Measuring the customer benefits of click and collect

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Purpose – Click and collect (or grocery pickup) represents a growing part of the channel strategy of traditional off-line retailers. The objective is to understand how customers develop their perceptions towards this new channel. In other words, what are the key factors explaining the long-term value creation for each “click and collect” system depending on consumers’ profiles?

Design/Methodology/Approach – Based on a quantitative survey of 479 respondents, this research uses confirmatory analyses based on the PLS path modeling.

Findings – Based on the structural model, the customers’ relations, the website, the pickup station are the most important factors creating value for customers whatever the Internet grocery shopping model. The global conceptual model has been implemented under many variations to test the age effect and the kind of click and collect model. It is made evidence that customers’ benefits vary regarding the kind of click and collect model and the age of customers.

Research limitations/implications - This research allows a better understanding of the performance of the click and collect system by looking at the key factors that maximize the customers’ value and those that decrease it. Results show precisely variations of those factors according to the customer’s profile and the click and collect model.

Originality/value – This quantitative paper studies customer behaviors towards their usual retailer and their relationship with him. To do so, segmented approaches of the causal model are retained to provide specific recommendations.

Keywords – Click and collect, Confirmatory analyses, Grocery pickup, Multi-channel strategy, Structural equations modeling.

Paper type – Research paper

Introduction

The French retail food market is dominated by both the price war between retailers and uncertainties related to the future of the Hypermarket. Urgent questions about a new model providing long-term value to customers are raised. The click and collect model or grocery pickup, called “Drive” by French sellers, emerges in this context. The concept remains simple: consumers buy online items and collect them from a dedicated warehouse. In the absence of physical stores, click and collect is a pure player. Click and collect can be one part of the “*research-shopper phenomenon*” (Verhoef *et al.*, 2007) meaning that consumers cross-buy. They can visit a hypermarket to identify and to explore without shopping but ordering on line or vice versa. In this case, click and collect concept is based on the idea of ROBO (Research Online Buying Offline) or ROPO (Research Online Purchase Offline) (Kalyanam and Tsay, 2013) that symbolizes the fluidity between channels. Consumers and retailers enter the ubiquitous era.

The click and collect concept aims traditional off-line retailers to reposition in a service relationship with customers. It could indeed create a new type of consumer interaction, a meeting point and a different service experience for customers. This new on line customer experience with the off-line retailer becomes a fundamental component of the customer relationship, leading to create a sustainable value. Here, the customer co-creates the value through his interactions within the system (Vargo and Lusch, 2008). The participative dimension of the drive illustrates the co-production of services that is to say that the customer becomes part of the distribution process (Cadenat, *et al.*, 2013). As a consequence his perceptions are determinant to measure the created value (Woodruff and Flint, 2006).

Although fast food chains have been using the click and collect system for several decades, this channel is more recent in the retail field. The first French food click and collect system

was indeed opened in 2004 by the Auchan Group, under the “Chronodrive” banner. This opening has revolutionized traditional retailing, directly implicating customers in the production of services. In the US, pickup is a way to compete with Amazon one-hour deliveries and conquer new territory such as mid-size markets.

This internal grocery model is a natural consequence of the evolution of sales formats. In responding to societal consumer pressures, it decreases functional constraint consumption and forms part of the logic of the development of multi-channel networks. In February 2017, there were more than 3954 grocery click and collect in France¹. Under certain conditions, this Internet grocery shopping model represents an effective tools used by networks to optimize their territorial coverage. (Vyt *et al.*, 2017). Today in France, 80% of households has access to food click and collect less than fifteen minutes away from home (versus 75% for a hypermarket)².

The purpose of this paper is to understand how customers build their perceptions towards the click and collect system. In other words, based on a causal model formed by customers’ perceptions, what are the key factors explaining long-term value creation for this channel? The answer can guide retailers in shifting to cross-channel strategy. This research is therefore built to complete previous marketing and logistics contributions and it develops professional recommendations.

Since a better understanding of click and collect channel is required to study the consumer in the cross channel retailer strategy benefits of this new channel, this paper establishes the definition of multi-channel strategy. First section describes the three click and collect models. Multi sources of value creation in a customer viewpoint are then presented. Based on a quantitative survey of 479 French respondents, this research uses confirmatory

¹ Source: Drive Insights, Distribook, February 2017.

² Source: Nielsen Trade Dimension, April 2016.

analyses based on the PLS path modeling to understand how customers develop their perceptions towards click and collect. The results, based on structural equation modeling, present key factors of customer created value (in global at first, and then segmented through the click and collect channel and the customers' profiles). The final section presents the overall conclusions of the paper and discusses logistics and marketing recommendations to practitioners as well as future research perspectives. Based on previous results logistics and marketing recommendations are discussed and perspectives for future research are exposed.

