Past, present and future of a retail concept: the hypermarket

Dr. Rozenn PERRIGOT
CREM UMR CNRS 6211
IGR-IAE, University of Rennes 1
11, rue Jean Macé
CS 70803
35708 Rennes Cedex, FRANCE
rozenn.perrigot@univ-rennes1.fr

Dr. Gérard CLIQUET
CREM UMR CNRS 6211
IGR-IAE, University of Rennes 1
11, rue Jean Macé
CS 70803
35708 Rennes Cedex, FRANCE
gerard.cliquet@univ-rennes1.fr

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Abstract:

The hypermarket appeared in France at the beginning of the sixties as a synthesis of the main features of modern retailing. This paper describes the history of this retail format and displays curves, based on quadratic and cubic models, to highlight the specific shape of the evolution of the hypermarket format. These curves tend to show the decline of this retail format in France. In the same time, the German hard-discounters continue their invasion. According to the retail life cycle theory, this paper discusses some managerial and strategic issues as well. The retailing wheel seems to go on turning!

Keywords:

Retail life cycle, hypermarket, France, quadratic and cubic models, retailing wheel.

Passé, présent et futur d'un format commercial : l'hypermarché

Résumé

L'hypermarché apparut en France au début des années 60 comme une combinaison des principales caractéristiques du commerce moderne. Ce papier décrit l'histoire de ce concept du commerce et montre des courbes fondées sur des modèles quadratiques et cubiques afin de mettre en lumière la forme particulière de l'évolution du concept d'hypermarché. Ces courbes tendent à montrer le déclin de ce format commercial en France. En même temps, les hard-discounters poursuivent leur invasion. Selon la théorie du cycle de vie du commerce, ce papier tente de soulever des problèmes managériaux et stratégiques. La roue du commerce semble continuer de tourner !

Mots-clés

Cycle de vie du commerce, hypermarché, France, modèles quadratiques et cubiques, roue de la distribution.

1. INTRODUCTION

The history of modern retailing was initiated more than 150 years ago when the first retail format, the department store, began to compete with the traditional small and independent shops. Then came variety stores in the USA and later in Europe (France, UK, Germany and Italy) and also in Japan. After a long period of success, these formats are now in the decline stage in most of these countries (Cliquet, 2000).

Another important retailing format appeared in the French territory at the beginning of the 1960s: the hypermarket. This new format radically changed the French retail landscape and enables the French retailers to conquest a big part of the world, making France one of the most powerful countries in the retail sector. Nevertheless, even if this format is still developing in some countries such as China, it seems to face some difficulties in France (Cliquet, 2000) and in other countries such as Spain (Cuesta Valiño, 2004).

Despite the importance in the economy and in most corporate marketing policy of the hypermarket format, very few papers have been published about this retailing topic if a special issue on large retailing format in the *Journal of Retailing and Consumer Services* published in 2000 is excluded. The purpose of the present paper is therefore to explore the evolution of the hypermarket format since its appearance in 1963 in the French market in terms of hypermarket openings and sales areas.

This paper therefore strives to answer two questions: 1) Where does the hypermarket format stem from? 2) What will be its future? It is organized as follows. In section 2, the hypermarket format is presented with a focus on its origins. In section 3, the research design of the empirical study is described and the first results from quadratic and cubic models are displayed. In section 4, and because of the shape of the curves, the concept of retail life cycle is presented and results about supermarkets and sales areas are added. All these results are discussed in section 5 before concluding in section 6.

2. PAST AND PRESENT OF THE HYPERMARKET

The hypermarket format appeared as a synthesis of more than hundred years of retail evolution. Today, this format tends to be worldwide spread from France to Southern and Eastern Europe, to Asia (China, Thailand, …) and North Africa, to South and … even North America. In the 1990s, big US retailers like *Wal-Mart* and *K-Mart* have integrated food products in their non-food stores to create *Wal-Mart Supercenters* and *Big K-Mart*.

2. 1. History of a modern retail format

The hypermarket can be considered one of the most accomplished retail formats. Its complexity has stemmed from many important improvements brought to modern retailing since more than a century and a half. This section strives to synthesize the origins of the main hypermarkets characteristics and to describe its development.

2. 1. 1. Origins of the hypermarket format

Retail history is still a discipline in progress and it is difficult to know who implemented first a technique despite historians' efforts (Marseille, 1997). This history is described through the most well-known facts.

Many European merchants and business people were very famous through their trading ventures like for instance Jacques Cœur in France, the Fugger in the German Empire, the Medicis in Italy. They all of them took benefit from good relationships with the political power (Thil, 1966). In the middle of the XIXth century, emerged a new kind of independent trading business people. In his famous book *Au bonheur des Dames* (in English: “Ladies' Paradise”), Emile Zola (1883) tells the story of Octave Mouret whose real name was Aristide Boucicaut. Boucicaut and his associate Justin Videau opened in 1852 *Au Bon Marché* which is considered the first department store in the retail history and, as far as it is known, the first large retail concept: 100 square meters!!! Justin Videau brought this floorspace and Boucicaut brought 50000 Gold Francs. Today, 100 m² is the equivalent of a mid-size flat! But usually before this date shops were very small and strictly specialized according to regulations imposed by trade guilds as in most European countries. The Constitution Assembly during the French Revolution passed an act in 1791 called Le Chapelier Act which prohibited trade guilds. An equivalent act was passed in 1835 in the UK (Thil, 1966). The door was therefore opened to new concepts in the retail activities. Boucicaut is known for being the first one to change radically the traditions in this sector. He defined new rules (he was probably inspired by other experiences but he was the first to really succeed in implementing them): free admission in the store, fixed item prices and explicit labeling, a wide assortment, item return, advertising, various services (delivery, customer transportation, free bars, …), lower gross margin (only 13.5%!) price cuts, frequent changes in in-store display, sales persons paid by commissions on sales – *guelte* - (Cliquet, 2000), and … the first mail order sale system (Thil, 1966) more than 30 years before *Sears* and *Roebuck* (Katz, 1987). Zola in his book speaks about *Paris Bonheur* (in English: “Paris happiness”) defined by Octave Mouret (Boucicaut in reality) as a retail brand name for a product supposed to attract Parisian ladies (Helies-Hassid, 2000). Moreover, Boucicaut defined the store as a permanent show in order to justify this large retail format with a wide assortment. *Au Bon Marché* is still alive in Paris. It is strange to see that no chain was created from this concept and the first luxury company in the world, LVMH (Louis Vuitton-Moët-Hennessy), bought the store several years ago. It was entirely restored and is used today as the shop window for LVMH luxury product lines. Indeed, automotive development enforced the need for a large parking lot.

