E-commerce and encroachment: evidence from French franchise networks

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**Abstract:** Encroachment is a critical problem in franchise networks either between franchisees or between franchisees and the franchisor. Internet increases the risk of the latter situation when the franchisor offers the opportunity to consumers to buy online. We show with a logistic regression in this paper that the higher the proportion of franchised units, the lower the presence of transactional websites in franchise retail networks in France. Through two cases of French retail companies we strive to envisage solutions to this problem.

**Keywords:** click and collect system, encroachment, franchising, Internet, retail networks.
1 Introduction

After a period of errors and tries sanctioned by a deep economic crisis at the beginning of the new millennium, e-commerce growth seems to be now a strong reality. It has given birth to some successful multichannel strategies even though most of them are often difficult to implement and to make profitable (Achabal et al., 2005). Passing from retailing to e-tailing despite former warnings (Calkins, Farello and Smith Shi, 2000) and the development of new technologies which make virtual various products have sometimes jeopardized retail companies, in specific markets like books and records: it was recently the case of Borders (Ovide, 2011) in the USA and Virgin (Huijgen, 2013) in France.

The marketing literature is more prolific to determine e-shopper’s profile (Nicholson, Clarke and Blackmoore, 2002) and their performance (Kumar and Vankatesan, 2005) despite specific behaviours (Balasubramanian, Raghunathan and Mahajan 2005; Schramm-Klein, Swoboda and Morschett, 2007). This specificity makes multi-channel shoppers difficult to manage (Stone, Hobbs and Khaleeli, 2002) concerning the communication strategy (Thomas and Sullivan, 2005), but with a rather high level of profitability (Venkatesan, Kumar and Ravishanker, 2007). Some researchers highlight difficulties for consumers when dealing with multi-channel retailing (Dholakia, Zhao and Dholakia, 2005) or with hybrid systems like the “click and collect” system (called “drive” in France) combining Internet orders and store picking (Picot-Coupey et al., 2009) even though Tesco has been successful in the UK (Enders and Jelassi, 2009). Some papers explore the purchase process (Balasubramanian et al., 2005; Kim, Park and Pookulangara, 2005) when others insist on segmenting consumers to find the most attractive segments for Internet sales (Shim, Eastlick and Lotz, 2004; Konus, Verhoef and Neslin, 2008) given that getting trust from consumers is more difficult through Internet (Chen, Griffith and Wan, 2004). However retail and service networks have benefited from
this evolution, but whereas company-owned chains are confronted to traditional cannibalization issues, franchised networks are facing various problems: encroachment (Branellec and Perrigot, 2013; Coldwell, 2003; Fontenot, Keaty and Srivastava, 2006), intellectual property (Duffin and Watson, 2009; Vanderbroek and D’Angelo, 2008), trademark using (Tuneski, 2012).

Researchers have started to tackle these problems. Some papers deal with Internet usage within franchise networks (Cedrola and Memmo, 2009) whereas others point out internal difficulties of communication between franchisor and franchisees (Paswan, Wittmann and Young, 2004). But problems related to Internet as a marketing tool within franchise networks remain little explored. Fontenot et al.’s (2006) study encroachment problems due to Internet usage – or e-ncroachment – which could become probably in the future one of the most critical problems. Perrigot and Pénard (2013) develop recently a strategic reflexion from territorial exclusivity clauses as determinants of e-commerce strategy among other things. Brannelec and Perrigot (2013) develop legal issues in France concerning Internet usage in franchise networks. We propose a quantitative approach in order to show whether Internet is truly a hinder for franchise networks or not.

Hence two questions arise: 1) Is franchising a hinder to develop a multichannel strategy using Internet? 2) Are there any solutions to overcome this difficulty? Kaufmann, Cliquet and Achabal (2010) already highlighted this phenomenon in the USA some years ago (data based on the year 2009). Given that the technology is running very fast and not only in the USA, it seems to be of great interest to know whether this phenomenon is still under way and which solutions have been brought by retailers to avoid multichannel drawbacks within franchise networks. We opt in this paper for a franchisor perspective. The reason is that Internet is taking a broader position in marketing strategies of franchise networks and there is
a shortage of research dealing with these specific problems generated by this new channel as far as franchisors are concerned.

This paper starts with a literature review about the use of Internet as a marketing channel in franchise networks. Two cases are then described in two steps: the first step describes the situation of two large French retail groups Groupe Carrefour and Groupe Beaumanoir in 2009 to illustrate the difficulty of running a transactional website in a franchise network. Then a logistic regression is carried out from a French database of franchise networks to see whether an on-line store is more difficult to implement for a franchised network or not. Results are exposed and discussed through the examination of the two former French retail companies in their use of Internet in 2013 and that constitutes the second step.