Cross-Channel strategy and multi sources of value creation

Integrated multi-channel retailing includes issues related to the transition to ubiquitous trade (Picot Coupey *et al.*, 2009). Whilst the multi-channel is materialized by a juxtaposition of channels, without real synergy, cross channel symbolizes the multiplication of points of access to goods and therefore coordination and complementarity of these channels. In the cross-channel strategy the consumer is put at the heart of the process of retailing networks. It leads to create high shopper value (Payne and Frow, 2004). The website becomes determinant in customer relationship management (Seck *et al.*, 2014). Since click and collect “*combines the strength of physical stores with those of a mobile shop*” (Beck and Rygl, 2015), it can be classified into cross-channel retailing.

The following section describes the heterogeneity of the click and collect model, showing differences in logistics and marketing viewpoints and leading thus to segment it into three independent sub-models.

Click and collect in the cross-channel retailer strategy

From the introduction of Internet in the customer buying process, retailers operate a single brick and mortar strategy, based on a physical network of stores, to a *click and mortar* system and combining the strength of each channel, and generating additional sales (Dinner, *et al.*, 2014). Thus, consumers can combine multiple forms of purchases. In addition to carrying out their traditional shopping at the store, shoppers can now opt for an online purchase, with an ease of offering 24/7 access, with home delivery or in-store pickup. Since 2004 in France, shoppers are offered a new way to shop: the click and collect. Networks tend to develop the synergies of e-shopping and Internet grocery pickup service. As mentionned by Picot-Coupey *et al.* (2016) to “*synchronize clicks and bricks*” leads to new challenges for retailers, especially regarding customer relationship management. The introduction of this new channel - multiplying contacts between the retailers and the customer - disrupts the buying habits of shoppers.

Click and collect and retailer logistics: development of three models

The general principle of the click and collect is simple: the shopper orders online from a dedicated website or a mobile application (*click*) and then comes to the pickup station (*collect*). Consumers' role change in click and collect system: the consumer delegates to the e-tailer the task of preparing his order: grocery retailing has switched from self-service to free service. While most service offerings place more emphasis on the consumer, this new channel rethinks the co-production of services (Li *et al.*, 2013, Vernet and Tissier-Desbordes, 2012).

Three different click and collect models exist (Hübner *et al.*, 2016; Mevel and Morvan, 2015). It raises questions about differences concerning customer benefits.

- Drive-out model: a solitary station, a pure player, isolated from any store or named solo Drive (Hübner *et al.*, 2016; Mevel and Morvan, 2015). In this case, there is no physical store, but only warehouses serving as collecting points. The objective is clearly to conquer and capture new competitive territories (Colla and Lapoule, 2012; Marouseau, 2013). In France the Auchan Group uses this solitary station to conquer new territories. As an example, since the Group was not allowed to open hypermarkets in Brittany it opened four solitary stations under the *Chronodrive* banner. To our knowledge, there are no pure player regarding grocery click and collect. This new channel is dominated by traditional off-line retailers. That is to say that drives-out belong to established groups, and most of the time operate under the same banner as the traditional hypermarket.
- Drive-in model: customers order online then then pull up at their local store to grab their order at least two hours after the order. The pickup station is close to the physical store and orders are prepared in a specific warehouse click and collect (Hübner *et al.*, 2016; Mevel and Morvan, 2015).
- In-store picking model: integrated within a hypermarket or a supermarket, orders are prepared within the store (Hübner *et al.*, 2016; Mevel and Morvan, 2015). The in-store picking model represents the most important part of “click and collect” system development because of it is easy to implement, but the time to prepare orders is high in comparison to others (between 20 – 50 minutes against 10 minutes for others). In France, 1 250 hypermarkets have a Drive-in or in-store picking click and collect system representing 62% of all hypermarkets. Another difference concerns the assortment of goods available. Since, traditional stores, in brick, provide the infrastructure to accommodate this shopping mode, the in-store picking proposes the same references as in a physical store is not the case for

others systems that focus on usual food products. Regarding Walmart's grocery pickup service, there are around 30,000 SKUs (Store keeping Units) available for curbside pickup, which is comparable to what consumers would find in the store. In France, Cora has developed in-store picking for each of its hypermarkets proposed in 2016 around 31961 SKUs in its on-line assortment³.