Boucicaut implemented lower margin through a higher inventory turnover. But the modern idea of discount came probably later from the USA with Franck Woolworth’s innovation. It was implemented in France during the great depression by the department store companies which created from 1933 the *magasin à prix uniques* (in English: “Unique price stores”). Traditional retailers obtained from Pierre Laval, the minister of trade, an enactment in October 1935 forbidding this kind of stores. The modern retailers and especially department store companies got around the law and created the *magasins populaires* which can be translated in English by “discounted variety stores” following the model of *Woolworth*'s stores. The Parisian department store *Au Printemps*, created in 1865 by Jules Jaluzot a former Boucicaut's associate, opened several variety stores under the sign *Prisunic* from 1931. *Les Nouvelles Galeries* launched the first *Uniprix* in 1929. *Les Galeries Lafayette*, created in 1895 by Théophile Bader and Alphonse Kahn, located from 1932 many *Monoprix*. *Au bon marché* bought *Priminime* stores in 1932. These variety stores are not discounted ones anymore. *Monoprix* is the last variety store chain still in activity in France and they have locations abroad. All these stores have been transformed into *city-marchés*. This concept consists in offering good quality products for downtown consumers whose buying power is rather high. The retailing wheel (McNair, 1958) has turned.

2. 1. 2. The development of the hypermarket format

From the end of the 1940s, after World War II and its destructions in Europe, the process of creating hypermarkets is under way. Actually, another form of discount policy appeared in France with Edouard Leclerc. This former seminarist opened his first store in Landerneau (Brittany in the very West part of France) in 1949 (Thil, 1964). This store was located in a very basic site in a small town. It was a real revolution and once again the traditional retailers tried to make this new concept out of the game. They enforced suppliers not to deliver this spoilsport. But Leclerc was supported by the French government as a fighter against inflation (Thil, 1964). He could develop his ideas despite political attacks from Pierre Poujade and Jean-Marie Le Pen who founded a new political party (the UDCA, *Union de Défense des Commerçants et Artisans* which can be translated in English by Defense Union of Retailers and Artisans) and were elected at the French parliament in 1956 (Roy, 1971). Discount prices were central to his retail philosophy. But he also designed a new organization. He decided to develop a chain through an association of retailers where no one could own more than two stores, a certain proportion of profit should be given to the employees and a low level of gross margin fixed by the organization should be respected. It is interesting to notice that through Leclerc's action, the VAT (Value Added Tax invented and implemented to manufactured products for the first time in France in 1959) has been extended to retail companies. The impact of this political decision, made by Mr. Giscard d'Estaing, former President of the French Republic (1974-1981), who was state secretary for finances at the end of the 1950s and at the beginning of the 1960s, was very important. The former local tax (equivalent to the present American retail tax system) was based on the total price of the product whereas the VAT is calculated on the value added which is mainly constituted by the margin for retailers. That means that discounters like *Leclerc* would have much less to pay for taxes compared to traditional retailers. Despite reactions from traditional retailers, the tax system was reformed and the VAT system was passed by the French Parliament … the European Union as well.

E. Leclerc's stores became later supermarkets and most of them are now hypermarkets after having been enlarged. His son Michel-Edouard Leclerc took over some years ago and has been going on with these principles despite an Act (The Galland Act passed in July 1996 softened by the recent Dutreil Act, 2005) which has interfered with this retail policy and has forced *Leclerc* company to change its pricing policy from EDLP to HILO to a certain extend.

Networking in retailing seemed to begin in France as well. Félix Potin opened his first food store in 1844 and the second one in 1860 (Camborde, 1997). This first chain was developed and became a convenience store chain very well-known in France but declined and closed in 1996 mainly for inheritance reasons.

Bardou opened the first French supermarket in Paris close to the Champs Elysées in 1957 that is more than a quarter of century after the USA (Langeard and Peterson, 1975). Nobody did pay attention to it. However it was the first signal of a true revolution. In 1973, there were more than thousand supermarkets in France. This number climbed up to more than 7000, and today, more than 5600 supermarkets can still be counted in this country. This concept was based on self-service and merchandising techniques learnt in seminars on productivity in the USA that hundreds of French managers attended during the Marshall Plan (Thil, 1964).