2. Literature review, two cases and hypotheses

We first review the literature dealing with the relationship between Internet usage by franchisors and franchise network management before describing two cases of French large companies in the retail sector and developing hypotheses taking into account both literature review and cases description.

2.1. Literature review

The use of Internet as a marketing channel in a franchise network can have issues on encroachment problems (Branellec and Perrigot, 2013; Coldwell, 2003; Fontenot et al., 2006; Kaufmann et al., 2010; Perrigot and Pénard, 2013). Hence we examine encroachment problems in a first step and Internet usage within franchise networks in a second step.
2.1.1. Internet usage within retail and service networks

Using Internet within retail and service networks, franchised or not, can lead to strong misunderstandings: many network operators think primarily that Internet can improve both communications with franchisees and sales development. Several research works show it is not true. Dickey (2003) already warned franchisors that using Internet as communication channel with their franchisees does not entail a higher level of compliance among franchisees facing franchisor’s requirements. Furthermore several research papers and articles (Avery et al., 2009; Morganosky, 2000; Sharma, Gassenheimer and Alford, 2010; Simona and Kadiyalib, 2007) have denounced Internet usage which can jeopardize retail unit survival, franchised or nor, with a considerable risk of sales cannibalization. Hence we should be prudent with Internet usage within retail and service networks. In this paper we will focus on sales cannibalization problems through the phenomenon of encroachment. But what is encroachment?

2.1.2. Encroachment problems in franchise networks

Emerson (2010) asserts that “Territoriality, including the fear of encroachment, evidently is one of humanity’s primal, ubiquitous concerns”. He defines this encroachment phenomenon as the case “where the franchisor has authorized a new franchisee or established a company-owned unit within an existing franchise’s market area”. That means that encroachment is different from simply sales cannibalization. The problem of sales cannibalization has been already addressed (Ghosh and Craig, 1991; Zeller, Achabal and Brown, 1980). Encroachment entails specific spatial aspects of this managerial problem and that can happen whether territorial exclusivity clauses do exist in the franchising contract, or not. Stassen and Mittelstaedt (1994) already highlighted encroachment problems in franchise systems and Vincent (1998) developed legal issues about that strategic problem. But Kalnins (2004)
develop a first evidence of encroachment within the Texas lodging industry: this study shows how much new units imposed by the franchisor can cannibalize incumbent unit sales. The author questions then the franchisor’s spatial expansion strategy and the network governance which have critical issues in terms of both network management vis-à-vis franchisees and public policy. Du Toit (2003) already alerted on this kind of risk concerning multibrand franchised organizations in case of network purchases. Cox and Mason (2009) describe the same kind of encroachment situations when franchised network have to be spatially restructured: these authors consider this problem severe enough to make franchisors orienting their network either toward ownership redirection back then to seminal orientations (Hunt, 1973; Oxenfeldt and Kelly, 1968-69) or toward a stronger multi-unit franchise network development (Hussain and Windsperger, 2012; Kaufmann and Dant, 1996). Kaufmann and Rangan (1990) have proposed a model to cope with these encroachment problems and then to offer a simulation tool for decision making taking into account spatial constraints within the franchised network. More recent research leads to modeling distribution network expansion: Tikoo, Liu and Nair (2012) have recently presented a stochastic dynamic programming model in order to solve encroachment problems in franchising depending on the value both franchisor and franchisees can draw from the territorial exclusivity; Ferrari and Verboven (2012) develop a model restricting entry when exists a risk of encroachment and allows free entry anywhere else. But with Internet the problem takes a new dimension.