Although all networks are getting into the race of opening click and collect, in France this channel remains dominated by two retail cooperatives: *Leclerc* and *Système U*. The Leclerc Group dominates the grocery click and collect and counts 567 units, that is to say more than 38% of the channel, while the group Cora counts only 58 drive-in (~~see Table 1~~). Leclerc Group has a market share in 2016 of 2.4% (i.e.+ 0.2 points versus 2015) whereas the click and collect as a whole represents a market share of 5.5⁴%.

~~*Insert Table 1 about here*~~

The differences between the various strategies of the seven largest French retailers in the development of different models (Drive-in, Drive-out and in-store picking) are explained by the whole range of services paid for by customers and also by economic constraints (Durand *et al.*, 2010, Durand, 2009 ; Huré *et al.*, 2013).

Contrary to traditional home delivery models, with click and collect, it is up to the consumer to get products from retailer. It was made evidence that the cost of traditional e-grocery represents a major obstacle to the growth of his system. Whatever the click and collect system, this new channel allows networks to raise the last mile issues resulting from urban goods movement in comparison to traditional e-grocer. (Colla and Lapoule, 2011;

³ Source: Drive Insights, Distribook, February 2017.

⁴ Source: Drive Insights, Distribook, February 2017.

Durand *et al.*, 2012, Hübner *et al.*, 2016; Picot Coupey *et al.*, 2009; Punakivi *et al.*, 2001).

Durand *et al.* (2012) have proved that only under certain specific conditions, such as the urban delivery problem, the urban delivery problem can be solved.

To our knowledge, no research has appreciated the specific key factors creating long term value to customers for each click and collect model. In other words, this research aims to reveal the sources of value creation for customers for each model.

Multi-channel, multi sources of value creation for customers

Some researchers made evidence that multi-channel synergies can increase customer value (Zhang *et al.*, 2010). The click and collect model could be considered as a specific service model providing a specific technical support, automated or not (website, information system, warehouse) perceived by the customers as a functional value according to the terminology of Gadrey (2012). It implies that retailers should perfectly control the service script because the customer value depends on it and this leads to a sustainable competitive advantage. Thus, the model developed in this paper employs all service variables based on both logistics and marketing approaches.

Focusing the research on customer viewpoint leads to study perceived and created value for them. Woodruff and Flint (2006) specify that the value of a good or a service depends on the customers' perceptions of the contextual experiences; the service does not exist itself because of its intangibility. As a consequence, the focus on customers' perceptions is determinant to measure created value of the click and collect.

Customer value could be defined through the information quality (related to promotions, price, transaction information, extending information on products), the service

convenience (information access, orders and customer service) and the physical store (Müller-Lankenau *et al.*, 2005-6; Oh and Teo, 2010). This research aims to extend this contribution in taking into account customers benefits (unstudied to our knowledge). According to Keller (1993), three benefits exist: functional, experiential and symbolic benefits.

Functional benefits have already emerged from click and collect by relieving the consumer purchasing constraints (time pressure for instance) (Colla and Lapoule, 2011; Mevel and Morvan, 2015). Through these functional benefits, consumers loyal to the hypermarket perceive the click and collect as an additional service (Douard *et al.*, 2015). They perceive this channel as a complementary service and tend to be loyal to their retailer brand (Vyt *et al.*, 2017).

According to Keller (1993, p.4), functional benefits “*are the more intrinsic advantages of service consumption and usually correspond to the tangibles attributes. These benefits are often linked to fairly basic motivations*”. Because they are related to fairly motivation, they could destroy customers’ value in the case of dissatisfaction. Those benefits have often been studied in previous research through stock outs information (Mével and Morvan, 2015). Functional benefits played a more important role than other benefits when the click and collect system is new (customers do not have a long experience with this format) (Mével and Morvan, 2015).

The experiential benefits provide sensory pleasure or cognitive stimulation, and are part of a hedonic consumption experience by the customer (Keller, 1993). In line with the Holbrook and Hirschman’s work (1982), two major contributions (Dupuis and Le Jean, 2004; Filser, 2002) show that marketing oriented to an experiential dimension generates creative solutions, original and additional opportunities untested by retailers. Regarding grocery pick-up, these experiential benefits are mostly related to orders, service-marketing policy (product

selection, brands choice for instance), the pick-up point and the website design (quality of image), the speed and ease of navigation (Mevel and Morvan, 2015). The design and the ergonomics of the website can explain the success for this new channel (Colla and Lapoule, 2012). So, they could be considered as major key factors of customers' created value.

