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Disruptions versus More Disruptions:

How the Amazon Dash Button is Altering Consumer Buying Patterns

1. Introduction

Today's consumer is leading a highly digitized life whereby technology plays a prominent part of his/her day-to-day activities and interactions (Jackson and Ahuja 2016). As a matter of fact, the contemporary consumer is greatly demanding, expecting continuous innovations and rapid gratification in the most cost-effective means possible (Hota 2012; Pandey et al. 2003). Moreover, the expansive growth of new technologies and the evolution of online communities have created a significant change in the consumer journey (Moreau et al. 2001). This is due to the fact that technology has reshaped the way an individual interacts with a certain brand or retailer and created innovative, non-traditional venues for communication with the consumer that transcends both time and location constraints (Dessart et al. 2015). These new technological platforms may also radically change customer opinions regarding a given brand, which in turn can significantly alter the customer decision-making process (Chen and Ku 2013; Shih and Schau 2011).

The consumer journey has been further altered by the newfound lack of boundaries between both the online and offline worlds (Badrinarayanan et al. 2012). This has created a multitude of new touch points at which an individual connects with a brand transcending the traditional boundaries of a physical store (Cullinane, 2009; Hagberg et al. 2016). The integration of these touch points has led to the birth of omni-channel marketing, which is the harmonious overlap of the physical, mobile and online worlds that allows a consumer to interact with the product and/or retailer at various times and locations (Kotarba 2016; Verhoef et al. 2015). This has led to the

growth of empowered customers who are no longer passive recipients of corporate communications and services, but are instead active players in the overall value-creation process (Hagberg et al. 2016; Roncha and Radclyffe-Thomas 2016).

Consumers today are no longer limited to the traditional journey across the marketing funnel stages of awareness, consideration, evaluation, and action when completing a purchase decision (Hudson and Hudson 2013); instead, the increase in touch points has generated a disruption in the cycle leading to the creation of a new, fluid journey that is not anymore set in a certain chronological order (Wolny and Charoensuksai 2014). The creation of this omni-channel journey reshapes the individual shopping experience and limits consumer choices (Kotarba 2016). Since the customer is likely to focus his/her purchase decision on specific brands he/she interacts with through online communities and social platforms, he/she tends to ignore the other brands available within the physical retail space (Cook 2014). This in turn diminishes the bearing of the first moment of truth (FMOT), which is traditionally defined as the first seven seconds in which a consumer sees a brand on a store shelf and forms a certain impression regarding it (Nelson and Ellison 2005). Moreover, technological disruptions such as the Amazon Dash button, concierge-like services such as Amazon's Alexa, and Messenger's Bots are removing key stages of the consumer journey. This causes the consumer to forgo selection phase, forcing his/her loyalty to a given retailer or brand. Furthermore, these disruptions have increased consumer expectations of instant gratification, thus acting as enablers of consumer purchase behavior and impulsiveness (Singh 2017).

Accordingly, retailers today are utilizing new technologies in order to offer an enhanced shopping experience that provides consumers with instant satisfaction while minimizing the impact of competing retailers (Singh 2017). As a matter of fact, the world's largest online

retailer, Amazon, significantly encourages the concept of instant gratification since over a quarter of their sales are made upon impulse (Dawson and Kim 2009). Subsequently, Amazon has launched Dash buttons, the latest technology in online retailing that allows customers to remotely order a given product by the mere press of a button (Hockett 2016). These pocket-sized devices generate a new shopping environment acting as both a marketing tool and a product delivery mechanism while further enabling convenient and impulsive shopping opportunities (Terlep and Bensinger 2016).