2.1.3. Encroachment due to Internet usage within franchise networks

This topic relating encroachment to Internet usage within franchise networks has not been fully tackled yet by researchers. Some works explore the way franchisors and franchisees use the web within their network: information, relationships, and the possibility of online purchasing to the former, and information, training, sales, and procurement support to the
latter (Cedrola and Memmo, 2009). Other authors insist on electronic systems as a catalyst for business relationship (Paswan et al., 2004). Few of them deal with encroachment and profitability problems even though a new research stream about these encroachment problems related to Internet usage seems to emerge. Fontenoy et al. (2006) assert that “Most franchise agreements call for the franchisee to have exclusive territory, with a promise, either expressed or implied, from the franchisor that no other franchisees will be allowed to exist within the territory.” These authors remain that a court in Florida in 1991 said that if a franchisor wants to sell product in a franchisee’s territory this franchisor should have expressed that desire in the contract and many courts followed that judgment. They show that whatever clause within the franchise contract, a franchisor can be sanctioned because of bad consequences not only for the franchisees but for the entire network and hence for the franchisor. These cases had consequences on the franchisors’ attitude vis-à-vis the opportunity of opening transaction websites. That is probably a reason why Kaufmann et al. (2010) found a negative relationship in US retail networks between the PFO (Proportion of Franchised Outlets) and the probability to open a transactional website. These results can be considered already obsolete given the technology evolution and the managerial reaction speed. And maybe solutions have been found by companies to go around these hinders. But this has been observed in the USA. What’s about this situation in Europe and more specifically in France where franchising is designed as business format franchising (Dant, Perrigot and Cliquet, 2008)? And this is not the only difference concerning franchising between the USA and France: about 35% of franchise networks are plural form organized whereas they are only 9% in the USA.

2.2. Two exploratory studies from 2009 to 2013

To know more about this situation two French companies have been examined through interviews of managers. Two short cases are then now described concerning the way retailers
deal with sales on Internet: *Groupe Carrefour* in the French food retail sector and *Groupe Beaumanoir* in the French retail clothing sector. It shows that sales through Internet are not developed at the same level everywhere and that the American market is still an exception in this domain even though it is not so successful in every company of every sector.

2.2.1. Internet use in French food supermarket chains (group Carrefour)

The first case consists in explaining the way *Carrefour* shares out sales realized through its website: www.ooshop.carrefour.com. *Carrefour* is a French group and the second world largest retailer after Wal-Mart with about 500,000 employees, 12000 stores (hypermarts, supermarkets, convenience stores, and hard discount food stores) and 97.6 billion € sales in 2008. Its headquarters are located in Evry and in Levallois, in Paris suburb. The merger with *Promodes* in September 1999 had a surprising issue: *Groupe Carrefour* became then the largest French franchisor overnight! The supermarkets *Champion* (between 400 and 2500 m² which have become recently *Carrefour Market*) from *Promodes* entered the *Groupe Carrefour* with 50% franchised outlets (there are still about 40% today). From the beginning of the years 2000, they develop a website (www.carrefour.com) to inform people about the group and another one to sell certain categories of products (www.ooshop.carrefour.com).

An interview of the former marketing vice-president of the *Groupe Carrefour* enabled us to better understand Internet stakes in a retail group. This Internet system with in-home delivery has many difficulties to be profitable. And the risk of encroachment problems is real. There is now a recent evolution concerning the use of the website. The in-home delivery system is still offered but a “click-and-collect” system is also implemented which means that consumers can order products on Internet and get them in the trunk of their car by driving to the store. This second possibility seems to be successful in many places in France as it is already the case for instance with *Tesco* in the UK (Enders and Jelassi, 2009). Then the
encroachment problem (Kalnins, 2004) can be avoided. But concerning in-home delivery system, consumers are requested when ordering to give the number of their loyalty card which enables Carrefour to affect the sale to the right store (franchised or company-owned). Most of Carrefour consumers have this card but if not, a question is asked to invite consumers with no Carrefour loyalty card to give their usual Carrefour store. If they don’t answer this question, sales are affected to … Groupe Carrefour. This can be a reason for encroachment problems (Du Toit, 2003), and because of the saturation of the French food retail market, even within the Groupe Carrefour itself, there is a real difficulty to affect sales of a customer to a specific store especially when there is indeed at least a franchisee among the possible stores to be affected. For the moment it seems that these problems have never been raised given the relative importance of sales through Internet.

2.2.2. Internet use in French clothing retail chains (Groupe Beaumanoir)

A second case concerns the Groupe Beaumanoir (retail clothing). This group belongs to Roland Beaumanoir and has 5 retail chains: Cache-Cache, Bonobo, Scottage, Patrice Bréal, and Morgan, with 5,000 employees and more than 2000 stores mainly in France, China, Greece, Italy, Poland, Spain, Saudi Arabia and United Arab Emirates. Headquarters are located in Saint-Malo (Brittany). This group communicate through two websites: www.groupebeaumanoir.com and www.patrice-breal.fr and sell clothing products through two other websites: www.cache-cache.fr and www.bonoboplanet.com. A third website both communicates and sells products: www.morgandetoi.com.