Symbolic benefits could be linked to relational benefits leading to a sustainable relationship between customers and retailers. All researches focused on relationship marketing confirm that confidence is a mediating concept of the relationship between the consumer and the brand (Frisou, 2000; Gurviez and Korchia, 2002; Sirieix and Dubois, 1999). Human relations between customers and staff in contact at the pickup station build this confidence with the e-tailers and increase relational closeness with retailers (Vyt *et al.*, 2017). Thus, employees play an important role in the "click and collect" success leading to mobilize this variable in this work.

The experiential and relational dimensions of the click and collect system could maximize the created value leading to be perceived as unique. They are the key variables of a unique positioning, thus maximizing the customer service (Dupuis and Le Jean, 2004; Filser, 2002) without forgetting to satisfy the primary needs (the right products, at the right place, in the right quantities and at the right price). Hence, to maximize customers' value, e-tailers have simultaneously to intensify and to control experiential and relational benefits taking into account the satisfaction of basics requirements (functional benefits). Hence, the relationship between consumers' benefits and long-term value in the click and collect field are investigated. Therefore, three hypotheses emerge:

H1. Experiential benefits create long term value to customers. In other words, variables related to orders, service, pick-up point and website positively and strongly influence customers' re-purchases.

H2. Relational benefits related to human relations between staff and customers create long term value to them. They influence positively and strongly customers' re-purchase.

H3. Functional benefits create less value to customers in comparison to the experiential and relational benefits. Their influence is reduced on customers' re-purchases.

As shown in figure 1, this set of hypotheses spans our conceptual model which proposes that functional, experiential and relational benefits are the key factors of click and collect model creating long term value to customers.

-Insert Figure 1 about here-

Figure 1 describes the causal model based on the variables: the customer evaluation of orders, the website, the service and the marketing policy, the pickup station, the customers' relation and the functional benefit positively influence behaviors. Note that the functional benefit could destroy the customers' value if they are not satisfied. Thus, it potentially represents the brakes within the model leading to destroy value.

Click and collect market and pickup shoppers

Despite its recency, this Internet grocery shopping model has every year more and more consumers: more than 6 million households used click and collect or grocery pickup in 2016⁵. This development model captured in 2016 around 5.5%⁶ market share of consumer products, with an average basket of around 67 euros⁷ (compared with 41 euros in

⁵ Source: Kantar WordlPanel, Distribook, February 2017.

⁶ Source: Kantar WordlPanel, Distribook, February 2017.

⁷ Source: Nielsen Homescan, April 2016.

hypermarkets). Since 26.2% of French consumers used a “click and collect” in 2016⁸, what is the profile of this pickup shopper? Are there any significant differences with the usual buyer of a hypermarket?

~~Insert Table 2 about here~~

~~Table 2 indicates that~~ It is shown that⁹ the pickup shopper is younger than average consumer in hypermarket. While the age distribution is much more balanced for off-line sellers 74% of on-line shoppers are under 49 years old.

Why is click and collect so successful among youngest consumers? Finally, it meets the current requirements of the shopper: to break free from the chore of physical store shopping (Colla and Lapoule, 2015; Huré and Cliquet, 2011) and to control the management of his purchase time with a 24/7 access to on line assortment. As mentioned by Liao *et al.* (2011), “*For young customers who consider convenience and speed as prerequisites, online shopping has become a new type of consumption*”.

Data and sample

This research focuses on measuring factors creating long term value to customers, taking into account all click and collect models and the maturity of customers.

This work combines both logistics and marketing dimensions. The global channel model is inspired of the propositions of Mevel and Morvan (2015) cumulating these two fields. The

⁸ Source: Kantar Worldpanel, Distribook, February 2017.

⁹ Source: Kantar Worldpanel, Distribook, February 2017.

present objective is to explain the relations between the variables by using a causal method. Hence, the role of key factors and brakes is precisely measured within a model and then they could be appreciated for each click and collect system according to the age of customers. This methodological choice also provides a relevant predictive way for managers.

The empirical survey was conducted in a French specific territory: Brittany, because this region is dynamic concerning the click and collect development in France, ~~as shown by figure 2.~~ It is the first region in terms of commercial density of click and collect: more than 1 click and collect system for 13 000 inhabitants compared to 1 for 25 000 inhabitants, on average in France¹⁰.

~~*Insert Figure 2 about here*~~

Note that 129 hypermarkets located in Brittany have a click and collect system, that is to say, more than 77% of the whole. In Brittany, the traditional and historical location of the retailer Leclerc explains its domination not only regarding the hypermarkets' infrastructure but the development of Drive outs too. Thus, this Group represents 29.34 % of hypermarkets in this area and encounters 85% of Drive-out¹¹. ~~as seen in Table 1.~~

A structured survey among French consumers in this region was conducted. In total, 479 questionnaires were useful. Once the questionnaire has been administered, the causal model can be tested. Two steps are necessary to measure the perception of click and collect models: the validation of the measurement model and the validation of the structural model.

