around the three same themes: the use of smartphones in everyday life, the use of smartphones while shopping, and paying with a smartphone.

Concerning data analysis, consistent with a moderate inductive approach, a conceptualizing content analysis was...
conducted. First, meaning was drawn from our qualitative data by using tables and matrices for an explorative description. A thematic coding frame was then done on the six steps of the shopping process potentially impacted by smartphone usage (Shankar et al. 2010). Lastly, the final categorization was structured confronting the explorative codes and the thematic codes. Moreover, the methodological process also discussed and confronted the evidence in France and in Japan. Although this study does not consist of an intercultural analysis, an intercultural perspective is needed in order to understand specificities and derive results that are not culturally or technologically specific. The data analysis process was performed by three researchers, allowing for investigator triangulation cross-checking the analysis and findings (Denzin/Lincoln 2000).

4. Findings

Our study shows evidence of a typology of eight usages of the smartphone in daily life (4.1). There are also specific findings about the role of the smartphone as a shopping companion for pre-purchase activities (4.2) and as a facilitator of the purchase stage (4.3).

4.1. Eight smartphone usages in the daily life

In France and Japan, participants detail several types of experiences they have with their smartphones, as presented in Tables 2 and 3. All participants describe spontaneously several usages of their smartphone in their daily practices, showing that the smartphone is now inseparable from numerous daily activities and confirming the cultural and personal aspects of this object (Shankar et al. 2010; Barkuus/Polichar 2011). With its characteristics, the smartphone quickly became essential for individuals because of its multi-usage ability well synchronized with a need and a situation.

The content analysis resulted in a typology of eight daily usages both for France and Japan:

1. **Daily life management**: The smartphone is a daily tool that quickly became “essential in daily activities” (Itomi, Japan). Both French and Japanese participants indicate it can be used to manage their bank accounts and to organize private and professional events. Stella (Japan) also uses it for medical purposes, for reminding her to take her medicines at the proper time.

2. **Socialization**: For Japanese interviewees, the use of social network applications is now natural with a frequent use and a larger choice in applications (Line, Facebook, Twitter) than it is for French respondents (Facebook only). In the Japanese culture, in which

