E-commerce: exploring the critical success factors

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Abstract

Purpose – The objective of this piece of qualitative research is to identify the key success factors (KSFs) of the grocery “click and drive” (or drive or drive-in) model developed by French grocery retail companies and to understand the basis of their competitive advantages.

Design/methodology/approach – The authors compare the conclusions of a review of the literature with an analysis of the various grocery drive-in approaches developed in France. These approaches are studied by applying a multi-method qualitative perspective comprising semi-structured interviews with managers and e-consumer focus groups.

Findings – The research confirms – with the exception of the quality of customer reception, which is particularly valued by managers and consumers – the main key success factors identified in the literature, and reveals a real consensus among the main operators on those KSFs and on the nature of the kind of core competences required in order to obtain competitive advantages.

Research limitations/implications – The comparison of the real profitability of “drive-in” sales outlets and a more precise evaluation of the advantages of an integrated multi-channel approach would provide more accurate results. Moreover, the authors have limited this study to an analysis of the French experience. The research implies that French grocery retailers should develop, along with a more differentiated logistical system, an improved approach to customer relations marketing. Moreover, it implies that “click and drive” outlets enable traditional grocery retailers to sharpen their competitive edge.

Originality/value – This article provides an original analytical approach to the identification of the critical success factors of large grocery retailers developing drive-in services. In answering this research question, the study should also help large grocery retailers to achieve development objectives and counter the stagnation of traditional retail formats, especially the hypermarket.

Keywords Electronic commerce, Grocery retailers, Drive-in, Multichannel retailing, Internet shopping, Retail marketing, France

Paper type Research paper

Introduction

Increasingly intense competition and planning restrictions in France have encouraged large grocery retailers using traditional formats (supermarkets, hypermarkets and convenience stores) to introduce innovative e-commerce approaches in order to boost sales (Colla and Lapoule, 2009; Picot-Coupey et al., 2009). Even after the recent moderate liberalisation of retail planning legislation, which was previously extremely restrictive (Cliquet et al., 2008), it is still very difficult to open a large store in France.

However, not all “brick and mortar” experiences in online grocery shopping have been financially successful. French operators still appear to be struggling to implement online grocery shopping and develop multichannel strategies with potential synergies. These operators attempt to combine different approaches to stock-keeping and picking and packing online orders (in warehouses or in-store) with different models of delivering goods: home delivery, click and collect at the store, and – more recently –
grocery click and drive (also called drive or drive-in). With click and drive, consumers order online – most often from home – and collect their groceries at the pick-up point (the drive-in) (Fernie et al., 2010; Durand and Senkel, 2007). Many large French grocery retailers are investing heavily in click and drive formats in order to avoid having to make home deliveries and bear the substantial costs associated with the “last mile”, but they still have to deal with a new and difficult format, which presents a number of challenges from the strategic, logistic and marketing points-of-view.

The number of drive-ins in the grocery sector is increasing very rapidly: in 2009, there were 250; in 2010, 500; and in 2011 over 1,000. All the observers and managers interviewed believe that the format will continue to grow rapidly. The market share of drive-ins in terms of grocery products was only 0.06 per cent in 2011, but, in the same year, it surpassed the market share for online home deliveries and, according to the observers and managers, will continue to increase over the course of the next few years with the opening of more outlets. According to SymphonyIRI Group, the market share for drive-ins will reach 3 per cent by 2018, while the market share for hypermarkets, supermarkets and hard discount outlets will all decrease; according to the retail marketing specialist, convenience stores represent the only other sector that will experience growth in the same period.

In this context, we have attempted to identify the key success factors (KSFs) in the grocery retailer click and drive model. Since click and drives are a new service recently introduced by a number of French companies, but not yet developed in other countries, relatively little research has been carried out on them at the international level.

On the other hand, the literature on online purchases in general and on home delivery e-commerce for food products in particular is already fairly substantial. Many authors working in this area have studied online sales experiences as fundamental in terms of exerting an influence over consumer purchasing behaviours (see, for a useful review of this subject with a substantial bibliography, Constantinides, 2004). Another area that has been analysed is logistics, not only in terms of home delivery, an approach widely used in the e-grocery sector, but also in terms of collection and delivery points (although the latter approach was rarely deployed in practice before the introduction of click and drive). The potential for complementary goods and the advantages of the multichannel approach have also been extensively analysed in the literature and this helped us to frame our response to the research question.

Most case studies (many of which we shall refer to during the course of this article) were carried out on e-commerce in general – especially for non-food products – and home delivery e-commerce in particular.

On the other hand, very few authors have addressed the issue of the click and drive approach to food products, whence the interest of posing the research question of key success factors in this new format, a format that only a handful of companies outside France have chosen to develop.

The results of our research should also help companies review their options and potential results and more successfully pursue their growth and strategic positioning objectives.

With this aim in mind, we conducted a literature review and an empirical investigation. The aim of the literature review was to find out what, according to leading scholars in the field, are the drive-in’s key success factors (KSFs) in the field of e-grocery. This empirical analysis was intended to investigate the main KSFs of
French operators who increasingly depend on the click and drive model to differentiate themselves from their competitors. Lastly, we compared the results of the second analysis to those of the first. This comparison enabled us to validate the key success factors identified in the literature and made it possible to isolate a number of managerial implications and prospective factors. We conclude with some considerations on the limitations of our research.

Key success factors in click and drive: a review of the literature

Key success factors (KSFs) are generally defined as strategic factors that can be influenced by management, a task in which managers must excel in order to improve their firm’s competitive position (Hofer and Shendel, 1978; Johnson and Scholes, 2002). KSFs generally emerge at the conclusion of an analysis of the business environment and of the competition in terms of the industry as a whole and of strategic business units in particular. KSFs are necessarily linked to value creation from the consumer point-of-view, and consumers’ perceptions of value vary according to the kind of business unit in question. Analyses of what motivates consumers to buy online initially enabled researchers to identify the main expectations of e-buyers.