This paper aims to explain and to predict the created value for customers based on their perceptions. As the model is attempting to measure relationships of causes and effects

¹⁰ Source : LSA Expert, november 2016

¹¹ Source: LSA Expert, November 2016

between the variables, which are numerous and vary simultaneously, a structural equation modeling through the PLS Path approach is recommended. This model, developed by Wold (1982) and extended more than ten years ago (Tenenhaus *et al.*, 2005), consists of estimating the parameters of the model by a succession of simple and multiple regressions based on the relationships between the latent variables (“internal” or structural model) and the manifest variables (“external” or measurement model). The flexibility of this model (no minimum or maximum sample size, either ordinal or metric data) and the clear quantification of the latent variables justify its use; it also enables to make precise predictions about the latent dependent variable and to provide a synthetic and operational calculation of the concept studied. Since this research is operationalized on more than 400 respondents and aims to predict to support managers investments, the PLS Path approach is recommended (Fornell and Bookstein, 1982).

Measurements

The first step concerns the validation of reflective variables of the causal model. More specifically, their reliability; convergent and discriminant validities are tested.

Reliability, convergent and discriminant validities of reflective variables

Regarding reflective constructs (latent variables), the adopted procedure follows that proposed concerning the reliability and convergent validity of the latent constructs (Churchill, 1979).

Confirmatory analyses were conducted through Xlstat PLSPM software based on the PLEASURE technology (Partial LEast Squares strUctural Relationship Estimation) supporting the PLS path modeling.

-Insert Table 3 about here-

As shown in table 3, reflective variables (related to logistics and marketing dimensions) are assessed through different statements. The questionnaire has been operationalized through a five-point Likert's scale since attitudes and opinions towards click and collect are measured. The procedure to develop the Likert scale is "no different from that used in the method of equal-appearing intervals" and can be used as a metric scale (Churchill and Iacobucci, 2005) required for our future statistical treatments. Long term value is estimated by re-purchases.

Based on table 4, the measurement scales (reflective variables) are confirmed as one-dimensional, since only the first eigenvalue of the block is greater than 1, and Cronbach's alpha and the Rho Dillon-Goldstein are both superior to recommended threshold (i.e. higher than 0.7) (Tenenhaus *et al.*, 2005). Reliability of the measurement scales is therefore validated.

-Insert Table 4 about here-

Two steps enable to test the convergent validity:

- 1) First the communalities of each manifest variable with the latent variable (intra-communality) were tested. Second, the Average Variance Extracted (AVE), calculated on the latent variable was tested. A bootstrap procedure (500 re-samplings) was systematically used to check that each of the intra-communalities differs significantly from zero and is higher than 0.5 (Tenenhaus *et al.*, 2005). The bootstrap test gives each of the communalities a 95% confidence interval.
- 2) Commonly, 0.5 is the minimum recommended value for acceptance of the manifest variable communality and the AVE of the latent variable (Fornell and Larcker, 1981).

The convergent validity of the model is also confirmed, given that the variances extracted exceed the recommended threshold (Table 5).

-Please insert Table 5 about here-

Discriminant validity

The test of discriminant validity is required to be sure that each construct of the model precisely measures an independent dimension of the phenomenon; discriminant validity is assumed when the average variance extracted (AVE) is greater than the squared correlation (Fornell and Larcker, 1981). Discriminant validity is only shown when there is no correlation between all latent variables (< 0.5) in order to demonstrate that latent variables measure different constructs. Given the discriminant validity matrix (Table 6), it seems that all the constructs in the model measure independent dimensions. In fact, variances shared between the latent variables are lower than the shared variance (AVE down each column) between the latent variables and their respective measurement items.

-Insert Table 6 about here-

Results

To validate the structural model implies testing the quality of causal relationships between the seven latent variables within the model and identifying the weight of each of the six independent variables within it. To do this, several statistical indicators are employed and shown in Table 7.

-Insert Table 7 about here-

The model is validated because statistical indicators exceed the recommended threshold (Chin, 1998; Fornell and Larcker, 1981; Tenenhaus *et al.*, 2005). The causal model is expressed as follows (Table 8).