Roland Beaumanoir, the franchisor, has been interviewed and the information system manager of the group as well who is also the president of a subsidiary in charge of managing the websites. This group has only about 18 months experience in using websites for selling products. Presently sales on Internet are equivalent to the sales of the biggest store of the
whole company. We have about the same result in the food retail market when Internet sales represent the sale of a big hypermarket for the whole country (France). Thus there is no question about encroachment at that stage of the process and when franchisees ask for sharing the margin with the franchisor they are said that it is very small. Some figures are quite explicit: in 2008, 880,000 consumers entered a Beaumanoir store and 25% bought products whereas 120,000 visited one of the website with a buying rate of 1.7%!!! One of the issues consists in implementing marketing techniques as literature states (Ansari, Mela and Neslin, 2008). Customers can also use either an in-home or an in-store delivery system. In-store delivery system would be a good basis for profit sharing. But this group does not envisage such an issue. Internet is considered first a way to increase consumer traffic. The franchisor develops the websites in order to attract customers and push them to the stores. The exchange formula is: “I (franchisor) attract people through Internet and bring them to stores and you (franchisees) help me to develop an e-CRM system. Then I will be able to help you in your local market if you need it”. It can be a way to better react locally instead of opening company-owned units as suggested by Bradach (1997). It can be considered an effect of a prediction made 10 years ago about the evolution of marketing which is now shifting from being a “marketer of goods and services to being a customer consultant and manager of his or her saleable consumption assets” (Achrol and Kotler, 1999) applied to franchising. Internet can be regarded here probably more as a communication channel than as a distribution channel (Lusch, 1979) able to sell as much as stores in this sector. It is an illustration of a research showing that in many cases consumers use Internet for information and stores for buying (Schröder and Zaharia, 2008, Verhoef, Neslin and Vroomen, 2007). If consumer’s adoption of Internet and navigation skills are constantly growing (Dholakia et al., 2005), managing multi-channel strategies remains difficult for retailers because of the multiple uses of channels by customers (McGoldrick and Collins, 2007). Obtaining information from the
local market is of great interest for the franchisor and franchisees are much better located to get it (Minkler, 1990). A new clause about information feed-back from franchisees to franchisor in exchange of benefiting from the franchisor’s website could be added in franchising contracts. And this clause could be considered a new contractual restraint compared to other usual restraints on (Brickley, 1999): external activities of franchisees, territorial exclusivity, and obligation to participate to promotional efforts.

So profitability of websites is not so easy to determine and is not even the first objective of the company contrary to some literature statements (Chu, Chintagunta and Vilcassim, 2007). In this clothing retail sector, most of operators are still testing the right formula to develop a real multi-channel strategy. Two businessmen raised and invested 14 million euros five years ago in a website dedicated to clothes sales through Internet: Brand Alley. They just reached the breaking point in June 2009. These two cases could have been classified as evolving multi-channel strategies (Easingwood and Coelho, 2003) because despite their relatively large size in their respective sectors, they were still looking in 2009 for a real development of sales through Internet.

2.3. Hypotheses

These two cases can be classified as evolving multi-channel strategies (Easingwood and Coelho, 2003) because despite their relatively large size in their respective sectors, they are still looking for a real development of sales through Internet. They both point out two potential changes in horizontal and vertical restraints in franchise contracts (Brickley, 1999). The first change concerns a horizontal restraint and leads to a specific clause related to sales affectation to stores. Behind this sales affectation problem there is encroachment issue and more specifically here an e-ncroachment one not between franchisees but between the franchisor and franchisees located in the same area as the consumer who bought on Internet.
Conflicts in franchise networks have been treated in many ways for several decades through modeling processes (Ghosh and Craig, 1991; Kaufmann and Rangan, 1990; Zeller et al., 1980) or the examination of specific geographic and sectorial situations (Kalnins, 2004). This last author makes a distinction between franchise networks and company-owned networks in the hotel industry in Texas. He shows that when franchisors add new units it decreases revenues of incumbent units whereas in company-owned system global revenues increase. In our present case of sales on Internet, that could diminish revenues of incumbent units located in the same areas as the Internet customers. Hence a first hypothesis related to the PFO (percentage of franchised outlets) is proposed:

\[ H1: \text{Franchisors with a lower PFO are more likely to open transactional websites.} \]