Identifying and understanding e-buyer motivations and the main KSFs

The main reasons why grocery consumers buy online are convenience and time-saving (Morganowki and Cude, 2000; Picot-Coupey et al., 2009). Furthermore, some consumers regard the in-store grocery buying experience as a negative one, and would much rather spend their time playing sport or watching entertainment products (Connan Ghesquière, 2011). E-commerce enables customers to make their purchases whenever they want, with no physical effort, a distinct advantage particularly when purchasing large, heavy items. They consider online sales a rational buying activity, useful when it comes to limiting excessive purchasing and/or impulse buying. Online sales are thus particularly popular with people who are pressed for time, such as working couples with children and consumers with physical disabilities. Amongst the main obstacles to online sales are the perception that the internet is complicated to use; the difficulty of judging the quality of products – particularly fresh produce (Rajish, 2004); delivery costs; and the absence of any social links (Roberts et al., 2003).

Customer satisfaction surveys underline the importance of other factors, notably late or incomplete deliveries and deliveries containing unsatisfactory replacement items. Another oft-mentioned negative factor is the perception that the online buying experience is monotonous, boring and unpleasant (Robinson et al., 2007). A certain number of e-buyers continue to visit physical stores to buy fresh produce and items which they want to spend more time on selecting (Robinson et al., 2007).

In drive-ins, as in the shared reception box concept, “goods are delivered only ‘half the way’ and the customer has to pick them up within the pick-up time window defined by the service provider” (Punakivi and Tanskanen, 2002). At the same time, the consumer saves part of the time needed to make the trip to the store – generally the drive-in outlet is nearer to the consumer – and all the time he would have had to spend picking up the groceries in the store. In the drive-in model, the consumer expends even less time and effort, as the goods are generally delivered to the car boot.

While consumers like the idea of time saving and the reduction of physical effort associated with online sales of all kinds, click and drive has a number of advantages in
comparison to home delivery: “drive-ins offer their adepts a new way of rationalizing purchases and freeing themselves from the constraints of delivery times which mean that they have to be at home at a certain time of the day. The approach also avoids delivery costs and frees up time that can be used for other activities” (Heitz et al., 2011).

Furthermore, click and drive services offer consumers the chance to combine their shopping trips with other daily activities such as travel to the workplace (Schenk et al., 2007).

Identifying the various motivations for and obstacles to click and drive not only helps to define the kind of items likely to meet e-buyer demands, but also to isolate its key success factors (Table I).

Our research, which we will present later in the article, emphasises the major elements of the offer of services meeting click and drive customer expectations. These are, notably, a pronounced focus on the customer, the quality of direct marketing and the level of interactivity provided by e-merchant websites, the range of items available, price moderation, the power of the brand, and the cost and efficiency of the logistics system.

Offering a website experience with a high quality of design and ergonomics
According to many authors, an effective website design is critical to the success of electronic commerce, and the functionality, usability, ease-of-navigation and interfaces of the websites themselves are vital building blocks for sustainable success (Constantinides, 2004; Yen et al., 2007; Lim et al., 2009, Colla and Lapoule, 2011).

According to Lee et al. (2002), approximately 35 per cent of users are concerned by issues like website accessibility and ease-of-use. The structure of websites can greatly affect their accessibility and efficiency and is fundamental to effective navigation support (Yen et al., 2007).

According to these authors, websites may differ considerably in processing capability, transaction support complexity, information flow, security requirements, and the range of applications supported. Many features characterise websites: they may be content-related (accuracy, relevance and completeness of information, media format – scope –, and updating), or more design-oriented (size, page layout, structural navigation, response time and security). In another study, this one on the effects of atmospheric variables on consumer satisfaction and behaviour, McKinney (2004) found that a set of those atmospheric variables contributed to satisfaction for all consumers. The variables were linked to special offers/coupons, product descriptions, graphics/photos/images, price(s) of merchandise, the total cost of merchandise, the option to delete a previously selected item, help service/toll-free number for customer service, and order confirmation via e-mail.

Given that the biggest motivations for consumer online grocery shopping are convenience and time saving, grocery retailers need to develop their web configurations in order to reduce time spent in navigation and increase customers’ perception of the system’s innate simplicity and ease-of-use (Yoo and Donthu, 2001). In addition, they need to deliver quality signals for their products to customers by providing full information, including information on nutritional content and provenance (Lim et al., 2009).

Dholakia and Zhao (2009) demonstrate that website interactivity helps to meet customer expectations by providing a number of fundamental elements, including
<table>
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<th>Motivations</th>
<th>Main components of the offer involved/requirements for success</th>
<th>Main authors</th>
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<tr>
<td>Time saving</td>
<td>Onsite localisation in strategic areas on routes taken by consumers between their homes and places of work; the ease of use of the website; the quality of the ordering and traceability system; the ability to conduct searches based on keywords; the interactivity of the website; efficient delivery and no waiting time</td>
<td>Morganowki and Cude (2000); Constantinides (2004); Heitz et al. (2011); Schenk et al. (2007); Yen et al. (2007); Lim et al. (2009); Dholakia and Zhao (2009); Yoo and Donthu (2001)</td>
</tr>
<tr>
<td>Potential to shop at any time</td>
<td>The continuity of the online service</td>
<td>Picot-Coupey et al. (2009)</td>
</tr>
<tr>
<td>Reduction of physical effort, physical difficulty of in-store shopping (pregnancy, disability)</td>
<td>Goods delivered to the car boot, enabling consumers to take away their orders without getting out of their cars</td>
<td>Morganowki and Cude (2000)</td>
</tr>
<tr>
<td>Useful, rational purchasing</td>
<td>Providing full information, records of the most frequently purchased products</td>
<td>Lim et al. (2009)</td>
</tr>
<tr>
<td>Price moderation</td>
<td>Good price/quality ratio, and promotions. Efficient logistics (order picking)</td>
<td>Tanskanen et al. (2002)</td>
</tr>
<tr>
<td>Obstacles to purchasing or repeat purchases</td>
<td>The simplicity of the interface and ease of navigation</td>
<td>Yen et al. (2007); Lim et al. (2009)</td>
</tr>
<tr>
<td>The perception that the website is complicated to use</td>
<td>The amount of information about products, the visual quality of the interface and the effective presentation of sensory attributes</td>
<td>McKinney (2004); Rajish (2004)</td>
</tr>
<tr>
<td>The difficulty of judging the quality of products, particularly of fresh products, and the perceived risk involved</td>
<td>The variety – width and depth – of the assortment, storage capacity</td>
<td>Kotzab and Madlberger (2001); Dholakia and Zhao (2009)</td>
</tr>
<tr>
<td>A limited choice</td>
<td>A high level of interactivity at the interface</td>
<td>Roberts et al. (2003)</td>
</tr>
<tr>
<td>The absence of social links</td>
<td>The reduction in the number of stock shortages, the quality of replacement products</td>
<td>Urban et al. (2000), Fernie et al. (2010)</td>
</tr>
<tr>
<td>Incomplete deliveries and deliveries with inadequate replacement products</td>
<td>The quality of the visual interface and the level of interactivity</td>
<td>Constantinides (2004), Yen et al. (2007), Lim et al. (2009)</td>
</tr>
</tbody>
</table>