### Table 1: Research samples in France and in Japan

<table>
<thead>
<tr>
<th>Surname</th>
<th>Age</th>
<th>Gender</th>
<th>Level of interest in new technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Japanese sample</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Itomi</td>
<td>21</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td>2. Naro</td>
<td>20</td>
<td>Female</td>
<td>Low</td>
</tr>
<tr>
<td>3. Misaki</td>
<td>21</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td>4. Itcho</td>
<td>20</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>5. Ichida</td>
<td>24</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>6. Kyoka</td>
<td>32</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td>7. Saïka</td>
<td>21</td>
<td>Female</td>
<td>Low</td>
</tr>
<tr>
<td>8. Tsuyo</td>
<td>33</td>
<td>Male</td>
<td>Intermediate</td>
</tr>
<tr>
<td>9. Hiroshi</td>
<td>34</td>
<td>Male</td>
<td>Intermediate</td>
</tr>
<tr>
<td>10. Stella</td>
<td>23</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td>11. Natsuhi</td>
<td>21</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td><strong>French sample</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Pierre-Louis</td>
<td>27</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>2. Melissa</td>
<td>27</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td>3. Damien</td>
<td>30</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>4. Delphine</td>
<td>34</td>
<td>Female</td>
<td>Intermediate</td>
</tr>
<tr>
<td>5. Sébastien</td>
<td>37</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>6. Marguerite</td>
<td>19</td>
<td>Female</td>
<td>Low</td>
</tr>
<tr>
<td>7. Simon</td>
<td>24</td>
<td>Male</td>
<td>Intermediate</td>
</tr>
<tr>
<td>8. Anne-Laure</td>
<td>33</td>
<td>Female</td>
<td>Low</td>
</tr>
<tr>
<td>9. Jerôme</td>
<td>37</td>
<td>Male</td>
<td>Intermediate</td>
</tr>
<tr>
<td>10. Franck</td>
<td>18</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>11. Florent</td>
<td>23</td>
<td>Male</td>
<td>Intermediate</td>
</tr>
<tr>
<td>12. Fabrice</td>
<td>36</td>
<td>Male</td>
<td>High</td>
</tr>
<tr>
<td>Name</td>
<td>Daily life management</td>
<td>Shopping companion</td>
<td>Geolocation</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Itomi</td>
<td>Line/Facebook</td>
<td>Line/Facebook</td>
<td>Line/Facebook</td>
</tr>
<tr>
<td>Naro</td>
<td>Kakebo</td>
<td>Map</td>
<td>Line/Facebook</td>
</tr>
<tr>
<td>Misaki</td>
<td>Phone book</td>
<td>Twitter</td>
<td>Email</td>
</tr>
<tr>
<td>Iecho</td>
<td>Safari</td>
<td>Safari</td>
<td>Line/Facebook</td>
</tr>
<tr>
<td>Ichida</td>
<td>Email/Facebook</td>
<td>Email FaceTime</td>
<td>Evernote</td>
</tr>
<tr>
<td>Kyoka</td>
<td>Calendar</td>
<td>Google Maps</td>
<td>Facebook/Instagram</td>
</tr>
<tr>
<td>Saika</td>
<td>Goura</td>
<td>Navigation</td>
<td>Facebook/Emails</td>
</tr>
<tr>
<td>Tuyo</td>
<td>Navigation</td>
<td>Facebook/Emails</td>
<td>Facebook</td>
</tr>
<tr>
<td>Hiroshi</td>
<td>Camera</td>
<td>Maps</td>
<td>Skype/Message</td>
</tr>
<tr>
<td>Stella</td>
<td>Runaruna</td>
<td>Twitter</td>
<td>Line/Emails</td>
</tr>
<tr>
<td>Natshuhi</td>
<td>Google Maps</td>
<td>Facebook Line</td>
<td>Line</td>
</tr>
</tbody>
</table>

Table 2: Smartphone, applications and usages for Japanese participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Daily life management</th>
<th>Shopping companion</th>
<th>Geolocation</th>
<th>Socialization</th>
<th>Communication</th>
<th>Professional productivity</th>
<th>Information</th>
<th>Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pierre-Louis</td>
<td>Bank Runkeeper</td>
<td>Photo LeBoncoin Web</td>
<td>Google Maps GPS</td>
<td>Facebook</td>
<td>Emails Phone</td>
<td>Google Translate</td>
<td>Web</td>
<td>Shazam</td>
</tr>
<tr>
<td>Melissa</td>
<td>Bank</td>
<td>LeBoncoin Ventesprivéé s Shopping List</td>
<td>Wikango Facebook Phone</td>
<td>News Web</td>
<td>Games Photo TV Program</td>
<td>Games Music Marmiton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damien</td>
<td>Cdiscount Vente Privées Castorama QR-Codes</td>
<td>Facebook</td>
<td>Professional App</td>
<td>Weather News Web</td>
<td>Games Music Marmiton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delphine</td>
<td>Web LeBoncoin</td>
<td>Facebook</td>
<td>Emails</td>
<td>News</td>
<td>Photo Games</td>
<td>Games</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sébastien</td>
<td>Bank Runkeeper</td>
<td>Cdiscount Paypal</td>
<td>Phone Professional App</td>
<td>Web Weather News</td>
<td>Games</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marguerite</td>
<td>Timetables Phone Book Calendar</td>
<td>Phone</td>
<td>Web Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simon</td>
<td>Google Maps</td>
<td>Emails Phone</td>
<td>Professional App</td>
<td>Web</td>
<td>Shazam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anne-Laure</td>
<td>Bank Calendar</td>
<td>Phone/SMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jérôme</td>
<td>Calculator Timer</td>
<td>GPS</td>
<td>Phone/SMS Emails</td>
<td>Web</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Franck</td>
<td>Bank Photo</td>
<td>Facebook</td>
<td>Web Games</td>
<td></td>
<td>Games</td>
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<td>Bank Calendar</td>
<td>Passbook GPS</td>
<td>Emails Phone Keynote</td>
<td>News Web</td>
<td>Podcast Music</td>
<td></td>
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<td></td>
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</tbody>
</table>

Table 3: Smartphone, applications and usages for French participants
personal expression is not traditionally valued, smartphones could be a means to overcome this.