The second change deals with a vertical restraint and a clause related to information feed-back from franchisees to franchisor in exchange of a website managed by the franchisor to draw customers towards stores. The franchisor could ask franchisees to pay fees for that as it is the case for promotional or advertising expenses. Instead of doing so Groupe Beaumanoir sets an e-CRM system and asks franchisees to help in providing it with information about customers. That could be another vertical restraint which can lead to new kinds of clause in a franchise contract besides others clauses on external activities, territorial exclusivity and participation to promotional effort (Brickley, 1999). The question is then more how to qualify a “pure” franchised network when most of them are plural form organized. This is probably truer for a “more company-owned” network than for a “more franchised” network. It can be also a way to spot free riding from franchisees if some of the latter do not feed the franchisor with customers’ information and then do not want to participate to the building process of the brand (Bercovitz, 2004). Chaudey, Fadairo and Solard (2013) have shown the importance of vertical restraint for brand value of French franchise networks. Franchisors with a low PFO have a fewer risk of e-ncroachment in
selling products through Internet than franchisors with a high rate of franchisees. The latter can try, like *Groupe Beaumanoir*, to implement an e-CRM system. Instead of dealing with e-CRM which needs complex data, a less complex notion can be of interest and concerns the franchisor’s will to attract customers in the chain stores (franchised or not) in order to help these stores to increase in-store customer traffic. Such information on the franchisor’s website can be considered a way for franchisors not to compete with the franchisees. A proxy can be obtained by considering the presence of store locator on the website sales. The aim of an e-CRM system is to keep in touch with customers both in stores and on Internet (Payne and Frow, 2005) in order to increase profitability as shown by Venkatesan et al. (2007). The presence of a store locator can be a first step. Then a second hypothesis is posed:

*H2: Franchisors with a higher PFO are more likely to display a store locator in the website.*

This hypothesis can be more precise by adding the possibility for customers to buy online and the store locator to help them finding the right store for other purchases as well.

Kaufmann et al. (2010) found that the existence of an overseas presence was negatively related to the presence of a transactional website. Indeed, the franchisor could be less interested in increasing their margin by encroaching into their franchisees’ sphere of interests in case they would benefit from their overseas operations. As the presence of overseas operations is not confidential information and is rather easy to determine for any franchised network, we decided to control for this variable in our analysis. Thus, we hypothesized that:

*H3: The networks engaged in overseas activities are less likely to open transactional websites*
for distance purchase than others (Balasubramanian et al., 2005). This variable being easy to control, we made the following hypothesis:

**H4: The relationship between the sectors the network belongs to could and the presence of a transactional website is significant.**

Finally, more developed and experienced networks could be more likely to have a transactional website than less developed ones. Thus, we suggest:

**H5: The networks with higher total number of outlets (be they franchised or not) are more likely to open transactional websites.**

“Click-and-collect” systems have been implemented in France since 2004 by French food retailers (grocery stores like supermarkets and hypermarkets) to attract consumers who do not like or have no time for shopping, as it the case in the UK by Tesco. ChronoDrive by the Groupe Auchan was the first retail “drive” company in France in February 2004 (http://fr.wikipedia.org/wiki/Chronodrive) but as a subsidiary and these warehouses are disconnected from Auchan stores unlike Auchan Drive system which consists in opening warehouses close to Auchan hypermarkets. Another retail group, Leclerc, has implemented this new retail format since 2007 and the other French retailers have followed. These retailers maintain an online service with home delivery even though it is not profitable and develop a “drive” system in the same time with two forms: 1) a “drive” warehouse close to a hyper- or a supermarket; 2) an isolated “drive” warehouse often close to a competitor store. That means that consumers should do an effort to pick up their purchases by driving to the store or to the warehouse: these conditions are different from a home delivery system usually implemented by “traditional” transactional websites.
As for the e-encroachment issue, the “click-and-collect” system facilitates margin sharing and thus reduces the conflict of interests between franchisor and franchisees. Thus, supermarket chains should probably be less sensitive to PFO for adopting transactional (click-and-collect) websites as far as for this sector, the adoption of e-commerce does not interfere with franchisees’ interests. Hence we hypothesized:

*H6: The exclusion of supermarket and hypermarket chains from the original sample would reduce the correlation between the PFU and the presence of a transactional website.*

3. Data and methodology

As no readily made database of French franchise networks was available including all the variables of interest, we have to compose it by ourselves. It is important to distinguish only those chains where a transactional franchise website is potentially competing with the franchisees. In other words, we are interested in franchise retail systems which market products that could be sold directly to consumers over the Internet as well as through local distribution.