**Source:** Authors
useful feedback, an accurate order system which takes stock levels into account, a
capacity to follow orders and search the website by means of key words, the level of
personalisation of the website, the number and quality of images on the website, and
ease and speed of navigation.

Developing a diversified, efficient and service-oriented logistic
In order to gain a better understanding of the conditions of success of large grocery
retailers, a number of authors, including Esper et al. (2003), have focused on logistical
models. Urban et al. (2000) maintain that the most important element in creating
consumer trust is fulfilment, which includes getting the right product to the right
consumer at the right time.

Two issues inform logistics in e-commerce: the storage and preparation of orders,
and delivery to consumers. There are two operational models for each issue.

The first operational model for storage and order preparation, referred to as the
“store picking” model, consists of picking orders directly from the supermarket’s aisles.
In the second model, orders are prepared in a dedicated warehouse.

E-merchants may also deliver orders directly to customers’ homes or deliver them to
consumers at pick-up points (warehouses or stores for grocery products) (Fernie and
McKinnon, 2003; Fernie et al., 2010; Durand and Senkel, 2007; Marouseau, 2005).

Consequently, four types of e-commerce are possible in online grocery sales: home
delivery from the warehouse; home delivery from the store (both with attended or
non-attended delivery); pick up by consumers at grocery stores; and pick up at
drive-ins.

If home delivery – by stores – fulfils the two most important customer expectations
(convenience and time-saving), it is still very expensive both for suppliers and clients.
Durand (2010) estimates that delivery costs can account for up to 15 per cent of the
value of an order. And 30 per cent of home deliveries fail because there is no one in to
accept the delivery. Getting food deliveries to customers takes between 24 and 48 hours
and requires the customer to be at home for a specific two-hour period in order to
receive the order. In grocery e-commerce, failed deliveries imply that the retailer has to
arrange for the customer to be at home for an attempted redelivery, that the carrier will
waste mileage (McLeod et al., 2006) and that customer service will be poor.

Collection and delivery points enable users to collect items that they have purchased
online (Fernie and McKinnon, 2003; McLeod et al., 2006). But even if this method has
been heralded for its cost savings (e.g. mileage, environmental, time, capacity
utilisation) and the possibility of link shopping, it is still rarely deployed in practice
(Aksen and Altinkemer, 2008; Campbell and Savelsbergh, 2005) even for non-grocery
products.

We therefore chose not to analyse the above logistic problem settings, which can be
seen as variants of the well-known vehicle routing problem, extensively studied in the
operations research and management science literature (surveys by Nagy and Salhi,
2005, 2007; Parragh et al., 2008a, b; Braysy and Gendreau, 2005a, b).

Drive-ins may have different fulfilment systems: most independent (“solo”)
drive-ins are composed of a purpose-built warehouse and a pickup point. “Attached”
drive-ins may have a dedicated picking facility co-located with a store (supermarket or
hypermarket), similar to the “solo” drive-in model, or they may offer store-based
fulfilment (Fernie et al., 2010; Durand, 2010).
For grocery products, picking up the items oneself makes it easier to organise one’s time, and drive-in outlets provide e-buyers who dislike the fact that Internet prices are higher with both flexibility and convenience. Consequently, encouraging e-buyers to collect their purchases from a nearby pick-up point has a number of advantages, not least financial. Non-home delivery reduces logistical costs by up to 70 per cent (Yrjölä, 2003).

In the context of home delivery, store-based and fulfilment centre picking have been extensively studied and, many researches have highlighted the main advantages and disadvantages of both systems.

The main advantages of the store-based fulfilment model are as follows (Fernie et al., 2010): it minimizes speculative investment; it improves the utilisation of existing assets and resources; and it makes it possible to achieve a rapid rate of geographical expansion. On the negative side, the model can impair the standard of service for customers, who are obliged to rely on retailers to make suitable substitutions. And conflicts between conventional and online retailing are likely to emerge at the front end of stores and to intensify as the volume of online sales increases.

Purpose built fulfilment centres on separate sites or co-located with conventional stores (supermarket or hypermarket) offer a number of logistical advantages. Consumers can check product availability and the dedicated order picking function is more rapid and efficient (Fernie et al., 2010).

Offering a diversified assortment of products and services creating value for the clients and for the firm

A number of studies on marketing and distribution (De Kervenoael et al., 2006; Hackney et al., 2006) have highlighted the importance of a wide range of complementary goods and services in terms of increasing the value of the offer and differentiating it from that of the competition. In the context of online sales in general, the components of the offer considered to be the most important, other than logistics, are, notably, the range of available items, advice, payment, interactivity and advertising (Kotzab and Madlberger, 2001). Price and price/quality ratio are important elements of choice for grocery products and many firms have found it hard to make profits by creating value for consumers combining home buying with home delivery. Unfortunately, the number of consumers willing to accept higher prices in exchange for the convenience of home delivery was often not enough to sustain a profitable business (Tanskanen et al., 2002).

Price levels for click and drive may be lower than for e-commerce with home delivery, as the cost of the “last mile” (the most expensive one) is covered by the consumer, who goes to the store himself. Since drive-in is a new format, we were unable to find any research on the subject of price levels acceptable to consumers. Some authors have identified the importance of hybridizing logistic operation models when selling premium e-grocery, or, in other words, of using multiple sourcing and consolidation points to respond to consumer needs (Bozkaya et al., 2009).