The researchers' review of the extant literature indicates the presence of a large knowledge gap in studies assessing the implications of retailer usage of omni-channel technological devices on customer purchase behavior (Demko-Rihter and ter Halle 2015; Melero et al. 2016). Accordingly, technological disruptions to the consumer journey are a largely novel topic with very few studies, if any, analyzing the consumer journey and subsequent shopping behavior in such cases (Wolny and Charoensuksai 2014). Such technological disruptions have not yet been examined nor discussed in the marketing literature despite their expected substantial impact on all, consumers, brands and retailers. Indeed, since the launch of the Amazon Dash buttons in 2015, fears have emerged with regards to this innovative yet disruptive device on consumer buying patterns, and accordingly their effects on brands. Therefore, the case of the Amazon Dash buttons will be utilized to develop a further understanding of the changes in consumer decision making and consumer impulsive purchase behavior in the presence of this key tech-disruption.

The subsequent section will offer an in-depth review of extant literature on: *(1) the effects of tech disruptions on retailers and shoppers, (2) the effects of consumers' affective feelings towards retailers on shopping impulsiveness, and (3) the effects of consumer self-control on shopping impulsiveness*, for which a series of related hypotheses will be developed. This will be

followed by an empirical examination of the presented hypotheses through a web-based survey distributed to a sample of US Amazon Dash button users; the results of the structural equation modeling analysis will be subsequently presented. The manuscript concludes with a discussion of both the theoretical and managerial implications of the results as well as proposed avenues for future research.

2. Conceptual Framework

2.1 The effects of tech disruptions on retailers and shoppers

Impulsive purchases are known to be very profitable for manufacturers and retailers alike (Ayadi et al. 2013). Online retailers have been capitalizing on consumer impulsiveness through the development of new technologies that can entice and lock-in consumers and enhance their purchase intentions (Singh 2017). Amazon.com was launched in 1995 as an online bookstore after which it became the world's largest online retailer with a wide array of product categories (Amazon 2017a; Li 2015). Amazon is known for its constant technological advances, of which the latest is the Dash button. The latter is a wireless, USB-sized device that contains an adhesive allowing it to be attached to any household surface (Hockett 2015). Each button is associated with a certain household brand, such as detergent or toothpaste; once the consumer presses the button a message is sent to his/her Amazon account through the wireless connection to order replenishments of the given product that are subsequently delivered to an individual's address (Gerpott and May 2016; Selko 2015). These buttons are only available to members of Amazon Prime, a fee-based subscription to Amazon that offers users various benefits such as free shipping, unlimited free streaming and exclusive access to ad-free music streaming (Amazon 2017b; Hamilton and Srivastava 2009). This device simplifies the purchasing process as it

diminishes the number of steps required to complete a purchase, thus enhancing convenience while maintaining the overall perceived value of the final product received (Gerpott and May 2016). Furthermore, the introduction of the Dash button would make certain stages in the consumer journey rather obsolete, namely the ‘awareness, consideration and evaluation’ stages, as the consumer would directly and impulsively act upon the repurchase action through the Dash button of the previously selected brand/product.

Consumer impulsiveness is an individual's sudden desire or urge to purchase an item in an immediate, spontaneous manner; this is generally bought on by physical closeness to the product or the promise of prompt satisfaction and gratification (Amos et al. 2014; Arens and Rust 2012; Parboteeah et al. 2009). Impulsive buying typically entails an on-the-spot purchase decision-making in response to a stimulus that generally requires a cognitive response (Badgaiyan and Verma 2015). Research indicates that an individual is more likely to complete an impulsive purchase if he/she perceives that the value of the purchase outweighs its perceived costs (Bayley and Nancarrow 1998; Yu and Bastin 2010).

Perceived service value is a consumer's expectation that a given product's usage allows him/her to achieve benefits that are believed to be of value to the user (Boksberger and Melsen 2011). As a matter of fact, perceived service value is a direct result of a consumer's cognitive evaluation of a brand/retailer's expected benefits versus expected costs, making it a highly subjective and personal concept unique to each individual (Ryu et al. 2012). Moreover, perceived service value is a consequence of the consumption experience itself, and it is considered as one of the core elements in determining a consumer's likelihood to maintain a long-term relationship with a given retailer (Coutelle-Brillet et al. 2014; Fang et al. 2016). When a consumer believes

that a purchase is of value and provides him/her with a good deal or bargain, then he/she is more likely to make an unplanned, impulsive purchase (Ozen and Engizek 2014).