-Insert Table 8 about here-

Key factors of click and collect

As shown in Table 8, it appears that:

Re-purchases = 0.234 relation + 0.207 website + 0.201 pickup station + 0.153 service and marketing policy + 0.103 orders + 0.016 functional benefit

The model shows the created value meaning the key success factors of click and collect, in order of importance:

- 1) The customers' relation forms 23.4% of customer value (*related to relational benefit*);
- 2) The website explains 20.7% of the customer perceived value (*related to experiential benefit*);
- 3) The pickup station contributes to 20.1% of the customer perceived value (*related to experiential benefit*);
- 4) The service and the marketing policy explain 15.3% of the created value (*related to experiential benefit*);
- 5) The attributes related to orders contribute to 10.3% of created value (*related to experiential benefit*);
- 6) The functional benefit explains 1.6% of created value.

It appears that four variables stand out significantly: the customers' relation, the website, the pickup station and the service. These variables are related to relational and experiential benefits. More precisely:

- website evaluation has been already mentioned as a determinant factor that can improve satisfaction (Colla and Lapoule, 2012; Montoya-Weiss *et al.*, 2003);

- concerning the pickup station, results also show that accessibility and timeliness of physical service are well perceived by customers. Those elements reinforce and respond to the importance that customers attach to the time factor;

- service observed through the marketing policy related to products choice, price line and promotions are determinant of customers' positive behaviors. Retailers have to focus on the assortment questions (wide and depth) to improve created value;

- attributes related to orders (as product selection ; access to promotion; track expenses; minimum order value; choice of proposed withdrawal of schedules; proposed methods of payment; the order confirmation by email) play a minor role in the positive customers' behaviors in comparison to previous variables.

Therefore, experiential benefits create long term value to customers. In other words, variables related to orders, service, pick-up point and website positively and strongly influence the customers' re-purchase (H1 is supported).

Relations established between employees and customers are determinant of created value. Those daily exchanges with the retailer enable him to become closer to customers and finally to build a sustainable value. They influence positively and strongly the customers' re-purchase (H2 is supported).

Finally, functional benefits create less value to customers in comparison to the experiential and relational benefits. Their influence is reduced on customers' re-purchases (1.6% of created value; H3 is supported).

Variations of the click and collect value according to the kind of system

In this context several variations of these results are tested in order to extend contributions. It seems to be relevant to deepen previous results by identifying precisely which click and collect model and which profile of customers could maximize the value and those that dilute it. Table 9 presents specific model for each model.

-Insert Table 9 about here-

Drive-out model: a value equally based on four factors

Concerning the Drive-out, four key factors emerge: the pickup station, the website, the service and the relationships with customers. They equally create the customer value. Note that functional benefits (stock outs) are not totally satisfied and could destroy the created value. This "click and collect" model has to pay attention on this component.

Drive-in model: pickup station and relationships are determinant

The Drive-in model shows that the pick-up point and relational components are determinant of its success; the website plays a minor role compared to the two others. This model is less experiential than the Drive-out model.

In-store picking: relational and experiential components are significantly superior to others

The relationships with customers, the website and the on-line orders are the most important factors determining the created value in the in-store picking model. Relational and experiential components are significantly superior to others. In this model, customers perceive the uniqueness of the formula compared to the store. The in-store picking is clearly perceived as a new selling proposition in comparison of the traditional store. Note that all needs are satisfied in this model.

It is made evidence that there are variations between click and collect models regarding customers' benefits. In other words, Internet grocery shopping models create different value to customers: the Drive-out model is more experiential than the Drive-in model but its value could be destroyed by the dissatisfaction of functional needs; both relational and experiential expectations are significantly superior to others in the case of the in-store picking. Hence, these results show variations between click and collect system. In other words, the role of functional, experiential and relational benefits differs from a model to another.

Variations of the click and collect value according to the customers' maturity

As mentioned by previous research (Goethals *et al.*, 2012), the relationship between satisfaction in e-grocery and age admits significant differences across age groups. Especially, it is made evidence that pickup shoppers have younger profile compared to traditional grocery ones (Heitz *et al.*, 2011; Liao *et al.*, 2011). For these reasons it seems relevant to verify if relations between e-tailers and consumers vary according to the age. Hence, the global conceptual model will be implemented under many variations to test the age effect. Three groups are identified corresponding to different life step leading to guarantee the homogeneity

within each group. Table 10 details variations of the created value according to the age of customers.

-Insert Table 10 about here-

Customers' benefits vary regarding the kind of click and collect model. In other words, the role of functional, experiential and relational benefits differs from a model to another.

Group 1: 25-34 years: utilitarian consumers – unsatisfied functional needs

The group 1 is composed by utilitarian customers seeking the maximization of their utility. The dissatisfaction of their basic needs (functional) destroys the perceived value even though other experiential (the website and the pickup station) variables are satisfied.