All these approaches (Kotzab and Madlberger, 2001; Tanskanen et al., 2002; Dholakia and Zhao, 2009) confirm that e-merchants can improve their results by developing a global offer of goods and services, and ensuring that there are coherencies and synergies between those goods and services and the various functions of the firm (notably between marketing, IT systems and logistics).
While all these authors offer valuable insights, their studies do not represent an in-depth analysis of the new phenomenon of drive-ins. Moreover, as drive-ins are so integrated in the store network and logistic systems, we are of the opinion that, in addition to the Key Success Factors of online sales per se, the question of the multichannel approach and its impact both on the overall package of e-merchant services and on logistics should also be addressed.

Exploiting the advantages of the multichannel approach
A number of researchers have examined the advantages of the multichannel approach both from the perspective of retail companies and from that of consumers (Hackney et al., 2006; Tanskanen et al., 2002; Vanheems, 2009; Wallace et al., 2004). In Table II, we summarise the most important of those advantages.

On the basis of this literature review, and in order to make a specific contribution to the study of the drive-in phenomenon, we are ready to begin our field study but, before moving on to an analysis of French grocery drive-in retailers, we will present the methodology underlying our study.

Research methodology: a multi-method qualitative study
The purpose of our research is to identify the key success factors in the French click and drive grocery retail sector. We have chosen the online grocery market because it is the sector in which the click and drive model is developing most rapidly, thereby substantially contributing to the development of the online market. In our research we intend to gain an understanding of why and how this rapid growth is taking place. As drive-ins are in an initial phase of development, and being unable to access data on corporate performance, we could not compare the critical success factors identified in

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<th>Objectives and potential advantages</th>
<th>Main functions concerned</th>
<th>Actions to be undertaken</th>
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<tr>
<td>Exploiting the capital of the brand for online sales</td>
<td>Strategy, marketing</td>
<td>The use of the same brand for stores and online sales</td>
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<tr>
<td>Recruiting new consumers</td>
<td>Direct marketing and customer relations</td>
<td>The implementation of an IT system covering all channels</td>
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<tr>
<td>Developing the frequency of customer purchases, particularly “mixed” customers</td>
<td></td>
<td>Prospecting and communicating online using information from loyalty cards</td>
</tr>
<tr>
<td>Encouraging customer loyalty</td>
<td></td>
<td>Coordinating buying with the stores’ purchasing centre</td>
</tr>
<tr>
<td>Increasing purchasing power</td>
<td>Purchasing and assortment policy</td>
<td>Exploiting customer databases and relationships with listed suppliers</td>
</tr>
<tr>
<td>Optimizing costs and diversifying logistical models</td>
<td>Logistics</td>
<td>Using stores for receiving orders, as pick up points for online orders, as a logistical platform for managing stock and home deliveries</td>
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</table>

**Table II.**
Synergies between online and off-line channels

Source: Authors
the literature with company results. Therefore, we adopted a qualitative research methodology to “tap” directly into retailers’ and consumers’ interpretations. We started our project with a review of the literature about e-buyer motivations, obstacles to purchasing, the components of the offer capable of meeting consumer demand, and Key Success Factors for major grocery “brick and mortar” retailers developing the click and drive approach. We used the results of the literature review to guide our approach to collecting data on critical success factors of the French click and drive model. Our approach consisted of:

**Data collection**

Our data sources consisted of:

- Semi-structured interviews of managers designed to encourage respondents to talk about their experience of e-grocery retailing. We interviewed managers who had opened a drive-in facility and managers who had decided to wait for the pilot to be successful. The managers interviewed came from different organisational structures in the French retailing sector: four from large integrated chains (Auchan, Carrefour, Casino and Cora) and three from two groups of cooperatives of associated independents (Leclerc and Intermarché).

- Focus groups consisting of between 12 and 15 e-consumers were set up in order to investigate the purchasing motivations and various perceptions of drive-in shoppers, and to stimulate comments and ideas about improving such services. The e-consumer respondents were chosen with the specific intention of observing a variety of food shopping behaviours, based on differences in gender, age, socio-economic group, housing location and internet use.

- Multiple secondary sources concerning critical success factors of drive-ins: surveys conducted by consultancy firms, data provided by market research firms, the professional press and published interviews with managers of drive-in companies and experts in the field.

The data was collected in three phases:

1. **Phase 1.** We conducted in-depth interviews with seven retail managers before using our findings to build up a representative picture of the growth and diversity of this e-commerce model. At least one manager for each of the main retail operators was also interviewed. Conducted by one or two authors who recorded and transcribed them in full, the interviews lasted 50 minutes on average. The interviews followed a semi-structured format (Mick and Buhl, 1992) to allow for questions and discussion to flow naturally. The interview guide included a number of questions focusing on the qualitative assessment of the main KSFs identified in the literature as well as a number of open questions designed to establish whether other KSFs were considered important and if so why. We divided our results into four sections: motivations and obstacles to purchasing on the part of drive-in customers; factors determining the choice of opening a drive-in and choosing a precise location for “attached” and “solo” drive-ins; the economic model of the format; and its key success factors.

2. **Phase 2.** We conducted interviews with two focus groups including a total of 27 consumers with a view to comparing their click and drive experiences with the
results of our “Phase 1” interviews. Of these 27 consumers, 13 were female and 14 were male. Most of them were university graduates in the 18-35 age group. A moderator chaired the interviews and an observer took notes. After discussing their perceptions and experiences of click and drive shopping, the respondents were asked to consider ways in which those experiences could be improved. Paraphrasing was used to clarify interviewees’ responses, and to ensure the interviewers understood the respondent’s response and allow for any follow up questions (Strauss and Corbin, 2008). The interviews were recorded and a summary was written up for each of the two focus groups.

(3) Phase 3. We reviewed the multiple secondary sources concerning the critical success factors of drive-ins to ensure a comprehensive understanding of the responses.