(3) **Communication:** While smartphones remain above all phones, they also allow users to diversify communication means, that is to say texting, emailing, and social networking used in a communication perspective. For instance, Itcho (Japan) uses Twitter to “instantly hit a group of friends” and then arrange a meeting with them. The smartphone experience allows participants to be more reachable with the various communication methods being on it (Barkuus/Polichar 2011).

(4) **Professional usage:** Managing emails with a smartphone is very efficient, according to Misaki (Japan). In France, respondents specifically mentioned dedicated professional applications: “for helping out also for my classes, when my computer crashes, I can show my slides with my phone” (Fabrice, France, teacher), for accessing video monitoring (Damien, France, security agent), or for receiving alerts (Sébastien, France, fireman). The smartphone is a real personal digital assistant.

(5) **Information:** Informative apps (mostly news and weather forecasts) are used daily in France and in Japan. However, informational usage goes beyond news apps. Application content can provide individuals different information helping them to make decisions or to fulfil their curiosity or their need for learning. For instance, Saika (Japan) and Marguerite (France) use apps to check information about public transportation to better manage their route. As Misaki suggests, Twitter, in addition to its social network usage, is a way to get selected information, with news feed. Tsuyo (Japan) also uses Facebook for gathering professional information. These findings confirm that information on a smartphone is a highly important function (Barkuus/Polichar 2011).

(6) **Entertainment:** Applications dedicated to leisure, especially music or photography, are popular among our French and Japanese respondents. Stella (Japan) finds Instagram fun and nice, as she can “play with photos”. The camera is also an essential tool for socializing via photo sharing (Misaki and Kyoka, Japan). In the French context, an application can also be a support for entertaining activities: “yes for doing sport, this morning again I used it, things that track you and give you the number of kilometres, the speed... It’s Runkeeper” (Sébastien, France). For Florent (France), entertainment constitutes the main use of the smartphone: “I just need some leisure time honestly. To me, my applications are just for leisure, entertainment, anything else”. This finding contradicts the observation of Barkuus/Polichar (2011) in an American context, of the smartphone being mainly used for utilitarian purposes.

(7) **Geolocation:** In Japan the use of geolocation-based applications is systematic, either to optimize journeys, to find one’s way, or to not get lost. Geolocation appears as a more controversial usage in France. Some consumers recognize its utility: “Maps, it’s when I am looking for a place in Paris for instance or in Rennes, it is comfortable when one is walking” (Pierre-Louis, France). Others pinpoint privacy concerns about geolocation: “Yes, geolocation applications, it’s really ‘Big Brother is watching you’, so.” (Marguerite, France).

(8) **Shopping activities:** These usages are detailed in sections 4.2 and 4.3.

In summary, the smartphone is becoming very important in daily lives, because, according to our respondents, its use provides them highly valuable services, thanks to the characteristics and functionalities that are almost unlimited with applications. Described as convenient, practical, and efficient, the smartphone is source of utilitarian value. It is also fun, which makes it a source of hedonic value. As it is also a good way to connect with friends and family, it is source of social value. Finally, it offers conditional value (Gummerus/Pihlström 2011) as usages are situational. For instance, entertainment usages are adjusted to specific situations: “I have applications for keeping busy the kids in waiting rooms or in stores, it avoids crises” (Delphine, France).

4.2. **The smartphone as a digital shopping companion**

According to our participants’ experiences, the smartphone is a shopping companion, the use of which in terms of advice and facilitating services is different when preparing a purchase outside or inside the store.