At the end of the 1950s and at the beginning of the 1960s, many French retailers applied for seminars on retailing which took place at NCR and came to Dayton (Ohio) to listen to Bernardo Trujillo, director of the *International Management Systems Seminars* (Tordjman, 1988), whose one of his arguments during his seminars on modern retailing was: “No parking, no business”. Most of them came back to France very enthusiastic. And a group of French retailers decided to define a new concept: the hypermarket. The supermarket consists in selling mainly food products, at least 75%. It is described in France as a self-service retail concept with a floorspace between 400 m² and 2500 m². The hypermarket has been defined as a retail concept with a floorspace over 2500 m² (over 25000 square feet). Every kind of products is supposed to be sold through self-service techniques even though there are today exceptions: for example, cheese, fish or deli. The families Fournier, Badin, and Defforey, native from Annecy (Alps), decided to open the first hypermarket *Carrefour* in the Southern suburb of Paris (Sainte-Geneviève des Bois) in 1963: its size was 2500 m², hence the definition of a hypermarket (Lhermie, 2003). Despite several bank support refusals, founders could find enough money to develop their new concept and the first hypermarket was immediately a big success. Ten years after the opening of the first *Carrefour*, there was more than 250 hypermarkets in France. Today, there are more than 1300 hypermarkets in this country. And the group *Carrefour*, composed of several chains, is now the second world largest retailer after *Wal-Mart*. *Carrefour* is the brand name for hypermarkets, *Champion* for supermarkets, *Shopi* and *Huit-à-8* for convenience stores and *ED* and *DIA* for hard-discount stores. The *Carrefour* group is a public company and has today more than 10000 stores in the world located in more than 30 countries. *Carrefour* began its internationalization process very early in the 1970s (Spain and Brazil). The group is present in Europe of course but also in South and Central America, and in North Africa. In Asia, *Carrefour* is very successful in China and Thailand but not in Japan where they located four hypermarkets and they decided to quit this country in 2005. The same decision was made in Mexico.

Gérard Mulliez developed, starting in Northern France, the chain of hypermarkets *Auchan* from the end of the 60s as a private company and it is still so. The family Bouriez, from Eastern France, opened *Cora* hypermarkets and became a public company. Another big French retailer *Casino* started his development at the beginning of the XXth century through small grocery stores in Saint-Etienne in Central France, and located many super- and hypermarkets from the end of the 1960s. They bought *Rallye*, a western French super- and hypermarkets company, in 1994. *Leclerc* has transformed most of his supermarkets into hypermarkets and is associated to *System U* (*Marché U*, *Super U* and *Hyper U*) through a common central purchasing unit. Dissidents from *Leclerc*, behind Jean-Pierre Le Roch, created *Intermarché* in 1969 as an association of retailers with different principles close to a franchise system.

2. 2. The hypermarket today

A definition of the hypermarket format is today admitted in most countries (with exceptions). Present figures are also displayed about the French market.

2. 2. 1. A definition of the hypermarket format

The basic principle of a hypermarket is expressed in France as *Tout sous le même toit* which means “Everything under the same roof”. This retail concept did not appear overnight from nowhere. The main characteristics of the hypermarket format can be summarized as follows:

- A large floorspace for the widest assortment of products associated to a large parking lot,
- A discount price policy linked to networking techniques,
- Self-service techniques based on effective merchandising and sales promotion methods.

The Huff model (1964) founded on the retail law of gravitation (Reilly, 1931) has shown that, for many retail stores, enlarging the floorspace can lead to an increasing amount of sales even though “trees never grow up to the sky!”. Opening a chain of hypermarkets in order to get economies of scales and a larger purchase power to negotiate with suppliers can therefore improve the efficiency of such a retail concept by enabling the implementation of a discount pricing policy. As far as hypermarkets are concerned, their pricing policy in Europe have been recently defined as somewhat in between an EDLP policy like *Wal-Mart* or European hard discount stores (German companies: *Aldi* or *Lidl*) and a HILO policy like in most of the supermarkets (Solgaard and Hansen, 2003). Finally, self-service techniques replace sales persons that means that products should be able to be sold and promoted by themselves through specific techniques.

2. 2. 2. Hypermarkets in France today

Today, in the French context, it can be talked about the Big Six (cf. Table 1).

Retail groups	Number of hypermarkets
Auchan	136 (Auchan 121 + Atac 15)
Carrefour	251 (Carrefour 215 + Hyper Champion 36)
Casino	114 (Géant)
Cora	57 (Cora)
Intermarché	123 (Intermarché)
Leclerc + System U	517 (Centre Leclerc 425 + Hyper U 40 + Super U 52)
Total	1198

Table 1: The biggest French retailers in 2004
Source: Atlas de la distribution, LSA 2004.

Considering figures in Table 1 and total numbers of hypermarkets in France in 2004, it can be said that most (about 95%) of the 1259 hypermarkets belong to the Big Six. That means they are a few smaller companies running hypermarkets in France and among them very few are independent retailers compared to the situation 30 years ago (Langeard and Peterson, 1975).

France is today the country where the large format has been the most developed in the world through the concept of hypermarket. The largest hypermarket can be found in Portet-sur-Garonne (near Toulouse) with its 25,000 m². It has been opened at the beginning of the 1970s. Today, it is considered as too big and the maximum size is about 15000 m².

French retail companies have successfully located hypermarkets in many foreign countries except in the USA and in Northern Europe (UK, Germany) where they failed in the 1980s (Cliquet *et al.*, 2002). Nevertheless, beside this apparent success of hypermarkets, a detailed focus on its evolution will demonstrate that some difficulties have already risen in some countries and will arise soon in other countries. In order to better understand its evolution, curves are displayed before introducing the concept of life cycle with its four main stages. Past and present of the hypermarket were described, it is time now to discuss about its future.

3. THE FUTURE OF THE HYPERMARKET: AN EXPLORATORY RESEARCH DESIGN

Dealing with the future of hypermarket needs to call for a specific research design in order to highlight the main characteristics of its evolution.

3. 1. Methodology and data

The purpose of this research is to focus on the future evolution of hypermarkets. In order to reach this goal, a longitudinal analysis is required in the country where this format is the most advanced which is France. Regression analyses are run to model and predict the evolution of the hypermarket format. Specifically, both quadratic and cubic models were computed from the hypermarket cumulative numbers. The relevancy of this kind of models has been highlighted in the case of department stores (Cliquet, 2000). On the one hand, the basic form of the quadratic model is as follows: $Y = aX^2 + bX + c$. On the other hand, the basic form of the cubic model is the following: $Y = aX^3 + bX^2 + cX + d$. The following variables are used: "total number of hypermarkets", "number of hypermarket openings during the year" and "total sales areas (in thousands of m²)". Table 2 displays these variables for both hypermarkets (from 1963 to 2003) and supermarkets (from 1957 to 2003). The introduction of supermarkets data is explained later on.

