

SECTION 4. Practitioner's corner

Gilles Paché (France)

Logistical service in the e-grocery industry: the reality beyond the hype

Abstract

When ordering online on a website, e-consumers wish to acquire one or several products in satisfactory conditions. This consuming experience, like in-store shopping, will enable them to assess e-service quality, depending on their level of satisfaction. The maximization of the logistics service quality still too often relies on three main components: (1) order timeliness (reception of products within an expected amount of time); (2) order accuracy (management of the online order to e-consumers' exact specifications); and (3) order condition (product delivered free from any damage and decay). But recent research shows that e-consumers take other dimensions into account to assess their level of satisfaction and their desire to buy again on a website, particularly evaluating the design, information accuracy, functionality, and user-friendliness of the website. In brief, logistical service is just an element of the e-distribution mix among others, and its significance is to be put in perspective in the business plan of food e-tailing companies. A case study on the major French e-grocers presents preliminary findings on the manner in which they consider the building of their package deal of services as a source of differentiation.

Keywords: e-grocery, France, logistics, online marketing, retailing.

JEL Classification: M31.

Introduction

Within fifteen years, B2C e-commerce has become an all-important matter for the scientific community, even though the sales volumes of this new distribution channel remain marginal. Several dozen articles appear on the subject every month, adopting the perspective of information technologies, or adopting the marketing perspective (possible special properties of e-consumer behavior, speculations on the coexistence of the electronic channel with traditional channels, etc.). In this copious literature, a growing number of works review the logistical aspects of B2C e-commerce or, more recently, the functioning of e-supply chains. The general opinion is that logistical performance is a direct condition for the success of B2C e-commerce, particularly when e-consumers order regularly, and no longer occasionally. This explains why e-grocery logistics is in the limelight on both sides of the Atlantic: an online supermarket offering several thousands of fast-moving consumer goods will eventually build consumer loyalty – this is the theory – only if it is capable of delivering on time and at an acceptable cost, with a minimum of errors in order picking.

It would be obviously stupid to deny the importance of logistical performance in the development and success of e-grocery retailing. There is nothing original here since logistical performance has also been playing a key role for thirty years in the development of bricks-and-mortar and traditional home shopping retailing (Filser et al., 2001). But it seems interesting to go deeper and find out whether e-grocers really place logistical performance at the

core of their strategic concerns, as can be read in the trade press, or whether, on the contrary, they consider that it is only one element among others in their online marketing – not to be neglected of course – but not to be overemphasized. The issue is important because in the end, it is thanks to an effective and balanced e-distribution mix that e-grocers will probably build a sustainable competitive advantage.

A number of recent works, both in the field of logistics management and of services marketing, confirm the relevance of this approach. It appears that the attractiveness of a website is undoubtedly assessed on the basis of a complex offer of services associated with the products, and it is not certain that logistical performance is always considered as an essential service by e-consumers (Kotzab and Madlberger, 2001). On the contrary, other services, linked to functions of advice and financing, may come first during the decision-making process. My objective is not to contribute to the debate through an in-depth survey of e-consumers, but rather to assess how e-grocers organize their online marketing to take this emerging reality into account. I further wish to show where a large part of current research on e-grocery logistics is on the wrong track by focusing on issues of optimal monitoring of product flows, and by conveying the idea that logistical performance is a sufficient condition for the sector's firms success.

Although this article studies a conventional theme – the place of logistics in distribution channel management – it takes an opposite view to many works. It questions the real importance of logistical performance, or rather puts into perspective its influ-

ence as a source of competitive advantage. This analysis has already been made in France by Lichtlé et al. (2002) in the context of hypermarkets, and I now wish to extend it to online shopping, which is particularly sensitive to the issue of final delivery efficiency. This article is structured as follows. In the first part, the prevailing approach of e-grocery logistics is reviewed, then the criteria that are taken into account in this approach are described in reference to current works on the notion of the package deal of services. In the second part, the preliminary findings of a case study on four French e-grocers are presented; the case study leads to the analysis of their methods of managing services associated with products – including logistics – and of whether these services represent a favored means of differentiation for them.