4.2.1. **Experiencing the smartphone for pre-purchase activities outside the store**

Findings show differences between France and Japan in terms of smartphone use for pre-purchase activities in mobility. Few French participants experience smartphone usage to search, query, and compare in mobility contexts. They are still used to a sedentary practice of the Internet, and pre-purchase activities outside the store mainly consist in searching for information on the web with the computer. Technological barriers seem to remain in France, especially in terms of speed of connections, as explained by Fabrice: “Then to prepare purchases, not with the smartphone, it is rather the PC simply for a question of speed because the 3G, it is great but when with the PC and the high speed it is really better.” Japanese participants got into the habit of web usage in mobility. Four usages of the smartphone for pre-purchase activities in mobility emerge from the respondents’ discourse:

- **Locating a store:** While not mentioned by our French interviewees, this is a common motive for smartphone use by Japanese respondents. Indeed, geolocation for shopping purposes is very useful in the large Japanese...
cities where time and spatial conveniences seem important. Nevertheless, Stella (Japan), although totally addicted to her smartphone, still “prefer[s] to ask people rather than just looking [at her] phone”.

- **Gathering information about products and stores**: “not in store, but before to find it, to have information” (Itcho, Japan), “much more general information, activities, timetable for cinema” (Tsuyo, Japan).

- **Looking at customer reviews**: Both Saïka (Japan) and Fabrice (France) use specific apps to look at recommendations before choosing a restaurant. Unfamiliarity with a product, a store, or a commercial area leads to reliance on recommendations, as illustrated by Hiroshi (Japan) and Jérôme (France): “It depends on the product also but generally on the product and store reviews if I am not used to do some shopping in this specific store”.

- **Comparing prices and services**: Itomi, Stella, and Hiroshi (Japan) use their smartphones to compare prices when preparing purchases, typical of smart shoppers.

Respondents experience their smartphones for pre-purchase activities in ways that impact their location and information behaviours.

### 4.2.2. Experiencing the smartphone for pre-purchase activities in the store

Both our French and Japanese participants experience four usages of their smartphones to perform pre-purchase activities inside stores, but these usages vary in terms of intensity and purposes:

- **Price comparison**: Among the French smartphone users, Fabrice uses price comparison websites rather than dedicated applications: “In store, so it happened that I used comparison websites, to look at prices, simply to browse comparison websites on the Internet, to see what the price of the product was”. In Japan, Ichida uses his smartphone to compare prices while shopping in store; in this country, however, this behaviour looks impolite, according to Tsuyo and Hiroshi.

- **Information search**: With the smartphone, the search of information on the web is no longer limited to the pre-purchase stage and can be continued inside the store. Nonetheless, applications gathering additional information with QR-codes are not very useful, according to two French respondents: “I don’t find it outstanding. Like here you are going to scan the bottle, no-no. I took it but frankly, I don’t really need it” (Damien, France), while Japanese respondents were sensitive to this type of additional information.

- **Support for requests to a vendor**: The smartphone provides information to discuss and argue with vendors. Customers are much more informed than before: “it happens that I prepare the product reference or that I show the model to the vendor, yes it often happens” (Franck, France).

- **Taking snapshots**: According to our respondents, the use of the smartphone inside a store is mostly related to photographing products. Such usage has various motives, such as asking close relations about their approval of a product (Naro and Hiroshi, Japan) and postponing a purchase decision by keeping a photo of a product for later (Pierre-Louis, Melissa, France). Itomi (Japan) underlines the importance of sharing photos of products with friends and family before purchase in order to make the best purchase decision, thus avoiding expressing any kind of dissatisfaction. Indeed, Japanese consumers carefully look, touch, and taste products because before buying, as expressing dissatisfaction, is difficult in the Japanese culture. In France, taking pictures is related to smart purchasing. Sébastien practices showrooming, thanks to his smartphone: “I take a picture. It is quicker and then, you know there is a 90 % chance that it will be cheaper on the Internet, so it’s really, you look at the model so you can have it for real and even for having some information, it’s not bad, you have the vendor and then you don’t buy at his place”.

The smartphone interacts with the shopping experience as it enlarges such experience. Searching, querying, and comparing are no more limited to before a visit to the store.