As far as data collection is concerned, two main data sources are used. The first data source is an article published in the *Journal of Retailing* (Langeard and Peterson, 1975). It provided us with the figures for the period 1963-1973 for hypermarkets and 1957-1973 for the supermarkets. The second data source consisted in annual documents edited by the *Direction of the Retail, Craft Industry and Service Firms* of the *French Ministry of Economy, Finances and Industry*. The figures concerns the period 1974-2003 for both super- and hypermarkets.

Year	Total # of hyp	# of hyp openings	hyp com. areas	Total # of sup	# of sup openings	sup com. areas	Total # of hyp and sup	# of hyp and sup openings	hyp and sup com. areas
1957				1	1		1	1	
1958				2	1		2	1	
1959				13	10		13	10	
1960				45	32		45	32	
1961				107	62		107	62	
1962				226	119		226	119	
1963		1		326	100		327	101	
1964	3	2		403	77		406	79	
1965	7	4		504	102		511	106	
1966	17	5		626	122		643	127	
1967	23	11		746	120		769	131	
1968	39	16		913	167		952	183	
1969	89	50		1160	247		1249	297	
1970	123	35		1365	205		1488	240	
1971	158	34		1830	215		1988	249	
1972	223	65	1236	2178	250	1641	2401	315	2877
1973	275	51	1507	2455	238	1859	2730	289	3366
1974	303	34	1690	2681	214	2029	2984	248	3719
1975	323	21	1724	2856	214	2193	3179	235	3917
1976	362	39	2004	3157	369	2456	3519	408	4460
1977	395	33	2137	3192	218	2582	3587	251	4719
1978	419	24	2244	3274	236	2779	3693	260	5023
1979	450	33	2328	3421	237	2620	3871	270	4948
1980	484	35	2410	3673	256	2815	4157	291	5225
1981	529	46	2562	3822	294	3059	4351	340	5621
1982	572	44	2692	4188	366	3367	4760	410	6059
1983	611	41	2851	4586	398	3724	5197	439	6575
1984	653	43	2967	4954	373	4061	5607	416	7028
1985	694	40	3149	5298	344	4321	5992	384	7470
1986	751	45	3379	5645	305	4515	6396	350	7894
1987	792	27	3548	5880	334	4727	6672	361	8275
1988	848	36	4129	6100	316	5700	6948	352	9829
1989	894	31	4339	6400	360	6100	7294	391	10439
1990	933	21	4704	6550	341		7483	362	
1991	965	14	4956	6700	352		7665	366	
1992	1001	21	5298	7013	392		8014	413	
1993	1036	15	5624	6947	334	7000	7983	349	12624
1994	1064	13	5869	6858	404	7100	7922	417	12969
1995	1092	14	6114	6990	326	7500	8082	340	13614
1996	1109	11	6000	6624	180		7733	191	
1997	1119	7	6200	6607	169		7726	176	
1998	1126	3	6300	6077	121	6641	7203	124	12941
1999	1133	0	6600	5938	123	6611	7071	123	13211
2000	1154	0	6700	5863	99	6625	7017	99	13325
2001	1179	3	6900	5809	113	6703	6988	116	13603
2002	1207	2	7000	5787	89	6768	6994	91	13768
2003	1235		7200	5616	138	6741	6851		13941

Table 2: Data concerning the hypermarket and supermarket formats in France

3. 2. Results for hypermarket format

A first shot of results strictly based on hypermarket data are displayed. They concern the number of hypermarkets, the number of openings of that kind of stores, and the total sales areas.

3. 2. 1. Evolution of the total number of hypermarkets in France

The R² values (0.98944 for the quadratic model and 0.99766 for the cubic model) and the F values show that the models can be considered accurate for prediction purposes (cf. Table 3). But all variables are not significant at the 0.05 level. Indeed, the variable Time**2 is only significant at the level 0.10 in the quadratic model. This means that only a linear curve is shown on the SPSS graph (cf. Figure 1). The graph in Figure 1 indicates that the number of hypermarkets has already reached the saturation point in the French market. Moreover, the cubic model seems to predict a future decline of the hypermarket format.

Quadratic model		Cubic model	
Regression results		*Regression results*	
Multiple R	0.99471	Multiple R	0.99883
R square	0.98944	R square	0.99766
Adjusted R squared	0.98889	Adjusted R squared	0.99747
Standard error	44.35926	Standard error	21.15685
Analysis of variance	*Sum of squares (DF)*	*Analysis of variance*	*Sum of squares (DF)*
Regression	7,009,060.2 (2)	Regression	7,067,272.8 (3)
Residuals	74,774.3 (29)	Residuals	16,561.7 (37)
F =	1,780.98886***	F =	5,262.94278***
Variables in the equation	*Beta*	*Variables in the equation*	*Beta*
Time	1.148243***	Time	-0.452066***
Time**2	-0.156916*	Time**2	3.528841***
		Time**3	-2.139428***

Table 3: Quadratic and cubic models for the total number of hypermarkets in France