Data analysis
Analyses were carried out after each phase to identify themes, commonalities and patterns. After an initial, careful review of the transcripts, axial coding was conducted, whereby text was classified into emerging categories (Strauss and Corbin, 2008). In Table III, we present the example of the “solo” drive-in (i.e. independent pick-up points) phenomenon that we consider to be a core theme in our research.

As part of this process, the data gathered was triangulated with a view to checking its credibility and validity. Using the approach outlined by Jick (1979), “Weaknesses in individual methods were compensated for by the counter-balancing strengths of another”.

A number of methods for improving the quality of the research were adopted. First, data were triangulated from multiple primary and the secondary sources. Second, both researchers provided independent interpretations of the findings to ensure consensus. Where differences were identified the data was jointly reviewed again to arrive at a shared understanding. Third, all respondents (both store managers, and consumer focus groups) provided feedback on initial findings. These three sets of activities all reinforced the reliability and construct validity of our conclusions.

The key success factors of the main French click and drive actors
The click and drive model is gaining increasing support and making a particular contribution to the development of the Internet channel and online ordering. After an

<table>
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<th>Phenomenon</th>
<th>“Solo” drive-in development</th>
<th>Strategies</th>
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<td>Causal conditions</td>
<td>Time saving and convenience for the consumer</td>
<td>Intervening conditions</td>
</tr>
<tr>
<td>Context conditions</td>
<td>France (excluding Paris)</td>
<td>Consequences</td>
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| Using the same brand |
| Implementing a cross channel IT system and purchase policy |
| Limiting out-of-stocks |
| Reducing waiting time |
| Ability to select the best locations, to guarantee a diversified assortment, the same prices as in stores, quality replacement products and a warm welcome |
| High level of efficiency and efficacy development |

Table III. Axial coding of factors relating to drive solo implementation
analysis of the economic model of the drive-in model, we attempted to verify whether managers and users consider the KSFs defined in the literature relevant, and if there are other KSFs not identified in the literature but taken into consideration by managers and/or consumers.

The click and drive economic model

According to the managers we interviewed, all large retail companies entered the drive-in sector in order to adapt to the desires and behaviours of their clients, develop their turnover per customer, defend their trade area, and avoid having to deal with numerous regulations such as those required for opening new physical outlets or expanding existing ones. E-commerce with home delivery presents some of these advantages but according to the managers, logistic complexities and the high cost of home delivery (last mile problems) makes home delivery suitable to only the three or four largest French cities.

Managers believe that they have two options in terms of developing drive-in operations: either to attach the outlets to their existing network of stores, or to create new, independent pick-up points. The two models, the first “attached” to an existing store, the second a “solo” outlet, correspond to different strategic objectives: the first is defensive, the second more aggressive in terms of the competition. This is confirmed by a recent study of the sector (Nielsen, 2011). While attaching a drive-in to a store may facilitate logistical organisation, it also has the effect of increasing cannibalisation to the detriment of the store by between 10 and 30 per cent according to the managers interviewed. According to a manager at Leclerc: “This means that additional sales vary between 70 and 90 per cent”.

“Attached” drive-ins also make it possible to boost the trade area, while increasing the likelihood of customers living in the locality remaining loyal to the retailer. On the other hand, setting up a new “solo” drive-in reduces cannibalisation to the detriment of the competition and makes it possible to recruit new customers and gain market share. According to many managers, drive-ins located far from any other of their company’s outlets attract new customers and provide additional market share.

But logistical costs are higher and competition more intense in areas in which the store’s brand is less well known.

In both formats, by paying for “the last mile”, consumers contribute to the profitability of the service. For example, with twenty-four employees and 1,300 m² of storage area (including fresh and frozen items), one Leclerc Drive, which receives deliveries independently from the hypermarket and which accounts for 6 per cent of the store’s turnover, broke even in the first year and made a 3 per cent profit in the second. As a comparison, a profitability rate of 2 per cent represents a good year for the hypermarket.

Another experienced manager told us: “for a drive-in, investments can be recouped in four years, and the EBITDA rate can reach 5, much higher than a hypermarket”.

But sometimes, even the managers were unaware of whether the drive-in was really making additional profits; as long as they had the impression that they were gaining new customers rather than losing existing one they were happy.

According to one manager: “The turnover of the attached drive-in is included in the store’s turnover, so we can’t say how profitable it really is; but the drive-in saves us from losing clients to another retailer”. Other managers told the same story.
Developing broad market coverage rapidly
All the managers questioned agreed that those who arrive in the market early find themselves at an advantage in that they are able to select the best locations, thereby acquiring a resource that cannot be imitated. They all admitted that they were trying to beat their rivals to the best locations by deploying a strategy based both on defence and on conquering market share.

“If I hadn’t opened the drive-in, a competitor would have sooner or later, and I would have lost customers”, a manager said, reflecting a widely held view.

“The first company to arrive on the scene is in an advantageous position; if there are already a lot of competitors, cannibalisation will increase and it will be much harder to make a profit,” said another manager.

According to the managers, the urgency of the situation implies defining “an agenda, a retro plan, and a series of standardised internal management rules.” Everything should be designed to respond to a norm so that the model can be easily replicated and adapted to the clientele, both in terms of marketing – for example, the quota of own brands – and logistics – i.e. the number of lanes for cars.

The retailers currently considered to be ahead of the curve in terms of the development of the “pure” drive-in model are the Leclerc Group, which has opened 169 drive-ins (most of them “solos”) and the Auchan Group, which has opened 44 Auchandrive and 41 Chronodrive (all of them “solos”). Casino (113), Intermarché (44), Cora (24) and Carrefour (49) come next. Total turnover is approximately €1 billion. The Leclerc Group, which deploys a domination-through-cost strategy, has opted for both drive-in models: one attached to the hypermarket and, where possible, another, on the other side of town, designed as a “combat drive-in” or “offensive drive-in”, implanted in a high flow area often close to rival retailers. The Auchan Group defends its market share by attaching drive-ins with dedicated warehouses to its hypermarkets and counts on its solo “Chronodrives” to conquer new market share. More prudently, Carrefour and Cora have opened attached drive-ins and are currently testing the potential of solo models.