### 4.3. The smartphone as a facilitator of purchase activities in store

Our French and Japanese respondents use their smartphone to facilitate and make their purchase more fluid, regarding three points:

- **Easier to benefit from promotional offers**: m-vouchers and m-coupons are collected on the smartphone but not frequently used by our French and Japanese respondents. Saïka (Japan) enjoys collecting coupons and defines herself as a “savvy shopper” but she only wants to receive targeted promotional offers on her phone. According to our respondents, customers want to experience locally relevant information only.

- **Facilitating the payment process**: Paying with the smartphone is uncommon for our French respondents and to a lesser extent for the Japanese participants. Kyoka, Tsuyo, Naishuhi, Hiroshi, and Saïka (Japan) use their smartphones to pay with a message system. Tsuyo (Japan) pays with his smartphone in a few situations, where time convenience is important and financial risk is low (small amounts): “paying with my mobile phone has almost become routine when buying tickets or picking up groceries” (Tsuyo, Japan). [2] In France, where paying with the smartphone is at its early age, respondents’ discourses are more about adoption rather than usages: “maybe for buying a tube of toothpaste, I think it looks easy when we are in front of a vending machine, you just need to move around your phone and the ticket is out” (Simon, France). Fabrice (France) also considers it a practical alternative for...
having a wallet that he can sometimes forget, “as I don’t forget my smartphone, it is a possible mode of payment” (Fabrice, France). Reluctance is underlined by both French and Japanese interviewees, among which the risk of losing spending control expressed by Ichida (Japan) and Marguerite, Florent, and Franck (France) who associate this control loss with the money dematerialization: “already with the credit card, I was conned so if additionally, I pay with a smartphone, then I will be lost in my spending” (Marguerite, France). Moreover, the iTunes app is used. Consumers buy directly on their smartphones with it, after having registered their credit card on the platform, as with Ichida (Japan), Sébastien (France), and Pierre-Louis (France). Customers experience their smartphone as a way to pay that is convenient to the situation.

- Facilitating the expression of recommendations on a purchase: The smartphone is an efficient means to write and share recommendations. Saïka (Japan) explains that “after shopping I give my opinion on products, on stores, to help people in their future shopping decisions.” This usage is not popular among our respondents. Some of them explicitly mention that they prefer sharing it in person with their friends (Delphine and Marguerite, France).

5. Discussion and implications

Our research aimed to investigate in-depth the experiences with smartphones in daily and shopping activities. Twelve smartphone users in France and eleven in Japan were asked about this issue. We ensured credibility, transferability, reliability, and confirmability of our qualitative evidence, thanks to inter-judge coding, external judge decision, and multiple markets analysis. Our research contributes to a better understanding of consumers’ experiences with the smartphone, showing that the shopping experience is mainly impacted by smartphone usages at the pre-purchase stage and, to a lesser extent, at the purchase stage.

Concerning the experiences of the smartphone in daily activities, the research showed evidence of eight main types of usages (daily life management, socialization, communication, professional usages, information, entertainment, geolocation, and shopping activities), with these usages mixing and intermingling according to the situation. Our findings empirically confirm that the smartphone is a personal and cultural object (Shankar et al. 2010), allowing users to perform lots of incremental usages thanks to various apps (e.g., medicine, sport, shopping, professional life). This confirms previous results about the pragmatic ways people experience their smartphones as very rich tools (Barkhuss/Polichar 2011) and also extends the use of smartphones to not only utilitarian but also hedonic values. Our typology of eight interweaving usages reveals the multiple sources of value that a consumer can derive from experiencing a smartphone. Consequently, the global value of a smartphone is mostly related to its synchronicity characteristic, namely, its capacity to answer a consumer’s needs at the right time, the right place, and in the right situation (Shankar et al. 2010). It extends Wagner’s (2011) results about LBS by taking into account CAS as well as synchronicity.