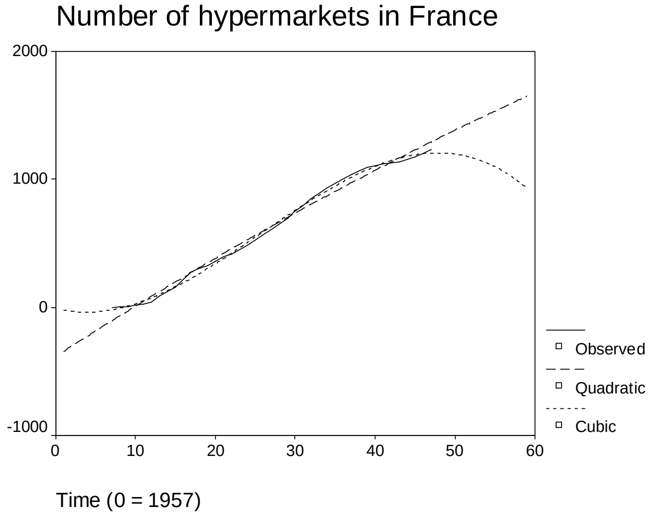

Figure 1: Curves representing the total number of hypermarkets in France

3. 2. 2. Evolution of the hypermarket openings in France

A complementary curve can be useful to analyze the hypermarket evolution in France: this representing the evolution of the annual number of hypermarket openings (cf. Figure 2 in which quadratic and cubic curves are also displayed). Both quadratic and cubic models are run. Details about these models are given in Table 4. They can be considered accurate for prediction purposes because of the R^2 values (respectively 0.66028 and 0.72549) and the F values. The cubic model appears more relevant than the quadratic model because of the higher value of the R^2. Moreover, all the variables are significant at the 0.01 level. The curves represented in Figure 2 indicate that the number of hypermarket openings is also declining in the French territory.

Quadratic model		**Cubic model**	
<u>*Regression results*</u>		<u>*Regression results*</u>	
Multiple R	0.81258	Multiple R	0.85176
R square	0.66028	R square	0.72549
Adjusted R squared	0.64192	Adjusted R squared	0.70262
Standard error	10.38998	Standard error	9.46856
<u>*Analysis of variance*</u>	*Sum of squares (DF)*	<u>*Analysis of variance*</u>	*Sum of squares (DF)*
Regression	7,763.2843 (2)	Regression	8,529.9714 (3)
Residuals	3,994.2157 (37)	Residuals	3,227.5286 (36)
F =	35.95719***	F =	31.71456***
<u>*Variables in the equation*</u>	*Beta*	<u>*Variables in the equation*</u>	*Beta*
Time	3.588545***	Time	8.158964***
Time**2	-3.958690***	Time**2	-14.466316***
		Time**3	6.089714***

Table 4: Quadratic and cubic models for the number of hypermarket openings in France

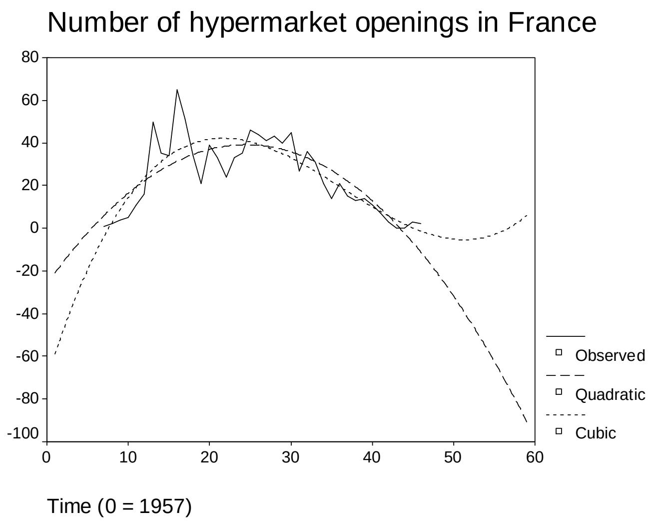

Figure 2: Curves representing the number of hypermarket openings in France

3. 2. 3. Evolution of the total sales areas of hypermarket format in France

A last couple of curves is displayed in figure 3 below. These curves, based on quadratic and cubic models, represent the evolution of the sales areas of hypermarkets (in thousands of m²). Working only from store openings can be questionable if these stores continue to increase their sales areas. So the size of these sales areas is taken into account as well. Details about these models are given in Table 5. They can be considered accurate for prediction purposes because of the R^2 values (respectively 0.98495 and 0.99190) and the F values. Moreover, all the variables are significant at the 0.01 level in the cubic model. The cubic curve presented in

Figure 3 indicates that the hypermarket sales areas in thousands of m² will be reaching the saturation point in France very soon.

Quadratic model		Cubic model	
Regression results		*Regression results*	
Multiple R	0.99245	Multiple R	0. 99594
R square	0.98495	R square	0. 99190
Adjusted R squared	0.98369	Adjusted R squared	0. 99084
Standard error	256.78695	Standard error	192,46320
Analysis of variance	*Sum of squares (DF)*	*Analysis of variance*	*Sum of squares (DF)*
Regression	103561967,7 2)	Regression	104292548,6 (3)
Residuals	1582548,9 (24)	Residuals	851967,9 (23)
F =	785,27978***	F =	938,50510***
Variables in the equation	*Beta*	*Variables in the equation*	*Beta*
Time	111,359402***	Time	-361,095146***
Time**2	1,784997	Time**2	22,254766***
		Time**3	-,270563***

Table 5: Quadratic and cubic models for the sales areas linked to the hypermarket format