Identifying and understanding e-buyer motivations
Click and drive shoppers interviewed in the focus groups confirmed the main purchasing motivations identified in the literature.

Time-saving is frequently mentioned, sometimes in conjunction with the potential to shop at any time: “It means that I do not have to hang around at the check out in the store”; “I save a lot of time: it takes me only 10 minutes to order on the internet, and 5 minutes to collect the goods”; “I save time ordering at 12 O’clock; I do not have the kids to deal with”.

Reducing physical effort, especially in terms of in-store shopping, was occasionally mentioned: “After work, I do not want to spend my time rushing around a store”; “Thanks to the drive-in, I do not have to push a trolley up and down the aisles anymore”; “I began to click and drive when I was pregnant and, after giving birth, I continued with it so I didn’t have to trudge around the store carrying the baby”.

Shoppers were also impressed by the fact that they did not have to park up, walk to the store, do their shopping and walk back to the car, and had, instead, merely to wait for an employee to load up their purchases. Some of the retailers interviewed made the
same point: “The fact that customers do not need to get out of their cars is part of the drive-in concept”.

Useful, rational purchasing is often quoted as a positive aspect of the drive-in experience: “When you’re using a computer, you can change your mind; but that’s more difficult at the check-out. You save more, you just buy what you need”; “[With the drive-in] you aren’t tempted to buy stuff you didn’t plan on buying”; “[With the drive-in] I do not do impulse buying”; “At home I make a dispassionate choice”; “Buying on the internet, I’m less tempted to make impulse purchases than I am when I’m in a store, so I can control my spending more easily”.

The fact that the prices in the drive-in are identical to those in the store is also frequently considered a motivation to use the click and drive model.

*Exploiting the attractiveness of a store or a geographical area*

Knowing what consumers are looking for is vital to the managers choosing the best locations for drive-ins. A large number of managers have carried out studies on customer flows in their drive-ins. According to these studies, 50 per cent of customers visit the drive-in on their way to or from work. This is true of both kinds of drive-in and it is consumers living the furthest away who use the drive-ins most compared to their associated hypermarkets. According to these same studies, users of drive-ins are essentially economically active (most of them are women), aged under 42, and have a high level of academic qualifications. Couples with a child are a predominant part of the clientele of drive-ins. These results are confirmed by a sectorial survey undertaken by a market research firm, according to which the geographical area of attraction of a drive-in is closer to a supermarket than to a hypermarket: 80 per cent of a drive-in’s customers are no more than a fifteen minute drive away and the penetration rate is twice as much within a ten minute range (Hamelin, 2011).

In order to select appropriate sites, drive-in developers use geo-marketing techniques and take into account road traffic, population typologies, the buying power of people living in the area, rates of computer access, the level of local economic development, and broadband Internet coverage in order to predict potential turnover. Managers prefer to set up outlets in urbanised areas with at least 15,000 inhabitants, areas capable, *a priori*, of guaranteeing a break-even point of approximately 250 orders a day. In terms of supermarkets, drive-ins are generally attached to stores located in dynamic shopping centres, which attract a large number of motorists.

*Websites with a high quality of design and ergonomics*

Many consumers said they would like easier-to-use, more intuitive navigation features (the idea of a virtual shop was mooted), search engines enabling them to submit a list for which the search engine automatically seeks out the corresponding items, rapid access to information on out-of-stock products, assortments for specific events (Christmas, barbecues, parties), more organic products, lists of customer’s preferred items, and recipes.

Managers are convinced that the simplicity of the website and its ease-of-use are factors of central importance in terms of customer satisfaction and the quantity and quality of available information. But they also believe that no website so far developed has either all the functionalities ideally required for e-market transactions or has succeeded in optimising the functionalities that it already has, and that, in
consequence, e-customers do not always have an easy time of things. For example, according to the managers interviewed, while Intermarché.com is straightforward and easy to operate, users can encounter navigation problems. Others sites are easier to navigate but have a number of weaknesses, notably difficulties in setting up accounts and ordering items, both of which are relatively complicated tasks.

These assessments are confirmed by our focus group results: consumers emphasise the quality of the design of specific websites but do not (with one exception) judge the websites of the various companies mentioned in this study in a positive light. These unsatisfactory results are confirmed in a survey (Observatoire e-performance des cybermarchands) conducted in 2011 by an ergonomics agency (Yusoe in partnership with LSA). Only Leclerc’s website seems to meet with the approval of customers, a majority of whom express a desire to return to the site after using it for the first time. The websites of other operators encountered less success, with only a third of customers expressing the intention of using them again to make their purchases.

Choosing and managing an efficient logistic model

After defining their development strategy (“solo” or “attached”), operators test the most appropriate logistical model in order to reduce costs and minimise risks. While “solo” drive-ins require a dedicated warehouse, two different models can be applied to “attached” drive-ins: either a dedicated attached warehouse, or a pick-and-go store.

Independent (“solo”) drive-ins and “attached” drive-ins with a dedicated picking facility are generally considered as conventional stores (supermarkets or hypermarkets), and deliveries to them are made from regional retail warehouses. On the contrary, “attached” drive-ins with store-based fulfilment are considered to be a part of the store they are attached to and no separate deliveries are made to them.

The strategy designed to defend market share by means of pick-and-go in a drive in attached to a store is more popular with managers because, they claim, it involves less financial risk. According to a number of managers, setting up a “solo” drive-in with a dedicated warehouse requires a minimal investment of €4 million to build, plus land costs, while a standard “attached” pick-and-go drive-in requires an investment of between €130,000 and €300,000. Meanwhile, a group of independents suggested the possibility of an attached drive-in model with no order or payment stations for an initial investment of around €50,000.

The managers we interviewed were divided in terms of their views on the efficiency of in-store picking above a certain number of daily orders, estimated at around a hundred per day (150-200 during the week-ends), and of a sales area threshold, with supermarkets better adapted to picking than hypermarkets. Additionally, the model requires geo-localisation software that has made it possible to reduce the time required to prepare orders (from an hour-and-a-half in 2009 to 35 minutes in 2011 for an order of between 50 and 60 items).