This impulsive behavior is increasingly evident in the online environment since websites and online platforms are designed to decrease consumer inhibitions and increase purchase intentions (Baumeister 2002). Nonetheless, online consumers have been found to be more impulsive only in instances where they perceive that the product bought is of high value to them (Zhang et al. 2007). Online retailers, such as Amazon, aim to simplify the purchasing experience and allow for a convenient, easy-to-access purchasing environment. This subsequently enhances the perceived service value of the shopping experience and consequently increases consumer impulsiveness. In fact, the Amazon Dash button's primary objective is to allow for a more convenient shopping experience. Accordingly, the researchers hypothesize:

H₁: The higher the shopper's perceived service value of the Amazon Dash button, the higher his/her purchase impulsiveness.

Perceived service value has been found to significantly impact an individual's affective commitment towards, and love of, a certain retailer (Zhou et al. 2015). This is due to the fact that perceived service value impacts consumer behavior and affects his/her social bonding; the latter accordingly enhances the overall exchange between the consumer and the retailer generating feelings of love (Barry et al. 2008; Fullerton 2011). The consumer in this case perceives that the value of the service he/she is receiving from the retailer is congruent to his/her personal needs. This subsequently increases the value associated with the retailer, establishing an affective bond of love and commitment (Sabbir and Nazrul 2014).

Perceived service value is considered by consumers to be a tangible, concrete sign that a given retailer can continuously satisfy their needs, which consequently creates an emotional and psychological attachment to the retailer in question (Aurier and de Lanauze 2011; Johnson et al. 2006). Therefore, consumer love is based on a retailer's efforts not only to satisfy the consumers' needs, but to also provide them with additional values and benefits that induce affective responses (Hye-Young et al. 2008; Thomson et al. 2005). This is especially important in the case of online retailers since affective emotions, such as love, have been found to be primary indicators of consumer retention in the long-term (Verma et al. 2016; Zhou et al. 2012). The previous discussion suggests the following hypothesis:

H₂: The higher the shopper's perceived service value of the Amazon Dash button, the higher his/her retailer love.

2.2 The effects of consumers' affective feelings towards retailers on shopping impulsiveness

Consumer impulsiveness has also been found to be a direct result of retailer love (Mishra et al. 2014). Retailer love is an individual's attachment to the given retailer encompassing passion, intimacy and based upon a series of positive emotions and opinions (Albert et al. 2008; Loureiro et al. 2012). It generates an emotional attachment to the retailer and leads to the creation of a long-term, positive relationship with the corporation in question (Thakur and Kaur 2015). The afore-mentioned emotions of attachment and pleasure tend to arouse a positive, affective response in consumers that in turn has a significant impact on impulsive purchasing tendencies (Mishra et al. 2014; Parboteeah et al. 2009).

Indeed, if a consumer loves a certain retailer then the related shopping experience will cause customers to feel confident and energized, which in itself is a main motivator for impulsive

behavior (Hausman 2000). In addition, emotional shoppers who depend on their affective feelings when making a purchase decision tend to exhibit greater loyalty and impulsiveness with regards to the brands and retailers they love (Mallalieu and Palan 2006). This has also been proven accurate in online contexts whereby consumers who are in a good mood and feel an emotional connection to the given retailer display a stronger likelihood to partake in impulsive purchases (Adelaar et al. 2003; Parboteeah et al. 2009). In fact, consumers are more likely to purchase and utilize Dash buttons if they feel an affective feeling to Amazon itself. Consequently, the researchers hypothesize:

H₃: The higher the shopper's retailer love, the higher his/her shopping impulsiveness.

2.3 The effects of consumer self-control on shopping impulsiveness

An important factor in determining a consumer's likelihood to buy products through the Amazon Dash button is consumer spending self-control (CSSC). Consumer spending self-control is an individual's ability to monitor and regulate one's spending-related thoughts, emotions, and decisions in accordance with self-imposed standards (Haws and Bearden 2012). Accordingly, a decrease in spending self-control leads to an increase in a consumer's likelihood to purchase products and services impulsively (Faber 2004; George and Yaoyuneyong 2010; Sharma et al. 2014). This is due to the fact that consumers with high spending self-control display a rational and deliberate decision-making process; on the other hand, consumers with low spending self-control tend to show minimal deliberation acting spontaneously in search for immediate satisfaction (Roberts and Manolis 2012; Youn and Faber 2000).