We have built a database from the two following websites *AC Franchise – Annuaire et Conseil pour réussir en Franchise* ([http://www.ac-franchise.com/](http://www.ac-franchise.com/)) and *Fédération Française de la Franchise* ([http://www.franchise-fff.com/](http://www.franchise-fff.com/)): they both offer French data obtained for the year 2011 concerning the number of franchised and company-owned units and the international presence of the network. We only deal with retail chains which offer tangible products, but we do not consider businesses primarily engaged in services, even though they also offered a range of tangible products as a secondary business (e.g. hairdressing salons that also sell hair care products). We do not include in our database networks for which no recent information about the number of franchised and co-owned outlets is available (namely those
for which the information dates before 01.01.2011 or for which this data is missing) as well as chains that have less than 10 outlets. We also exclude companies that evidently necessarily require local distribution to deliver goods and services ordered by their customers by Internet (flower shops, pizza restaurants, traditional restaurants) as well as those whose products are not suitable for post-delivery (ice-cream shops). Thus, the list of industries includes in our database looks as follows: Clothes and Accessories; Decorating and Home Design; Hobbies, Sports and Culture; Supermarkets and Hypermarkets (actually retailers running hypermarkets, supermarkets, convenience stores, and hard discount food stores); Specialized Food Retailers; Cosmetics and Body Care; Stationary; Pet Products. A certain number of companies cannot be maintained because some are no more present in 2009. The final sample contained 172 franchised chains. Tables 1 and 2 give frequencies and descriptive statistics about the sample.

**Table 1: Frequencies (Categorical Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Levels</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items sold online</td>
<td>Yes</td>
<td>115</td>
<td>66.9%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>57</td>
<td>33.1%</td>
</tr>
<tr>
<td>Store locator present on site</td>
<td>Yes</td>
<td>172</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Overseas operations</td>
<td>Yes</td>
<td>120</td>
<td>69.8%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>52</td>
<td>30.2%</td>
</tr>
<tr>
<td>Country of origin</td>
<td>France</td>
<td>152</td>
<td>88.4%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>20</td>
<td>11.6%</td>
</tr>
<tr>
<td>Category</td>
<td>Clothes and Accessories</td>
<td>71</td>
<td>41.3%</td>
</tr>
<tr>
<td></td>
<td>Decorating and Home Design</td>
<td>42</td>
<td>24.4%</td>
</tr>
<tr>
<td></td>
<td>Hobbies, Sports and Culture</td>
<td>21</td>
<td>12.2%</td>
</tr>
<tr>
<td></td>
<td>Supermarkets and Hypermarkets</td>
<td>15</td>
<td>8.7%</td>
</tr>
<tr>
<td></td>
<td>Specialized Food Retailers</td>
<td>11</td>
<td>6.4%</td>
</tr>
<tr>
<td></td>
<td>Cosmetics and Body Care</td>
<td>8</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>Stationary</td>
<td>3</td>
<td>1.7%</td>
</tr>
<tr>
<td></td>
<td>Pet Products</td>
<td>1</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

**Table 2: Descriptive Statistics (Continuous Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of franchised units</td>
<td>112</td>
<td>43</td>
<td>30</td>
<td>218</td>
<td>1</td>
<td>1800</td>
</tr>
<tr>
<td>Number of co-owned units</td>
<td>62</td>
<td>20</td>
<td>0</td>
<td>103</td>
<td>0</td>
<td>643</td>
</tr>
<tr>
<td>Total number of units</td>
<td>174</td>
<td>91</td>
<td>27</td>
<td>238</td>
<td>12</td>
<td>1800</td>
</tr>
<tr>
<td>PFO</td>
<td>54%</td>
<td>53%</td>
<td>-</td>
<td>36%</td>
<td>0.8%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Then, we examined the websites of the chosen networks in order to find out whether the franchises were present abroad or not, whether a store locator was available on the website, and whether their website was a transactional one or not. To test the Hypothesis H6, data were analysed in a twofold way: 1) first a global study of all retail chains included in the database; 2) second a limited study including all chains except supermarkets and hypermarkets. By this way we could see whether the “drive” system implemented by food retailers could reduce the risk of e-ncroachment due to the adoption of transactional websites or not.

In order to test the hypotheses a logistic regression model was implemented with a binary dependent variable. As far as H1, H3, H4, H5 and H6 are concerned, a logistic regression model was carried out with “Items sold online” as the dependent variable, which means that the network has a selling website or not. Concerning H2, no test could be made as there was no variance for this variable (all sites studied provided a store locator or a list of addresses of the individual outlets).

4. Results and discussion

We first describe the two sets of results (with grocery chains vs. without grocery chains) before discussing eventual changes due to grocery chain introduction. Then we examine in a more detailed way the impact of variables related to the number of outlets, the sector, the country of origin and the overseas presence.