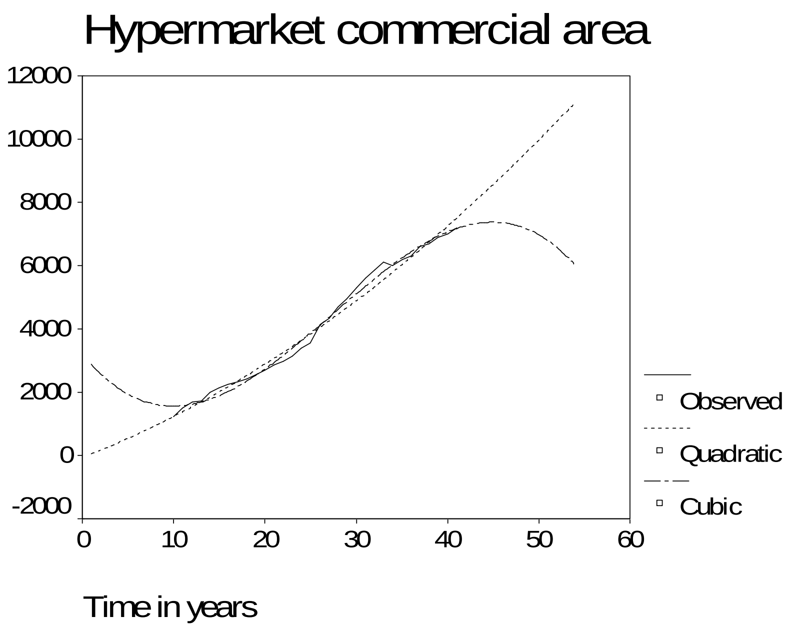

Figure 3: Curves representing the sales areas linked to hypermarket

The three analyses based on the total number of hypermarkets, the number of hypermarket openings and the sales areas show that the hypermarket format could face future failure in the French market. The saturation point is already reached in terms of total number of hypermarkets and close to be reached as far as the sales areas are concerned. Very few new hypermarkets will be opened in the next years in France and others will close.

Two comments can be made at this point of the research design: the curve displayed in figure 3 seems to be similar to a well-known theoretical approach and concretely the distinction between hypermarkets and supermarkets merit a complementary development.

4. A NEW RESEARCH DESIGN

Figure 3 shows a possible life cycle curve for hypermarkets in France. Introducing this concept of retail life cycle is then needed whereas other data should be added to confirm this evolution shape especially those stemming from supermarkets.

4. 1. The concept of life cycle

In biology, the concept of life cycle deals with human being birth, development, maturity and decline. This life cycle concept has been transferred to marketing in the 1950s. More specifically, the product life analysis contributed to improve new product pricing policy (Dean, 1950) and then the concept was applied to "major forms of retailing" for defining adapted strategies to change and sustaining profits at each stage (Davidson *et al.*, 1976). The life cycle applied to retail forms is composed of four stages: early growth or innovation stage, development stage, maturity stage, decline stage.

4. 1. 1. Life cycle stages

During the early growth or innovation stage, the store size and assortment width are reduced compared to the levels they can reach during the next stages. Implantations, store lay-out, equipments, marketing policies are tested for a period of time, and environmental conditions should be favourable. Direct competition is very weak and at the worst the new format can cause suspicion among other retailers. This stage can be very short: about four or five years for the supermarket and hypermarket formats in France, or relatively long: more than ten years for the hard discount in Germany.

During the accelerated development stage, the main features of the stores are specified. Competition is developing. Some fascias are imposing themselves in the market whereas some new entrants are already exited from the market after unsuccessful attempts. Good locations are still available and profitability is satisfactory for companies which keep a good control on operations and well manage how to progressively make these operations evolving.

During the maturity stage, the growth rate, in terms of number of stores, selling space, market share, sales in constant currency, varies between + 5% and – 5% per year. The store features are stabilized at this stage. The number of fascias is decreasing in the market because of external growth strategies implemented by the largest retail groups. The maturity stage length depends on macro-environmental factors.

During the decline stage, the most dynamic retail companies, when they do exist, regroup fascias to build large retail groups able to capture margins which can be saved. Sometimes, only one company stay alive as it is the case of variety stores in France (Cliquet, 2000) with *Monoprix* belonging to both (50%-50%) to *Galeries Lafayette* group and *Casino* group.

4. 1. 2. Debate about the concept of life cycle used in marketing and retailing

Despite defenders (Levitt, 1965), the product life cycle is considered questionable (Vandaele, 1986). Some researchers think there is not one product life cycle model but several (Rink and Swan, 1979) whereas others assert it is impossible to observe any true product life cycle model, except due to hazard (Dhalla and Yuspeh, 1976). Suppose such a curve can be drawn: the French car maker *Renault* could show product life cycle curves for instance as far as its model R19 was concerned, but ... at the end of the car model life. During the life of a product, it is actually never known regarding a product life cycle curve whether this curve will go on increasing, or stop growing, or even begin to decline. Every scenario is possible at any time.

The retail life cycle is based on the idea that the outlet is the product of the retail company (Dicke, 1992). But this specific "product" is concretely located in a delineated space. So it can be asserted this space can be saturated shown on the retail life cycle curve of a defined retail format as it was already shown for variety stores in France (Cliquet, 2000). This concept of retail life cycle is related to the concept of wheel of retailing (Hollander, 1960) which was contested because it does not work for specialized stores (Moati, 2001). But it deals with general merchandise retail formats for which it seems to work. The retail life cycle will help us to analyze the evolution of the hypermarket format in France since its birth, in 1963.

4. 2. Hypermarket and supermarket formats jointly considered

In this section, supermarkets and hypermarkets have been jointly analyzed because many supermarkets, considered in France as self-service grocery stores between 400 and 2500 m², were transformed into hypermarkets (indeed with a consistent proportion of non food products). These transformations were especially due to *E. Leclerc* retail group. Through such operations, hypermarkets seemed to maintain a certain rate of new openings in the market whereas it was only by enlargement of supermarkets areas. And the retail life cycle curve of supermarkets was decreasing quicker than it should because of these transformations.

4. 2. 1. Evolution of the number of "hypermarkets + supermarkets" in France

The R^2 values (0.941 for the quadratic model and 0.992 for the cubic model) and the F values show that the models can be considered accurate for prediction purposes with significant variables at the 0.05 level. According to the most accurate model, the cubic one, and the correspondent curve, plotted in Figure 5, it appears that the "hypermarket + supermarket" evolution has already reached its maximum and is now in the decline stage. If the curve is prolonged, it seems that hypermarkets and supermarkets could disappear near 2015 …!