1. Theoretical background

The sale of convenience goods by the Internet, known under the generic term of e-grocery, is experiencing an appreciable development in many European countries, even if the online channel still remains marginal compared to the traditional in-store channel. The act of physical shopping is still often “a socially valuable and personally relaxing experience” (Jones et al., 2002, p. 231), but a new generation of highly educated and professionally hyper-active young consumers find an increasing interest in online transactions for convenience goods which do not create any “retail therapy” buzz of in-store shopping. Numerous works now focus on e-grocery, systematically emphasizing the importance of logistics – the order fulfillment and order delivery processes – as key factors for the success of e-grocers (Durand, 2007). Of course, delivering the right product at the right time at an acceptable cost is an important stake. However, it should not be assumed that logistical performance alone will always exert a lasting power of attraction on e-consumers leading them to remain loyal to a website. In other words, are we really sure that the logistical performance associated with a website creates a source of competitive advantage?

Of course, e-consumers do not buy a product, but a product plus the “service envelope” accompanying it (Ricker and Kalakota, 1999). Logistics is obviously one of those services, but not the only one. Logistics is but one component of a package deal of services, the quality and the coherence of which are crucial elements that will condition the positive or negative view of a website by e-consumers. Through the package deal of services, e-consumers try to find a turnkey solution to their problems, for example limited opportunities for in-store shopping because of a busy work schedule or occasional or

lasting health problems making it difficult to regularly handle heavy or bulky products (Morganosky and Cude, 2001). Here again we find the bases of a strategic service vision developed more than twenty-five years ago in academic literature (Levitt, 1980), which retains all its relevance in a computer-mediated environment.

To state that logistics is one element of a package deal of services does not seem very original, at least when referring to works conducted on services marketing (Bonet and Paché, 2004). They note that consumers acquire not a product or a service, but a more or less complex “goods-service”: any service relies on material elements which make service construction and delivery possible, any product is finally assessed in function of the service rendered. This is why it seems pertinent to reason from the generic concept of services associated with products: “Services associated with products are services supplied in complement of a product so as to optimize their use and increase their value for customers... Expected by customers, they induce the demand for products and are the source of differentiation in firms’ offers” (Furrer, 1997, p. 99). The interest of Furrer’s (1997) analysis lies in clearly dividing the services associated with products into two categories.

The first category consists of *value-added services*, relatively independent from the products they accompany and representing a sort of bonus (for example, the possibility for consumers to use a call center 24 hours a day seven days a week). The second category consists of *services barriers to entry*, an integral part of the basic offer and which must absolutely be offered under penalty of losing customers (for example, free parking space offered by large retailers). This approach is completely applicable to online purchases on the Internet. In addition to a simple product as tangible goods, e-consumers will surely investigate the overall quality of the complex service offered to them, associating after-sales support and warranties. According to Kotzab and Madlberger (2001), the package deal of services refers to three complementary dimensions – or functions – that firms should attempt to develop equally:

- ◆ a product assortment function;
- ◆ a logistical function; and
- ◆ an advice, communication and financing function.

There is no doubt that logistical performance is one of the services associated with products, but food e-tailers must not neglect other at least as critical components, such as payment terms and conditions, the number of product lines offered or online advice. In a way, this echoes the notion of the e-marketing

mix proposed by Kalyanam and McIntyre (2002), summed up by the acronym 4Ps + P²C²S³, where 4Ps stands for the traditional marketing mix, P² stands for personalization and privacy, C² stands for customer service and community, and S³ stands for site, security and sales promotion. Although Kotzab and Madlberger (2001) do not use the notion of e-marketing mix, this is what they analyze. It is evident from this that a strict process of marketing audit should make it possible to put into perspective the importance of services that the trade press often presents as being value-added (security, customer service, etc.), when they perhaps only serve as barriers to entry. It should be noted that some current academic studies ask a rather similar question: to what extent does an efficient logistical service contribute to the loyalty of e-consumers to e-grocers? For the time being, no clear answer has been given. A qualitative study conducted with the key informants of ten retailers in a major metropolitan area located in the USA shows for instance that they do not really know much about e-consumers' needs and wants in terms of Internet shopping (Cowles et al., 2002).

In the end, food e-tailers need to imagine a balanced e-marketing mix – whose variables reinforce themselves mutually – rather than attach themselves to the sole best logistical service possible. It is quite clear that e-consumers look for the performance of the online shopping transaction itself (Park and Kim, 2003), a performance that will come from a set of closely interactive elements. The food e-tailers' objective will be to offer the highest delivered value, i.e. the most important differential between the total benefits to consumers and the total costs of the e-marketing offer (Kalyanam and McIntyre, 2002). For example, the promotional promise of a home delivery within a narrow time window to avoid long waiting times at home will require an order fulfilment and an order delivery capable of fulfilling this promise. If this is not possible, it would be better to modify the content of the promotional promise: a well-known rule of logistics management, sometimes forgotten in the computer-mediated environment. This is the main paradox of e-grocery logistics: it is most often considered as the food e-tailers' main key factor of success, whereas it is only one of the (sometimes) secondary components of their package deal of services. A comparative study conducted on the package deal of services of the major French food e-tailers seems to confirm this point of view.