A substantial number of managers expressed a preference for this dedicated warehouse model. IT systems associated with the model make it easier to deal with peaks in activity, and, likewise, to manage both stock issues and journeys made by pickers in real time. The automation of warehouses reduces staff outlay and cuts order preparation time to around twenty minutes.

For attached drive-ins, some distributors develop two logistical models, while others opt for only one. Leclerc Group and Auchandrive have gone for the dedicated
warehouse model. Carrefour, Casino and Intermarché have opened drive-ins attached to pick-and-go stores.

“Break-even is achieved at around 120 orders per week with an order preparation time of 35 minutes”, said a manager of the firm with the smallest example of this last type of attached drive. Another manager with the best performing drive in the same group spoke of 400 orders a week and a maximum of 110 in a day.

According to the managers, this model has the disadvantage of interfering with the needs of in-store customers. Consequently, brands attempt to modify picking hours, for example by switching them to evenings or mornings when there are not customers in the store. But in this case, items only become available a day after orders have been placed for them, rather than a mere two hours later.

Cora has developed attached pick-and-go drive-ins in “reserved” areas and a specific management system for in-store grocery pick-ups.

Managers base their choice between the two models largely on the estimated volume of activity, which defines costs, feasibility and return-on-investment.

Offer a variety of assortment, adapted to the consumers’ needs
Generally speaking, the storage capacity of dedicated warehouses and the potential for pick-and-go in hypermarkets and local supermarkets limit drive-ins to a number of items – between 6,000 and 13,000 – 90 per cent of them food items. These figures, which are inferior to those of hypermarkets but similar to those of large supermarkets, can have the effect of compromising the strategy designed to foster the loyalty of customers, who must return to the store to complete their purchases. But customers declare that, while they no longer have the advantage of saving time, they nevertheless believe that it is easier to make reasonable purchases and avoid impulse buying.

In terms of the typology of products purchased, all operators confirmed that the needs of drive-in users differed substantially from those of customers using stores, with the first buying larger products often associated with day-to-day use. By adapting their offer in consequence, operators generate a purchase basket, which is, on average, twice as valuable as that of a physical store. Furthermore, customers declare that they would buy more fresh produce if they were convinced of its quality. Managers recognise that a deeper and wider product range – with more fresh products, particularly fruit and vegetables – would make it possible to generate larger purchase baskets and increase the frequency of purchases and customer loyalty, but admit to still experiencing logistical difficulties with these categories of products.

Some managers consider local and regional products, and own brands critical for success. The managers of the associated groups (where assortments are partly selected at the local and regional level) said that their offer of such products is particularly popular with customers and enjoys a high degree of success. Some managers consider own brands to be an important factor in lowering the perceived price of the offer. Many of them said that, in their drive-in assortments, they offer a higher percentage of own brands than in hypermarket and supermarket assortments. “This is particularly important in low purchasing power areas,” one manager said.

Defining the same price as in stores
All the consumers in the focus groups consider price to be a factor of central importance in the choice of this format. Those who use drive-ins only do so on
condition that the prices are not higher than they are in stores. Managers are convinced of the existence of this constraint and of the fact that not delivering products to customers’ homes and not charging for preparation costs reduces costs and makes it possible to price items at the same level as in stores. According to the results of a study conducted by the Nielsen Company, price positioning is, in effect, substantially the same in drive-ins and stores. Thanks to this positioning, the drive-in is a response to the main obstacle to online purchasing: higher prices. This price positioning is particularly marked at Leclerc, a brand that, to this end, has chosen to over-represent, compared to its physical stores, its own brand items in its drive-ins.

Consumers want to find the same promotions online that they find in stores. Managers are aware of this, and most brands run promotions for drive-in customers. However, not all of them manage to unify their offers. For example, Leclercdrive.fr offers immediate discounts as well as Leclerc coupons, which can be added to the points total accumulated on the loyalty card. Auchandrive offers the same promotions in its stores and its drive-ins, while Intermarché is still attempting to resolve the technically complex problems that need to be overcome in order to achieve the same result.

*Guaranteeing a high quality of service and reception*

For most of the consumers interviewed in our survey, the quality of the welcome accorded to them by members of staff is extremely important in terms of overall satisfaction. This quality is closely linked to teamwork and the friendliness of deliverymen and can vary from one drive-in to another since staff can quickly tire of “doing the shopping” for their clients all day long. To compensate for the staff turnover generated by this repetitive aspect of the job and by the fact that such work is essentially uninteresting, and to maintain an acceptably high level of service and reception, drive-in managers try to diversify the tasks for which members of staff are responsible. As well as preparing orders, employees must take reception of products, clean the premises, negotiate with members of the public making various claims regarding purchases, deal with last minute stock shortages, and deliver items.

Insofar as other elements of service are concerned (waiting time, replacement products), in most cases, customers can come to the store two hours after having placed their order on the drive-in website and wait approximately five minutes for their shopping to be delivered to the boot of their car. The “picker” who prepares the order is trained to offer two or three replacement products in situations in which certain items are out of stock. At Auchan, these articles are products of an equal or higher quality to those ordered and any difference in price is borne by the retailer. The optimisation of upstream logistics also depends on an electronic reader used by the picker to check stock levels and enter out-of-stock information on the website.

“Order preparation time is a real race against the clock”, said the manager of an “attached” drive-in. “Preparation time (half-an-hour to forty minutes) is really long when you think that customers have to be able to pick up their items two hours after ordering them.”

One manager told us that, in a “solo” drive-in, “preparation time can be as short as twenty minutes”, which means that a higher quality of service can be provided, “but you have to be able to do things smoothly, dealing with peak-times by ensuring that you are always able to load a car in five minutes.”
Exploiting the advantages of the multichannel approach

Consumers state that they would like to obtain the same advantages online as they do in the store (loyalty points providing gifts and reductions). In order to attain this result, managers attempt to implement IT systems covering all channels and online prospection and communication systems using information gleaned from loyalty cards. Managers are aware of the importance of this approach, but also know that it is difficult to implement rapidly. It seems that only Auchan has succeeded in merging loyalty card databases for the different formats and that other retailers are still struggling to exploit synergies between channels. For associated retailers, the road will be longer, since customers can only spend the credit on their cards in the stores that issued those cards. On the contrary, all companies coordinate e-commerce buying with the stores’ purchasing centre.