A logistic regression was run regressing the “Items sold online” variable on the PFO, the total number of outlets, the sector, the country of origin, and the overseas presence first on the global sample including all the chains, second on the limited sample excluding the supermarket chains. Two logistic regression models were obtained having at least one
Table 3: Variables and Goodness of fit of the Logistic Regressions

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>Constants</th>
<th>General sample</th>
<th>Limited sample (supermarkets excluded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td>172</td>
<td>157</td>
</tr>
<tr>
<td>Variables not in the Equation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Sg</td>
<td>0,743</td>
<td>0,781</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>Sg</td>
<td>0,199</td>
<td>0,270</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector</td>
<td>Sg</td>
<td>0,264</td>
<td>0,181</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Sector (1)</td>
<td>Sg</td>
<td>0,453</td>
<td>0,314</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector (2)</td>
<td>Sg</td>
<td>0,840</td>
<td>0,665</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector (3)</td>
<td>Sg</td>
<td>0,120</td>
<td>0,068</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector (4)</td>
<td>Sg</td>
<td>0,513</td>
<td>0,739</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector (5)</td>
<td>Sg</td>
<td>0,078</td>
<td>0,076</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector (6)</td>
<td>Sg</td>
<td>0,141</td>
<td>0,261</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sector (7)</td>
<td>Sg</td>
<td>0,231</td>
<td>-</td>
</tr>
<tr>
<td>df</td>
<td></td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

| Goodness of fit           |            |                |                                        |
| R² Cox & Snell            | 0,127      | 0,112          |
| R² Nagengkerke            | 0,176      | 0,154          |
| Correct percentage        | 70,3       | 72,6           |

Both logistic regression models proved to be significant at $\alpha<0.000$ and have a good quality of prediction (over 70%). However, the $R^2$ values are not very high, meaning that
only a small part of the variance of the dependent variable can be explained by the independent variables included in the regression. As seen in Table 3 the coefficient for percentage franchised was significant at $\alpha<0.000$ and negative in both cases, thus H1 is supported. We can see that there is a significant negative relation between the percentage of franchised units and the likelihood that the website would have transactional capability. Thus, the less the system is populated by franchised outlets, the more likely a transactional website would be present. The overseas presence was a significant predictor only for the general sample (including supermarkets) but not for the limited sample. In the first case, there was a negative correlation significant at $\alpha<0.05$. Thus, we found a limited confirmation for H3: the networks engaged in overseas activities are indeed less likely to open transactional websites than the other ones. No other variables were significantly related to the existence of a transactional website capability.

We can see that the exclusion of the supermarket chains has an influence on the results of the logistic regression. Once supermarkets excluded from the general sample, though, the overseas presence is no longer significant. We observe also a slight increase in the correlation between the PFO and the presence of a transactional website, so we can conclude that H6 is supported and a high PFO is indeed less important a hinder for the adoption of a transactional website for supermarkets. The other explanatory variables being not significant, the hypotheses H2, H4 and H5 are not supported by the results of the logistic regression.

### 4.2. Discussion

Making up a database of French franchised networks that could adopt the Internet as their distribution channel is a key point in such a research. We can see that among all the studied chains, 67% had transactional websites. We also noted that all chains had franchisee site locator that enabled the customers to find a franchised unit that would be the most convenient
for them. That shows that, overall, French franchise networks are developing e-business to a great extent.

4.2.1. Franchising and transactional websites

The negative relation between the percentage of franchised units and the likelihood that the website would have a transactional capability is consistent with the fact that transactional websites may occasion franchisee concern about encroachment. This result confirms results found in the USA (Kaufmann et al., 2010). On the other hand, we should acknowledge the fact that the expansion of e-business encourages wide adoption of transactional websites even by chains with relatively high PFO (the mean PFO for chains having a transactional website was 45.5%, SD=33.5%).

The influence of overseas presence was only significant for the general sample (including supermarkets) and not for the limited sample as it was already the case in another article (Perrigot and Pénard, 2013). That unexpected observation is not directly concerned with e-ncroachment issues, but it could provide interesting insights for future research. It appears that overseas is a significant predictor for the sector of supermarkets. This hypothesis could be tested if a larger sample of supermarket chains was available for analysis.