Quadratic model		**Cubic model**	
Regression results		*Regression results*	
Multiple R	0.9699	Multiple R	0.9961
R square	0.9406	R square	0.9923
Adjusted R squared	0.9379	Adjusted R squared	0.9918
Standard error	733.2520	Standard error	267.0596
Analysis of variance	*Sum of squares (DF)*	*Analysis of variance*	*Sum of squares (DF)*
Regression	374,850,723.2 (2)	Regression	395,440,903.4 (3)
Residuals	23,656,975.5 (44)	Residuals	3,066,795.2 (43)
F =	348.5955***	F =	1,848.1789***
Variables in the equation	*Beta*	*Variables in the equation*	*Beta*
Time	314.9540***	Time	-157.8067***
Time**2	-2.2619***	Time**2	22.1037***
(Constant)	-1652.6590***	Time**3	-0.3384***
		(Constant)	337.2001*

Table 6: Quadratic and cubic models for the total number of "hypermarkets + supermarkets" in France

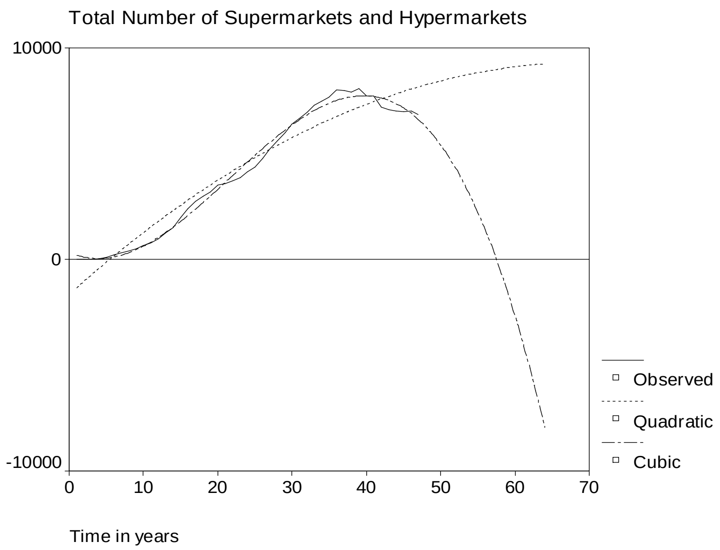

Figure 5: Curves representing the total number of "hypermarkets + supermarkets" in France

4. 2. 2. Evolution of the "hypermarket + supermarket" openings in France

Quadratic and cubic models were conducted from the "supermarket + hypermarket" openings from 1957 to 2003. The R² values (0.8041 for the quadratic model and 0.8635 for the cubic model) and the F values show a good predictability. Concerning the quadratic model, all variables are significant at the 0.05 level. It clearly shows that opening new hypermarkets or supermarkets in France "belongs to the past". Even if the constant is not significant and the other variables are significant only at the 0.06 level in the cubic model, Figure 6 also indicates that hypermarket evolution is due to transformation of supermarkets into hypermarkets and that very few hypermarkets and supermarkets can be opened in France now.

Quadratic model		**Cubic model**	
Regression results		*Regression results*	
Multiple R	0.8967	Multiple R	0.9293
R square	0.8041	R square	0.8635
Adjusted R squared	0.7950	Adjusted R squared	0.8538
Standard error	59.9329	Standard error	50.6153
Analysis of variance	*Sum of squares (DF)*	*Analysis of variance*	*Sum of squares (DF)*
Regression	634,023.20 (2)	Regression	680,877.38 (3)
Residuals	154,454.13 (43)	Residuals	107,599.95 (42)
F =	88.2559***	F =	885,900***
Variables in the equation	*Beta*	*Variables in the equation*	*Beta*
Time	34.9107***	Time	11.5897*
Time**2	-0.6513***	Time**2	0.5759*
(Constant)	-108.6115***	Time**3	-0.0174***
		(Constant)	-12.3960

Table 7: Quadratic and cubic models for the number of "hypermarkets + supermarkets" openings in France

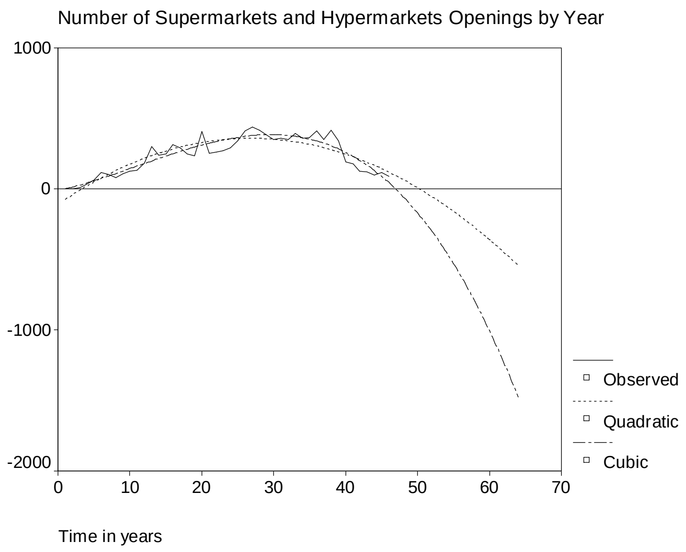

Figure 5: Curves representing the number of "hypermarkets + supermarkets" openings in France

4. 2. 3. Evolution of the sales areas for "hypermarkets + supermarkets"

As previously, a new set of curves is displayed in figure 6 based on quadratic and cubic models from the sales areas of "hypermarkets + supermarkets" (in thousands of m², cf. Figure 6 in which quadratic and cubic curves are also displayed) with details in Table 8. The R^2 values (respectively 0.96607 and 0.99382) and the F values enable to show with all the variables significant at the 0.01 level in the cubic model that the sales areas in thousands of m² for "hypermarkets + supermarkets" is probably close to reach the saturation point in France.