2. Main results of the case study

In 2007, e-grocery in France represented a little more than €240 million in turnover, or barely 1% of all food retailing in the Greater Paris area, the main geographical area for e-tailing coverage. The value

of the purchase basket on the commercial Internet is currently about 100 €, i.e. twice as much as the value of an average trolley in a traditional hypermarket. These figures point to the significant potential that e-tailing represents but also to its slow startup due to much psychological and economic hesitancy. To assess the nature of the package deal of services in French e-grocery, I conducted a comparative analysis on the model of previous research, particularly Kotzab and Madlberger's (2001) research in Austria, and de Haan et al.'s (2002) in the Netherlands. I selected the four major French e-grocers, that the trade press thought representative of current trends. These are, by order of seniority, www.telemarket.fr (Monoprix), www.houra.fr (Cora), www.ooshop.com (Carrefour) and www.auchan-direct.com (Auchan).

Methodologically speaking, data were collected at three levels: first, from the trade press specialized in retailing and B2C e-commerce; then from a number of websites supplying factual data on the sector; and finally, from the four e-grocers' websites, so as to establish a detailed comparison of the package deal of services offered. This approach is quite similar to that adopted by Kotzab and Madlberger (2001) in their study on Austrian e-tailers. But it differs from it, and categorizes the information collected according to the conventional classification of the variables of the distribution mix: location – depending on a catchment area – and order delivery, product assortment and associated services, and price policy. Secondary data were favored, not because I think that since they are published, they have a truth status superior to that of primary data, but because using primary data implies a complex system of interaction within the research field investigated.

2.1. Location of catchment areas and order delivery. E-commerce produces commercial transactions that do not necessarily require a physical network of points of sale, except when it is decided to use stores for order picking on the model of the British store Tesco. But all e-tailers, without exception, must provide distribution infrastructures, either operated by themselves or a logistics service provider (LSP), to ensure final deliveries to e-consumers' homes. The definition of their catchment area is thus based, at the end of the day, on considerations of a logistical nature such as: location of fulfilment centers, home delivery costs, and ease of urban accessibility. For the time being, the French food e-tailers have chosen their own logistical solutions, without trying to join forces to implement shared local distribution centers, for example. As a consequence, there are already serious problems of congestion in urban areas. This is the case in Paris, where increasing deliveries from small shops and deliveries to e-

consumers' homes have led the Mayor to take very unpopular measures to limit the movements of delivery trucks.

After studying the companies in my sample, it is possible to roughly sketch the choices concerning catchment areas and logistical organization. All are based in Paris and its suburbs. For more than five years, Ooshop has been trying to enlarge its territorial cover, but with mixed results. Since the end of 2006 and the beginning of 2007, Ooshop is present in seven French cities, in Lyon and Bordeaux particularly, and relies on an LSP (STEF-TFE)'s competence in the management of fresh products. For its part, Houra is present in 27 French "*départements*" (administrative regions). The dominant pattern is to prepare orders in a reduced number of specialized distribution centers (between one and three per online food distributor, sometimes relieved by local platforms, in Houra's case for example). In brief, unlike Peapod in the USA, which gave itself the means to cover a large territory by quickly acquiring a large number of distribution centers, French food e-tailers remain the prisoners of small-scale logistics. As they chose minimum risk-taking, the issue for them is not, at least for the moment, to know whether logistical performance is – or is not – a source of sustainable competitive advantage. Their thinking seems more "trivial": will we be able to deliver to our e-consumers from day to day?

An examination of the articles published in the trade press in the last two years shows that no strategic thinking has been given to the conditions for building a combination of service provision and delivery between the delivery man and the e-consumer, with, for example, the implementation of training programs (front office personnel's motivation and involvement). The organization of delivery rounds is controlled by precise criteria of optimization only, in order to reduce logistical costs, and customers appear as anonymous "delivery points" in the geographical space around the distribution center or the store. This is particularly true when an LSP is used, which then combines the logistics of several manufacturers and retailers, without succeeding in bringing a customized service. In addition, customers must be prepared to stay at home for two to four hours (depending on the websites) to receive their online orders, the e-grocer's objective being to have enough latitude to manage the hazards of traffic jams, among others! In other words, e-grocery logistics is very similar to the bricks-and-mortar logistics implemented to supply super and hypermarkets.