Group 2: 35-44 years: relational and experiential benefits are determinant

The second group is composed by customers who are globally satisfied of the e-tailer. Relational (relationships with the staff in contact) and experiential (through the website) benefits are the most important factors for them.

Group 3: 45-55 years: same expectations as supermarket shoppers

The last group is composed by customers who have the same expectations towards the e-tailer as the retailer. The pickup station, the relationships with the staff and the service indeed reflect the same components as the physical store. The on-line orders and the website are not really considered by those customers.

The age of customers could indeed segment their perceptions of the click and collect model. Customers who are between 35-44 years old have the best valuation of the channel (cumulating the higher number of components). Since they represent a big part of pickup shoppers (in France in 2016, 37,4% of pickup shoppers were between 35 and 39 years old¹²) multi-channel retailers have to care this target in so far as relational and experiential benefits are determinant for them.

To conclude, more customers are young more functional benefits are determinant of their re-purchases contrary to mature customers focused on especially experiential and relational benefits. There are variations of the click and collect value according to the age of customers. More customers are young more functional benefits are determinant of their re-purchases. Furthermore, it is made evidence that experiential and relational benefits are determinant of the mature customers' re-purchases.

Discussion

The main purpose of this study dedicated to click and collect service deals with all benefits and brakes perceived by customers creating long term value. In other words, it considers both factors of the co-creation value and brakes responsible for its destruction. This research reveals heterogeneity of the studied phenomenon leading to choose segmented approaches. As a consequence, the contribution of this study is threefold: first, this article reinforces previous contributions on customer value in the specific case of click and collect; second, it reinforces the previous descriptive approach of Mevel and Morvan (2015) in the logistics field by using confirmatory analyses (with the PLS Path modeling). The recency of this retail channel explains the dearth of literature about it. It explains why previous contributions have been

¹² Source: Distribook, February, 2017.

completed here by providing quantitative results based on customers' perceptions including their benefits retired from the click and collect system. Finally, this research provides segmented results to appreciate variations of the sources of created value by the click and collect formula. Indeed, the structural model provides precise results concerning customers' perceptions and behaviors towards each click and collect system.

This research reveals key factors creating long term value thus specifying previous contributions on digital customer value (Müller-Lankenau *et al.*, 2005-6; Oh and Teo, 2010) and the seminal work of Plé and Chumpitaz Caceres (2010) focused on the co-destruction process of value (based on a "misuse" of some resources within the system) that is the first contribution of this research. Indeed, the website, the pickup station, the customers' relationship and the service are the most important factors creating value for the customer whatever the click and collect system. Relational (relations between customers and employees in-contact; service and marketing policy) and experiential (website, pickup station and service-marketing policy) variables are the key factors creating long-term value. In line with previous research (Vyt *et al.*, 2017), it is made evidence that click and collect brings more to consumer than only functional benefits and has to play an important role in the value creation.

More precisely, the relation with customers forms 23.4% of created value; the website contributes to 20.7% of it; the pickup station explains 20.1% of it; service and marketing policy contributes to 15.3% of created value. So, managers have to pay attention to all of those variables to improve the customer experience and positive behaviors. In line with previous research, in a cross-channel strategy, retailer websites contribute to generating consumer satisfaction (Cao and Li, 2015; Montoya-Weiss *et al.*, 2003). Those results also corroborate those of Wetzels, Oderkerken-Schröder and Van Oppen (2009) where experiential benefits positively influence and build e-loyalty (through website aesthetic and intrinsic

enjoyment). Hence, it could be interesting to deepen attributes related to experiential value (in line with Mathwick, Malhotra and Rigdon, 2001 and 2002) when French click and collect system will reach the maturity stage.

This research therefore completes other previous contributions in explaining the created value by a causal model and appreciates variations within it (according to the age of customers and the “click and collect” model). More results specify the customers’ perceptions according to their maturity and the kind of click and collect. These segmented results reveal another contribution of this research. They show that:

- Click and collect models present some differences: the Drive-in model satisfies customers through its pick-up station and relationships. In the case of the in-store picking, relational and experiential components play a higher role than in other models. This model seems to be the best on-line approach to build a sustainable value. The Drive-out model finally cumulates more factors than the two others.

- Pick-up shoppers are heterogeneous in their expectations: younger are more utilitarian than others (similar to “information oriented-shoppers” according to Oh and Teo, 2010). Retailers have to control stock outs to satisfy them and to maintain efforts on experiential components (through the website). Customers between 35 and 44 years old are the principal target. They are totally satisfied of this Internet grocery shopping model and their expectations are oriented to relational and experiential dimensions creating a sustainable value (joining “hybrid shoppers”) (Oh and Teo, 2010). The last group (more than 45 years old) is globally satisfied but its perceptions are built on the same expectations as stores. In other words, this target does not value the specificity of the click and collect concept leading to not perceive the uniqueness of the proposition. This target definitively corresponds to hypermarkets (Heitz *et al.*, 2011).