Consumers tend to exhibit lower spending self-control levels on online portals and retailer websites since they offer anonymity that generally allows individuals to feel less inhibited

making them more prone to impulsive purchases; in fact, a diminished state of self-control decreases an individual's ability to consciously regulate and monitor him/herself, which in turn increases consumer impulsiveness (Sun and Wu 2011). This is due to the fact that once individuals forgo self-control, they tend to react quickly without considering the long-term results of their purchases (Karande and Merchant 2012; Ramanathan and Menon 2006). For example, the Amazon Dash button is consistently available to consumers diminishing their level of overall self-control and increasing their likelihood to complete an impulsive purchase. Subsequently, the researchers hypothesize:

H4: The higher the shopper's perceived consumer spending self-control, the lower his/her purchase impulsiveness.

Based on the above discussion, this study proposes a conceptual framework (see figure 1) that identifies the main triggers for consumer impulsive purchases relative to three specific elements, namely: (1) the perceived service value of amazon Dash Button, (2) retailer love and affective commitment, as well as (3) consumer spending self-control.

Insert about here:

Figure 1. The Conceptual Model

3. Research Methodology

The study focuses on U.S. users of the Amazon Dash Button, empirically testing the discussed hypotheses in the theoretical model presented above. An Internet survey, written in English, was conducted through Qualtrics. Face validity was conducted with seven respondents prior to the distribution of the final survey instrument. The seven respondents were asked about the length of

the questionnaire, clarity of the questions, and overall structure. Discriminant validity was also conducted through exploratory and confirmatory factor analyses. The incidence rate came at 15%, whereby 630 surveys were completed in total. The data was analyzed using SPSS 24 and LISREL 8.8. The scales were all adopted from existing scales from the literature.

3.1 Measures

In order to accurately investigate the usage of the Amazon Dash buttons and its impact on a consumer's shopper attributes, brand experience, retailer relationship and post-purchase evaluation, an empirical questionnaire was devised. The survey used includes multi-item scales to measure the interrelationships between the afore-mentioned variables. The first part of the questionnaire focuses on the usage of the Amazon Dash Button (*e.g. frequency of usage, number of Dash buttons owned, average total clicks per month, reasons behind the usage of the button, and the consumer's ordering methods*). This section also measures the consumer overall satisfaction with the Dash Button and Amazon's services as a whole. Consumers are then asked to indicate their tendency and likelihood to add new Amazon Dash buttons in the future.

The second part of the questionnaire utilizes a 3-item scale on perceived service value based upon Shamdasani, Mukherjee and Malhotra's work (2008), which was adapted from original scales developed by Brady et. al (2005), Sweeney, Soutar and Johnson (1999) and Sirohi, McLaughlin and Wittink (1998). Respondents are asked to indicate their perceived service value levels per item on a 7-point Likert scale.

The subsequent part assesses consumer spending self-control through utilizing an 8-item measure based upon the scale developed and validated by Haws, Bearden and Nenkov (2012), whereby respondents are required to indicate their level of agreement with each statement on a 7-

point Likert scale. The scale reflects the consumer's reported self-control with regards to their spending.

The ensuing section aims to measure consumer buying impulsiveness and spontaneous spending using a 6-item validated scale developed by Rook and Fisher (1995). This scale is widely used in marketing research to gauge a consumer's likelihood to purchase a product on impulse (Hausman 2000; Mishra *et al.* 2014; Yang *et al.* 2008) whereby individuals indicate their level of agreement with each statement on a 7-point Likert scale.