2.2. Product assortment and associated services.

In the field of food-oriented distribution, a conventional hypermarket offers between 20,000 and 50,000 products depending on its size and a super-

market between 5,000 and 6,000 products. What about e-grocery industry? My field study points to a relative similarity of product assortment strategies among e-grocers, and consequently an almost complete lack of differentiation at this level. Except for Houra, with an offer of 50,000 products, the other websites opted for a narrow – and standard – assortment of 3,000 to 7,000 products essentially composed of convenience goods. French food e-tailers are more similar to convenience stores than to a hypermarket, even if it should be noted that a service policy leads them to include fresh and frozen products, which represents a major logistical challenge. According to GroceryWorks studies in the USA, the relative narrowness of the product assortment should not be a weakness in itself, as e-consumers recurrently buy the same few products (Tanskanen et al., 2002). But would not a variety seeking behavior modify the rules of the game?

It could be thought that e-grocers try to distinguish themselves from others through the services they offer to e-consumers. Kotler et al. (2006) underlined the strategic importance of pre- and post-purchase services for e-commerce (website ergonomics, delivery by appointment, etc.) and associated services (e-consumers' information, online advice, etc.). The websites analyzed generally offer the same pre-purchase services, even if they differ slightly in matters of ergonomics, average order placing time, presentation and "staging" (e.g. special promotions events). But the differentiation among French food e-tailers lies in several post-purchase services, with different order and delivery methods, for example the existence – or lack of – delivery by appointment or an imposed minimum order quantity.

2.3. Price policy. The third variable of the traditional distribution mix, price, seems a great concern for e-grocers. In in-store sales, numerous studies show that consumers have an imperfect knowledge of price levels, and that they compensate for a perceived difference in prices by a number of guarantees or advantages such as the proximity of a point of sale. This reasoning is interesting and probably works in favor of food e-tailers. The early studies on price strategies in e-business stressed that the majority of purchases is made on websites that offer e-consumers guarantees such as transaction security or logistics reliability rather than on websites offering the lowest prices. But a policy based on the combination of "high service-low price" may be considered, and this would confirm the relevance of the emerging paradigm for successful global retailing identified by Rosenbloom and Dupuis (1994).

My comparative analysis confirms that, with the exception of the hyper-competitive Paris and

Greater Paris area, French food e-tailers, sheltered by their respective regional monopolies, do not really compete over prices; undeniably, value creation for e-consumers does not lie in price offers, the situation being comparable in the UK online grocery industry (Bevan and Murphy, 2001). Instead they promote the convenience aspects of online purchases and home deliveries to justify (minimal) differences in prices between those displayed in their stores and those on their websites. But delivery costs remain reasonable, varying from 1 to €14 depending on websites, delivery times and locations, and order size. According to *Le Monde Interactif* of September 23, 2001, the price invoiced to e-consumers is only half the logistical costs paid by food e-tailers, and the situation has not really changed since then. One of the possible explanations is that while e-consumers accept paying a small supplement on products, in exchange for guarantees and services offered to them, they refuse to be charged for what appears to them to be a seller's expense.

3. Discussion

The comparative analysis of the major French e-grocery websites has produced a preliminary inventory and makes it possible to propose a few directions for thinking on the manner e-grocers position themselves on the market. In my opinion, it seems possible to distinguish two emerging business models, that are distinguished from one another at the opposite ends of a continuum:

- The *first model* is represented by Telemarket. Their product assortment is deliberately narrow (3,000 products), with a strategy of proximity prioritizing a few targeted catchment areas. This enables them to offer significant guarantees to e-consumers, particularly in terms of short delivery times and delivery reliability.

- The *second model* is represented by Houra. Here, the product assortment is both wide and deep and similar to that of a conventional hypermarket. The geographical coverage is large, and consequently, adhering to a high and reliable level of consumer service is a problem (longer delivery times, significant occurrence of stock-outs during orders, etc.).

The two other e-grocers lie in between and try to manage in the best possible way the marketing and logistics constraints generated by selling on the commercial Internet. When examining their offer, it seems that their differentiation strategy lies more in aspects of service (delivery times, diversity of time slots offered to e-consumers, minimum amount of order, etc.), than on an aggressive price policy or the diversity of product assortments, coupled to their

“staging”. In a market in the middle of the structuring process, far from its maturity phase, it is urgent to develop a logistical system capable of fulfilling e-consumers' expectations on delivery service in the best possible way. Extending the product assortment is not on the agenda, in clear opposition to some of the usual strategic prescriptions found in academic literature (Vergnion and Montreuil, 2001).