Since price is a key success factor in the click and drive model, what is important is not so much the degree of coordination with the purchasing centre but the centre’s buying power.

Managers also explore a number of potential new synergies not considered in the literature. One frequently tested index includes a greater emphasis on drive-ins than stores in the sale of voluminous products (e.g. washing up liquids, washing up powders) and frequently purchased products (groceries, etc.). Consumers seem to like to have such items directly delivered to the boots of their cars, since they buy more of them in drive-ins than in stores. This process frees up more space for demonstrations and wine and food tasting in stores, thus improving merchandising and making it possible to present the offer in a more “theatrical” way. Thus, according to managers, drive-ins and stores complement one another.

Discussion and managerial implications

In light of our comparative analysis of the literature and the comments generated in our interviews of French groceries retailers and consumers focus groups, we are able to propose (Table IV) a classification of key success factors in the click and drive sector. The results of our field research confirm the main KSFs identified in the literature. Furthermore, we encountered a genuine consensus among the main operators concerning the nature of the core competences required to obtain competitive advantages.

However, we also discovered a number of differences between the views of managers in this regard and some new elements not previously identified in the literature.

Insofar as consumers are concerned, price is a factor of central importance. According to our results, consumers consider that, in order for a drive-in to be attractive, the prices of comparable brands must be as low as possible, certainly no higher than the price of the same brands in physical stores. Customers are not ready to pay a price premium in order to be able to collect the items in the drive-in instead of buying them in-store. They just like to have a choice between the two options at the same price.

We also found that customers see the kind of reception they receive as a very important factor, and that a number of synergies in terms of assortment are particularly useful in view of attracting new customers and increasing turnover.
Insofar as managers are concerned, the ability to develop a wide market coverage rapidly and to exploit the attractiveness of a given store or geographical area with this new service is considered to be of vital importance in terms of gaining market share and increasing profits.

Investing in selected drive-in locations is a cheaper way for retailers to expand their area of coverage than investing in new outlets. Moreover, the first retailer to develop a drive-in service in a given trade area is able to generate a higher turnover and to obtain e-buyer loyalty more effectively than those that follow.

More mobile shoppers will continue to use drive-ins and eschew conventional stores when drive-ins are more convenient. Such customers will probably shop in an increasing number of different types of outlet, depending on their place of work, their place of residence, their vehicle use, the products on offer, etc.

There are many implications for retailers. In order to be both rapid and efficient, thereby keeping ahead of the competition, brands must schedule the steps required to open a drive-in in advance (administrative measures, technical aspects, human resources issues, and advertising).
In order to satisfy e-buyer demand and gain a competitive edge, drive-in operators should provide customers with an ergonomic website rich in visual and technical information. The website should feature numerous functions, including natural, intuitive navigation features (a virtual shop, for example), automatic search engines enabling customers pressed for time to submit a list for which the search engine automatically seeks out the corresponding items, immediate access to information on out-of-stock products, baskets for specific events (Christmas, barbecues, parties), organic products, lists of customer’s preferred items, and recipes. These improvements should be concerted and gradual; customers very quickly become attached to the ergonomics and contents of a particular site. Finally, e-merchants should advertise the click and drive service and explain how it provides customers – through all its associated services – with a number of advantages, while at the same time downplaying any factor that may inhibit its adoption.

According to our results, in order to develop real synergies between physical outlets and Internet channels, grocery retailers should continue to improve the reputation of their brand, make their positioning more coherent and deploy an integrated strategy of marketing relationships. A customer relations policy based on the inter-channel integration of databases and loyalty cards linked to a real segmentation tool would provide more detailed information on customers and enable companies to adapt their assortment and communication approaches to each channel. Merging databases eventually requires management to persuade marketing and Internet teams to work together successfully.

More generally, and taking into account the cost constraints associated with logistics, retailers would probably be well advised to explore other ways of segmenting their activities, especially in view of the fact that drive-ins are more suitable for shoppers buying basic grocery products and produce in areas which are not densely populated.

On the other hand, mainly due to price differentials with physical stores, the home delivery of supermarket-type grocery assortments is rather more viable in large, densely populated towns and cities with substantial numbers of high-income customers. Home delivery is also suitable for speciality goods, purchased in smaller baskets (Goethals et al., 2012).

There are also implications for planners. One of the reasons why retailers develop drive-ins is that they are not subject to planning restrictions, and no authorisation is required to open them. However, building permission is required for outside facilities, particularly canopies (which serve as an emblem of the drive-in and on to which the brand name is attached). But new drive-ins may have the same effect on competition and the development (or exploitation) of a dominant position as new stores or the physical enlargement of existing stores. If so, then planners should perhaps be subject to the same regulations when it comes to opening new drive-ins as they are when increasing the surface area of existing stores or opening new ones.

Lastly, there are a number of logistical implications. The time required to prepare orders is an important factor in operational costs, which should be kept to a minimum in order to control prices and improve margins and profitability. But preparation time should also be reduced as much as possible in order to provide an improved level of customer service. The efficiency of logistical teams can be improved by updated software, and staff in those teams should be motivated as effectively as possible.
With this study – which has confirmed and also expanded on the results of the literature review, and the recommendations that go with it – we hope to be able to help grocery retailers achieve their click and drive development objectives and counter the stagnation associated with traditional retail formats, especially hypermarkets (Picot-Coupey et al., 2009).

Our research has a number of limitations, primary amongst which is the restricted size of our sample of managers and consumers, which means that our results cannot be applied generally. In order to achieve that aim, a quantitative method applied to a much larger number of respondents should be used. Another limitation is that demand for this new type of e-business, the click and drive, is currently uncertain, and that we were unable to find – and did not have time to complete – a prospective analysis. Also, we were unable to find any accurate data on profitability or return on investment concerning this business model. A comparison of the real profitability (real data are difficult to come by) of the click and drive model and a more precise evaluation of the advantages of an integrated multi-channel approach would enable us to present more accurate results. Lastly, we have limited ourselves to an analysis of the French click and drive model, which is much more developed than any other at the present time (2012).

References


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