Concerning shopping activities, the smartphone integrates into the shopping experience in two main ways. First, it is a digital shopping companion for pre-purchase activities experienced in the following ways: (1) to locate stores or products more easily, thus assisting consumers in their spatial behaviour and leading them to a pragmatic use of geolocation; (2) to search and query about products and stores; (3) to consult online recommendations sources, thus indicating that the information behaviour extends in time and space thanks to the smartphone and integrates new influential sources of information in the form of online consumers’ recommendations; and (iv) to compare prices and services, thus indicating that price comparison runs through the pre-purchase stage. Second, our findings indicate that the smartphone is experienced as a facilitator device for purchase actions in terms of use of promotional offer, payment, and writing of online recommendations. There is a call for limited yet precise profiling regarding targeted mobile promotions, a paradox already discussed by Okazaki/Li/Hirose (2012). Future research needs to go further in this direction by exploring the relationship between privacy, permission marketing, and control (see Watson/McCarthy/Rowley 2013).

Our two-country study also shows evidence of differences in terms of the intensity and purposes of smartphone usage while shopping in our two samples. The Japanese favour smartphone use at the pre-purchase stage outside the store, while the French seem to favour it in store. Usages in mobility, referring to the ubiquity characteristic of the smartphone, appear as more developed in Japan than in France: this difference may be explained by the difference in size between cities in Japan and France and by technological barriers that still exist in France and seem to explain a less spread use of smartphones while consumers are outside the store and in mobility situations. Geolocation is apparently more useful and less controversial in Japan than it is in France, and more widely in Europe, where being followed everywhere is today subject to great debates. Sultan/Rohm/Gao (2009) suggested that such differences could be explained by the place accorded to personal freedoms in different countries. These usages profoundly impact the consumers’ spatial behaviours and must be further investigated. Japanese and French consumers also differ in their use of the photography function of their smartphone: the former send pictures to their friends or relatives for approval, whereas the latter use pictures to remind them of the product for a future purchase. The Japanese behaviour corresponds well to their cultural trait as described by Hofstede/Hofstede/Minkov (2010) as a ten-
dency to be controlled by their peer group. The French are willing to be smart shoppers, but Japanese consumers tend to be so either (Salsberg 2010), thus giving support to the accuracy of the showroomeffect. Regarding paying with the smartphone, France and Japan are at different stages in a learning process. Japanese consumers are used to paying for small amounts while on transit with their feature phones.

When confronting these real usages to adoption factors previously studied (Gao et al. 2013; Khalifa/Shen 2008; Khalifa/Cheng/Shen 2012; Kleijnen/De Ruyter/Wetzels 2007; Lin et al. 2011; Sultan/Rohn/Gao 2009; Yang 2012), they correspond only as far as time convenience, space convenience, enjoyment, and privacy are concerned, thus indicating a real gap between real and expected usages.

In terms of managerial contribution, this research adds insights into omnichannel shopping behaviour by providing evidence on how consumers shop with a smartphone in a physical retail setting. By showing that the smartphone can be a shopping companion outside and/or inside the store, this research goes beyond the view of the mobile as an additional channel and considers it as a new touch point with the consumer participating in a retail ecosystem (Aubrey/Judge 2012). This study helps retail managers to know more about the levers of value creation. Customers expect locally relevant information about stores, products, and promotion. In terms of application, retailers should emphasize an economic dimension of their application, namely, the perception of an economic benefit (Mathwick/Mulotra/Rigdon 2001), in order to respond to smart shopper behaviours and/or a re-insurance value to diminish the perceived risks associated with the paying with the smartphone. As the consumer can use its smartphone during the entire shopping process, the retailer should be able to offer an application with the best synchronicity value as possible. In other words, the retailer’s application should let consumers benefit from any dimension(s) of value being the more relevant to the time, place, and situation of the usage.

Important questions can be raised from this research, when participating in the study of the change of paradigm in retailing:

- Can retailers develop a unique application able to deliver a synchronicity value in any context, or should retailers develop several applications?
- How can retailers manage showroomeffect that insinuates itself into shopping experiences thanks to smartphone usages?
- How can the paradox between being followed through the GPS and having the right profile to get appropriate promotions be solved by retailers?

These questions are avenues for future research on smartphone usage while shopping.

Notes

[2] In Japan, consumers often do their groceries in small amounts and while on transit.

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