Managerial implications

Click and collect model related to cross-channel strategy enables an integrated sales experience through all available shopping channels leading to increase both customer profitability and loyalty (Mathwick, Malhotra and Rigdon, 2001 and 2002 ; Rigby, 2011; Venkatesan, Kumar and Ravishanker, 2007;).

The present segmented approach could help managers to finely identify both motivations and brakes of their customers to provide a better service and to increase customer value. The destruction of value could exist if they neglect efforts on functional dimensions of their system. This research reveals for each click and collect model its own sources of competitive advantages.

Since traditional retailers have now to compete with new entrants, such as Amazon that proposes home-delivery in one hour (sometimes in 30 minutes) in big cities, to develop click and collect can be a means to maintain they market share and conquer new territories, specially mid-market not yet covered by pure players. Those results serve to advise managers to improve the relational and experiential dimensions of the click and collect system to maximize the created value and be perceived as unique. Retailers have to enrich the online experience to turn shopping into an entertaining, exciting and emotionally engaging experience and finally to increase customer service. The know-how of pure players could be highlighted. For instance, Jet.com company (bought by Walmart) offers dynamic pricing: more the customer buys lower are the prices; Amazon.com suggests adding complementary

products to those within the basket. To improve the experiential dimension, the pick-up point could be developed by offering a global shop area such as “Chronodrive Village”. More precisely, it proposes complementary food shops to the click and collect: “bakery Paul”, “Nicolas” wine shop, flower shop open 7 days on 7, pizzas and pasta sellers...

Experiential dimension is the key variable of a unique positioning, thus maximizing the customer service (Dupuis and Le Jean, 2004; Filser, 2002) without forgetting to satisfy the primary needs (the right products, at the right place, in the right quantities). The satisfaction of those functional needs implies retailers to optimize their logistics organization. As an example, Carrefour has launched on September 2016 a new warehouse of 23 000 square meters to deliver several hypermarkets and supermarkets in order to eradicate the stock outs question and to increase the quality of its service by expanding its assortment (around 20 000 SKUs against 6 000 for others competitors).

Relational dimension could be improved by using data about customers’ purchases: what are their favorite products? In which channel? Hence, retailers could predict more customers’ behaviors and then suggest adequate selling proposition. Customer Relationship Management is required to increase the global performance of retailers (offline and online channels).

Limitations and future research

This study presents several limitations which leaves opportunities for further exploration in future research. Firstly, all of our survey respondents lived in Brittany, a region in the West of France. Although click and collect systems are mainly located in the Western part of France, this methodological bias limits external validity. Secondly, other independent variables might be relevant such as the particular organizational structure of a network. Are

the benefits linked to the click and collect aspects of the organizational structure of a network? It would be useful to answer this by studying the governance of retail networks and their influence on customer value creation. Are there many differences between franchise networks and others? Moreover, that the size of the *brick and mortar* network changes sales growth in a cross-channel context (Cao and Li, 2015). However, the size of the network was not included in this research.

The specific French context such as labor costs, regulations, territorial coverage of the networks and the low willingness to pay for home delivery contribute significantly to the development of the click and collect area. Nevertheless, it should be noted that this new channel is being extended in many countries. In the USA for example, Walmart has deployed a click and collect system, called a free store pickup service that guarantees this promise: “*order fresh groceries online with free same-day pickup. We’ll even load your car*”. So, it could be interesting to apply this study in this another context.

Finally, this research needs further developments focused on relational benefits probably through retailer confidence and using experiential dimensions, taking into account variables defined by “*a variety of symbolic meanings, hedonic responses, and esthetic criteria*” (Holbrook and Hirschman, 1982, p.132) and related to creative solutions such as exciting navigation and redefined e-merchandising, for instance. Another perspective is related to deepening the link between customer perception of “click and collect” systems and customer behavior towards their retailer: Could they become loyal thanks to this Internet grocery shopping model? What is the customer behavior towards its usual retailer in the case of a high degree of “click and collect” satisfaction and inversely in the case of dissatisfaction? Literature has no consensus regarding cannibalization in a cross-channel strategy (Colla and Lapoule, 2015) or not (Herhausen *et al.*, 2015) so the question arises: how can satisfaction towards multi-channel retailer-be improved?

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