We can see that while the legislative amendments are underway to cope with the encroachment issue, business practice already proposes new schemes that permit to cope with the conflict of interests due to distribution channels innovations. The “click-and-collect” system in France proved to be adapted to the supermarket format. As our analysis shows, it also appears to be an effective solution of the e-ncroachment problem. This scheme could also expand to other sectors, including non-food. The expansion of transactional websites offering e-shopping with in-store delivery is a promising phenomenon. Other profit-sharing schemes are possible, namely sharing margin of the on-line sales according to the home
address of the buyer. We can expect further adjustment and improvement of profit-sharing schemes with the growth of the proportion of on-line sales in the total turnover of franchised networks.

It is now time to see how the companies we studied in a first step above, the two retail groups Carrefour and Beaumanoir, whether they have changed their respective transactional websites systems or not.

4.2.2. Internet use in Groupe Carrefour in 2013

As we saw it above most of the French supermarket and hypermarket companies have developed “click and collect” systems. But Groupe Carrefour was the last to open this new activity due to internal management problems. But this company is striving to make up for lost time. The “old” transactional website www.ooshop.carrefour.com has been replaced by www.ooshop.com probably in order to disjoint this home delivery website from the Carrefour brand name given it does not work well. Other transactional websites, more specialized have appeared and we found among them: http://courses.carrefour.fr/traiteur/accueil, http://vins-champagnes.carrefour.fr/. But the real change stems from the opening of this following website: http://courses.carrefour.fr/drive/accueil which means that any customer may order on Internet, using the previous website, and drive to the store to pick up purchases whatever status of this store, franchised or company-owned. Hence the e-ncroachment problem is solved. However the Groupe Carrefour owns not only supermarkets Carrefour Market and hypermarkets Carrefour, but also convenience store under several fasciae (store signs) like: Carrefour City, Carrefour Contact. These stores could be impacted by the “click and collect” system. The Carrefour manager in charge of convenience stores does not consider this question as so important because convenience stores are dedicated to extra purchases when “click and collect” is more routine purchases oriented.
This “click and collect” policy is shared by the other retailers and seems to be an easy way to avoid e-ncroachment. But if it can be implemented for supermarkets and hypermarkets, it is not the case for specialized food stores (e.g. Comtesse du Barry, Nicolas, Chocolats de Neuville …) which develop strategies closer to non-food retail chains.

4.2.3. Internet use in Groupe Beaumanoir in 2013

The share of sales generated by Internet is still very limited for the Groupe Beaumanoir: a little bit more than 2%. But an interview of the general manager of the Groupe Beaumanoir, confirmed by another interview of the manager in charge of one of the retail chains, Bonobo, shows that the arrangement described above has little by little evolved towards a “web to store” system. Instead of offering a delivery system for any purchase on one of the transactional websites, the Groupe Beaumanoir ask the consumer to choose between a non-free home delivery service and a free in-store delivery service. Hence if the consumer chooses to go to a franchised store the sale is affected the franchisee whereas it is paid directly to the franchisor in the other case. There is no doubt that it is an easy way to clarify many e-ncroachment situations.

Conclusion

This paper aims to address one critical and frequent problem in franchised networks namely the impact of the Internet on encroachment problems – we call it: e-ncroachment – here in the French context. We answered the two research questions: 1) about the negative effect between franchising arrangement and transactional websites among retail networks; 2) about possible solutions.

Concerning the negative effect, this study is in line with others giving evidence to this kind of conflict due to e-ncroachment either in the USA or in France (Kaufmann et al., 2010;
Perrigot and Pénard, 2013). With the expansion of Internet mobile technologies, a franchisor’s transactional website becomes a « ubiquitous outlet » cannibalizing the same-brand franchisees’ revenues. This kind of problem could then see new development.

However solutions have been already implemented by retail companies. Splitting the sample according to the presence or not of super- and hypermarket companies shows that the “click and collect” system can be a way to go around e-ncroachment problems: Groupe Carrefour opts for this “click and collect” system whereas Groupe Beaumanoir prefers to attract consumers to the store, franchised or not, by asking him to pay for home delivery services. In both cases, these two French retail companies shift from a “web vs. store system” to a “web-to-store system”.

The main contribution of this paper consists in splitting the sample to highlight “click and collect” advantages to avoid e-ncroachment. Another retail company experiments presently a similar system. The two cases studies in two different periods show that retail companies are aware of this problem and able to implement a solution based on a web-to-store strategy.

Our quantitative study is not free of a number of limitations. The first and major one is the liability of quantitative data. In the absence of official data on the franchise networks necessary for our analysis, we had to collect them ourselves from open web sources. The list of franchised chains used for this research is not exhaustive either. Concerning our case studies other cases are needed in order to see whether other solutions have been implemented.

References