This is followed by a 4-item scale to measure an individual's level of retailer love adapted from the scale devised by Thorbjornsen, Supphellen, Nysveen, and Pedersen (2002), which was based upon the original brand relationship quality (BRQ) scale devised by Fournier (1998). The original scale consists of multiple constructs and a total of 33 items; however, for the purpose of this study the researchers utilized only the love/passion construct. The scale employs a 7-point Likert scale with the anchors 1 (strongly disagree) to 7 (strongly agree) and measures the attraction of, devotion to and overall exclusiveness of the retailer itself.

The final section of the questionnaire consists of a series of 5 demographic questions that respectively discuss respondent's age, gender, marital status, education level and occupation. All the survey items are shown in table 3 in the construct and validation section.

3.2 Sample Profiling

The empirical data was collected in the U.S. by Qualtrics, a data collection agency, through a web survey distributed to Amazon prime users of the Dash Button. The gender split was 55% female, 45% male. The majority of the age groups' split was in the 25-34 segment (42%), followed by the 35-44 segment (23.5%), 18-24 segment (13.3%), 45-44 segment (11%), 55-64

segment (8.1%), and 65 or above segment (2%). Most of the respondents were married (54.6%), followed by single (37.1%), divorced (4.8%), and other (3.5%). The respondents were largely employed (69.1%), followed by unemployed (10.8%), self-employed (10.3%), other (5.7%) and current students (4.1%).

The education level distribution was as follows: the majority of respondents have a bachelor's degrees (59.1%), 16% have a Master's degree, 16% have secondary school or under, 6.4% have other education degrees and 2.5% have PhDs.

The vast majority of the respondents reported to have been using the Amazon Dash button between 1 to 6 months (56.4%), followed by 7 to 12 months (17.9%), and less than 1 month (17.6%). 8.1% of the respondents have been using the Amazon Dash Button for over a year. Indeed, the Amazon Dash button was first launched in March 2015.

The respondents were equally split (42.1% each) between those owning 1 Amazon Dash button and those owning 2 to 4 buttons. Those having 5 to 7 buttons represented 10.6% of the total sample, while those owning more than 7 represented 4.8%. On average, the respondents click the button 1 to 4 times a month (40.9%), followed by those who click 5 to 8 times a month (36%), 9 to 12 times a month (14%) and those who click more than 12 times a month (9.1%). Table 1 lists respectively the average number of clicks per month.

Insert about here:

Table 1: Average number of clicks per month

Most of the respondents reported using the Amazon Dash button for re-ordering just before they run out of stock on the needed product (44.6%), followed by those who use it to re-order

products that they are already out of stock on (30.6%). Consequently, respondents confirmed that they use it much less when it comes to stocking-up for the week or month ahead (14.3%), and for planning ahead of higher expected consumption on an item such as an upcoming occasion that requires a higher stock at home (8.2%). Table 2 lists the usage breakdown.

Insert about here:

Table 2: Amazon Dash button usage

4. Analysis and Constructs Validation

The used constructs were operationalized using multi-item scales. Table 3 shows the scales, the mean, standard deviation, AVE, and the factor loadings. Cronbach's α tests for reliability were conducted for each construct, which recorded an adequate alpha value indicating acceptable internal consistency (Nunnally 1978) as per Table 3. Cronbach's alpha is largely deemed to be a conservative estimate of a construct's reliability (Carmines and Zeller 1983).

Insert about here:

Table 3: General statistics and exploratory factor analysis

Discriminant validity was first assessed by conducting exploratory factor analysis. Discriminant validity represents the degree to which measures of two constructs are empirically distinct (Bagozzi et al. 1991). All items loaded correctly with no cross-loading, providing support for discriminant validity (see table 3). Discriminant validity was also tested using the AVE method (Bagozzi 1981), whereby a construct is considered empirically distinct if the average variance extracted by that construct's items is greater than the construct's shared

variance with other constructs (Fornell and Larcker 1981). The data showed that the AVE for each construct in this study was greater than the minimum threshold of .50, providing evidence of discriminant validity.