What conclusion can finally be drawn on the manner French e-grocers manage their e-distribution mix today? Are they looking for a balanced development of the package deal of services or are they concentrating on a few key factors only? For the time being, it seems that the second option has been chosen as the strategic direction. Of course, the websites reviewed sometimes differ through their ergonomics and user-friendliness, an aspect often highlighted in the comparative analyses in the trade press. But nothing shows that the potential diversity of the assortment components is perceived as a competitive “weapon”. This is also true for location – most firms try to cover the same highly urbanized catchment areas – and price policies, that are relatively similar. The favored variable is undeniably delivery service, considered as a *service acting as a barrier to entry*, in Furrer's (1997) terminology. This is quite clear in each website when the services associated with products are analyzed, particularly in interviews given to the trade press. Although factors related to payment, online advice or interactivity do not seem completely neglected, it must be admitted that delivery service, at the lowest cost, remains managers' first obsession, as if the priority objective was to reassure e-consumers on the reliability of the organization provided by e-grocers.

But nothing shows that logistical service quality is perceived as a source of sustainable competitive advantage; our results partially accord with those of Teller et al. (2006): in their view, in grocery retailing, price and product assortment strategies are the elements first influencing consumer behavior, not home delivery service. The main question for top management is to mobilize the most suitable logistical resources to reduce the level of dissatisfaction of e-consumers, not to increase their level of satisfaction, for example with greater flexibility in the management of time windows. Research conducted on e-grocery logistics in France highlights purely technical aspects and wrongly neglects marketing dimensions (Marouseau, 2005; Durand, 2007). From this point of view, it is revealing to note that some French e-grocers, for security reasons, take care to anticipate their own potential malfunctions by promising to reimburse invoiced delivery costs in the case of product stock-outs or failure to meet the time slot required by e-consumers... with the result

that they know nothing of their reaction to delays and stock-outs!

Currently, e-grocery logistics are driven by the company, depending on the organizational patterns trying to reduce operating costs without impairing service quality too much, and it seems unlikely that e-grocery logistics driven by the customer will be adopted within the next five years. This is where the major paradox of my exploratory field study lies. French e-grocers seem to be aware that the capacity and efficiency of their logistical system directly condition the potentialities for growth in the market. The e-grocery sector is a niche market today, for lack of something better, knowing that the decline of the hypermarket format and a number of socio-economical developments should open interesting development perspectives, even if some observers remain cautious for the time being. For this to happen, a significant investment in logistical infrastructures will be indispensable, but it may be to the detriment of other important elements of the e-distribution mix. The result is a surprising (and disquieting) wait-and-see attitude among French food retailers who in the past were renowned for dynamism.

Conclusion

Studies on e-grocery, and more specifically on e-grocery logistics, open up interesting perspectives for the analysis of distribution channels. Several angles of approach could be considered: a technical approach, focusing on the modalities of optimal delivery to e-consumers (store picking vs. warehouse picking), a socio-political approach, focusing on the implications of e-commerce development in urban areas, or a strategic approach, defining the

firms best suited to manage the supply chain. Without ignoring the interest of these different approaches, each bringing a particular light on e-grocery logistics, I chose yet another angle of study, that of the importance accorded by e-grocers to logistical performance in their online marketing strategy, or more exactly of its place inside a much larger package deal of services. A literature review shows that the importance of logistical performance is perhaps less great than is generally thought, and that a better way of gaining e-consumers' loyalty is through "relationship logistics".

To develop this assumption, I conducted an exploratory study of the main French food retailers who have diversified into e-grocery activities. The objective was to assess whether they have built an effective and balanced e-distribution mix integrating innovative logistical organizations to deliver to e-consumers, that are at least as efficient as the logistical organizations responsible for delivering to stores. The preliminary findings of the exploratory study indicate that this is definitively not the case for the time being. E-grocery logistics remains small-scale, including for the second largest food retailer in the world, the Carrefour group. French food retailers are unable to duplicate and adapt their traditional logistics, and it must be admitted that processes of organizational learning have failed so far. Beyond this pessimistic statement, our research will obviously have to be continued to understand the existence of blocks within the development of efficient e-grocery logistics, and to find how to overcome them rapidly, if the "homeland of the hypermarket concept" is not to be soon conquered by better armed foreign firms.

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