The Harman's single factor test was performed using an exploratory factor analysis to test for common method biases (Podsakoff and Organ 1986). The results showed that no single factor accounted for the majority of the variance whereby all un-rotated variables loaded on different factors, with the first factor accounting for 36% of total variance.

The data was then tested for validity through LISREL 8.8 (Jöreskog and Sörbom 1993) using confirmatory factor analysis. The resulting indices were chi-square (χ^2) = 564 (183 degrees of freedom (d.f.)) and *p-value*=0.00. The model also had good fit indices: *NFI*=0.978, *IFI* = 0.985, *CFI*= 0.985, *GFI*= 0.921, and *RMSEA*=0.0579.

5. Model Estimation and Research Findings

Using LISREL 8.8 to estimate the model, the findings showed all linkages to be significant. Figure 2 shows the estimated standardized path coefficients of the four constructs under investigation. All estimated path coefficients were significant at $p < 0.001$. Various indices for assessing the model fit have been used. The goodness of fit index (GFI), assessing the degree to which the reproduced correlation matrix based on the specified model accounts for the original sample correlation matrix, was found to be above the recommended threshold level of 0.90. Also, based on Steenkamp and Baumgartner's (2000) work, the comparative fit index (CFI), the normed fit index (NFI), and incremental fit index (IFI) were assessed, and acceptable fits for these indices were also found. The χ^2 to degree of freedom ratio was 3.168. Carmines and McIver (1981, p.80) suggest ' χ^2 to degree of freedom ratios in the range of 2 to 1 or 3 to 1 are indicative of an acceptable fit between the hypothetical model and the sample data'. Finally, the RMSEA value obtained (0.0589) was suitable as a value of 0.08 typically represents a reasonable error of approximation for the root mean square error of approximation (Brown and Cudeck 1993). In sum, the estimation of the model showed a good fit with $\chi^2=583 (184)$, $p\text{-value}=0.00$, $NFI=0.977$, $IFI=0.984$, $CFI= 0.984$, $GFI = 0.919$, and $RMSEA = 0.0589$ (see figure 2).

Insert about here:

Fig. 2. Model Estimation

As hypothesized, perceived service value had a direct impact on impulsiveness ($H_1: \beta = .289$, $p < .001$) and retailer's love ($H_2: \beta = .784$, $p < .001$). Retailer's love had also a significant positive effect on impulsiveness ($H_3: \beta = .218$, $p < .001$), while consumer self-control had -as expected- a significant negative effect on impulsiveness ($H_4: \beta = -.190$, $p < .001$). In short, all

the research hypotheses put forward were supported. It is essential to highlight that the effect of Amazon's Dash button on shopper attributes and retailer's relationship has never been tested before. Thus, these findings have valuable implications for both brands and retailers from a managerial as well as from an academic perspective.

6. Discussion of the findings and implications

The structure of the communication between brands and consumers is increasingly becoming blurred as shoppers are significantly being influenced by the retailers' omnipresence (Badrinarayanan et al. 2012). Pushing the edge on technology, retailers such as Amazon are expected to own and further lock the first moment of truth (FMOT). With its' Dash button technology, Amazon will indeed make it very difficult for shoppers using it to consider new brands, hence bypassing completely the FMOT and locking in current brands' market shares. Brands will hence struggle with the growing dictating power of the retailer. In fact, retailers today are focused on driving further their store traffic, increasing shoppers' average basket size and repeat purchases (store loyalty) using different brands to reach their objectives (Singh 2017).

The findings of this empirical study show the scale at which technological advances such as the Amazon Dash button would affect consumers' buying patterns and their expected effect on the traditional consumer journey. As the technological disruption's (hereby the Amazon Dash button) perceived value increases for consumers in regards to value and convenience, these shoppers will have higher affective feelings towards the retailer, and hence will become more impulsive in their buying behavior. Indeed, Dash button consumers are noting that they are prone to completing unplanned purchases more frequently since the devices act as round-the-clock, convenient purchase points increasing consumer buying impulsiveness (Wohl 2015). This fact is

significant as a primary objective of retailers is to encourage impulse temptation to boost sales (Amos et al. 2014). While the spending self-control of Dash button's shopper will be the main inhibitor on the impulsiveness attribute, the consumer journey in its different stages and touch points appears to be fundamentally altered with the adoption of these buttons due to various factors:

1. There will be no differentiation between shoppers and consumers anymore as the re-ordering of products is done first and foremost by the actual end consumer. Accordingly, Amazon would have to reinforce the continuous value equation of the selected Dash button brand (with the support of that brand) as the consideration stage that shoppers used to pass by, in the now-obsolete FMOT, is eliminated. Furthermore, the usage of the Dash Button is likely to reduce the customer's ability to track his/her spending, which may also lead to a greater level of uncontrolled purchases (Adcock 2017). Notably, a number of consumers have complained that Amazon Dash Buttons typically do not display price information, unless a text message alert is specifically requested, which makes it difficult to detect price changes (Terlep and Bensinger 2016).
2. In a typical physical store, plan-o-grams (POGs) are essentials to the FMOT and the selection of products by shoppers (Nelson and Ellison 2005). As the act of re-purchasing becomes intuitive and highly straightforward through the press of a button at home, POGs will become consumer driven. Being decided by consumers, the placement of the Dash buttons will highly depend on the moment and place of consumption around the house. Hence, it becomes crucial for companies to educate consumers on the placement of these buttons in order to increase buying impulse and hence maximize replenishment frequency and quantity. Some cross-placements could occur such as having a dedicated

space on a washing machine to mount the detergent's Dash button on. Nonetheless, as consumers start adding more and more Dash buttons around their houses, especially when competing brands are added (e.g. Tide and Persil, Lipton and Twining, Pepsi and Coke...), it is expected that frequency of usage would be affected, similarly to what happens in the physical store, as consumers might start to get overwhelmed by the choices they have.

3. Accordingly, this paper proposes a new stage in the updated consumer journey that we coin as the "Home Moment of Truth" (HMOT). Indeed, the HMOT will take place when a consumer decides on a specific brand purchase based on his/her interaction with the retailer's in-home refill technology.
4. Finally, the owner of the technological disruption, hereby Amazon, would need to keep the hype in using the Dash buttons amongst its users. High levels of interaction and engagement need to ensue out of the fear of having the Dash buttons becoming perceived as a dull shopping experience. Accordingly, Amazon would still need to secure the "retail-tainment" that shoppers experience in the physical store, but more adapted to their platform. Following that rationale, a sort of "button-tainment" will have to be staged, whereby consumers would for example experience entertaining offers and added interactions via the linked mobile app.

7. Limitations and future research

While this study provides original insights on the alterations brought to the consumer journey by the Amazon Dash Button it is not free from limitations that are inherent in the research design and the type of tech disruption studied. Perhaps most obviously, our study utilizes data only from

Amazon Prime users based in the US market. While this research is not particularly limited to any specific product category, future research could focus on consumer impulsiveness with regards to various product categories and to other types of tech disruptions. Since culture has found to influence impulsive buying behavior (Badgaiyan & Verma 2015), there is also a need to conduct similar studies for different markets and explore cross-cultural differences in consumers' reactions to these new technologies in order to establish the generalizability of our findings.

8. Conclusion

This empirical study helped enhance the understanding of the consumer's journey in light of the newest technological disruptions, specifically the Amazon Dash Button. The findings have discussed how the consumer journey has been fundamentally altered, and accordingly the necessity to develop more adapted consumer-based strategies. This study also contributed significantly to the development of theories related to consumer impulsive behavior in online environments, while shedding light on the specific case of the Amazon Dash button. This is of great importance since Dash buttons are the latest technological retailing endeavor, and it is forecasted that numerous retailers may eventually resort to the utilization of such devices in the near future. Last but not least, this study contributed to the understanding of how the Dash Button as a new touch point has altered the consumer journey from all the consumer, the retailer and the brand perspectives. Furthermore, as retailers will dictate which brands they would feature on their tech advances, brands are expected to respond back with other innovations that would still allow in-home customers to be exposed to their products.

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