Quadratic model		**Cubic model**	
Regression results		*Regression results*	
Multiple R	0.98289	Multiple R	0. 99382
R square	0.96607	R square	0. 99382
Adjusted R squared	0.96324	Adjusted R squared	0. 98607
Standard error	758,15163	Standard error	466,66896
Analysis of variance	*Sum of squares (DF)*	*Analysis of variance*	*Sum of squares (DF)*
Regression	392785258,1 (2)	Regression	401571373,4 (3)
Residuals	13795053,5 (24)	Residuals	5008938,2 (23)
F =	341,67487***	F =	614,64401***
Variables in the equation	*Beta*	*Variables in the equation*	*Beta*
Time	515,583356***	Time	614,64401***
Time**2	515,583356	Time**2	68,664674***
		Time**3	-,938281***

Table 8: Quadratic and cubic models for the sales areas linked to "hypermarkets + supermarkets"

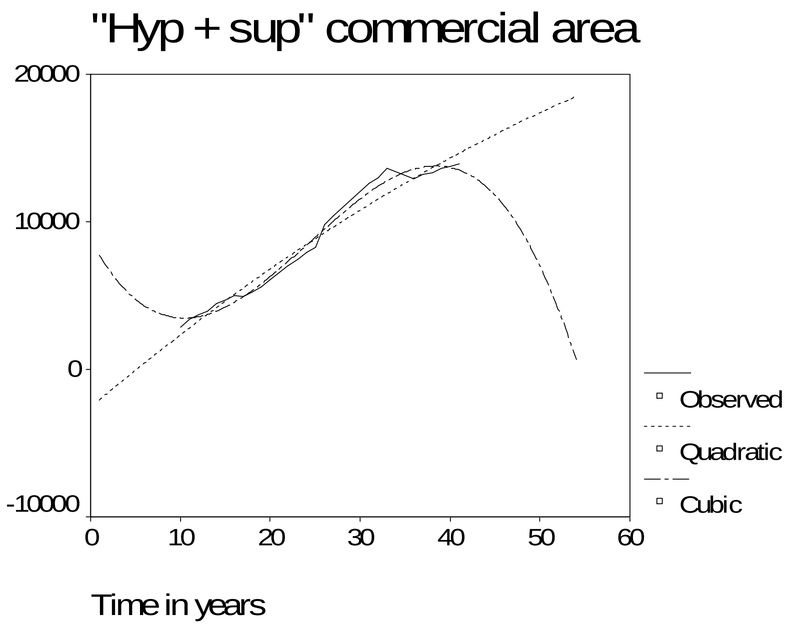

Figure 6: Curves representing the sales areas linked to "hypermarkets + supermarkets"

Dealing only with hypermarkets prevents us from making out the risk of decline of the retail format. Adding supermarkets data enables us to show that this whole set of stores is threatened by a serious decline. Considering the sales areas did not give any hope of recovery for the super- and hypermarket life cycle curve even though it is not so clear as it is for openings.

5. DISCUSSION

An interesting both empirical and theoretical contribution can be pointed out from this research: the existence of a retail life cycle is shown for hypermarkets confirming results of previous publications (Cliquet, 2000; Flavian *et al.*, 2002). As Dioux and Dupuis (2005) suggest to do, if it is tried to link together department stores, variety stores, supermarkets and hypermarkets, and perhaps later hard discounters, all dedicated to general merchandise, it is probably possible to assert that the retailing wheel (McNair, 1958; Hollander, 1960) can explain the retail format evolution. This mechanist theory was contested as some authors do not agree with the basic hypotheses of the model (Goldman, 1975), whereas for others (Filser *et al.*, 2001) it cannot explain the department store format and the shopping center. But department stores did enter the retail market through price discounts (Levy *et al.*, 2005; Héliès-Hassid, 2000). Shopping centers are not retail formats but urban planning techniques to improve retail offers by gathering them in a structured location. A shopping center does not sell any product: it sells locations to retailers.

This demonstration was made through the use of a longitudinal analysis. Regression models, and more specifically quadratic and cubic models, were run from data collected on a long period corresponding to the entire life of the retail formats studied – supermarkets and hypermarkets - as it was already done in previous works (Cliquet, 2000). The originality of the present approach stands in the choice of enlarging the format to the supermarkets and taking into account the size of the sales areas.

When dealing with a traditional product life cycle curve, nobody knows whether this curve will start again growing or go hopelessly to the decline stage. By using the retail life cycle (Davidson *et al.*, 1976), the evolution seems to be more certain. As it was shown for variety stores in France (Cliquet, 2000), when a retail life cycle curve reaches the saturation point, there is a great “chance” for seeing the curve going down irremediably. This phenomenon should be ascertained through computation about saturation in the retail sector of the country studied. Entropy measures can be used for that purpose (Cliquet, 1998; Cliquet and Rulence, 1998).

As far as the managerial implications are concerned, the evolution shown by the results displayed in this empirical study can lead to tragic decision making by hypermarkets operators if they do not react quickly enough. The problem concerns strictly the French context for the moment. French retail companies like *Carrefour* are clearly much more profitable in foreign markets than in their domestic markets. Being strong in its domestic market is often considered as a condition to grow abroad. But what can happen when the domestic market begins to decrease?

Indeed, the saturation of the market is not the only danger threatening the hypermarkets companies. As soon as a format reaches the maturity stage of its retail life cycle, new strong competitors try to enter the market. The German hard discounters *Aldi* and *Lidl* have penetrated the French food retail market from 1988. They have located more than 3000 stores in this country, and year after year, they gain 1% of market share to the hypermarkets. Philippe Moati[1] considers e-commerce as a threat for hypermarkets even though most of these companies are controlled by … hypermarkets! If for instance US category killers like *Best* or *Office Depot* (already located in France in the B to B market) decided to invest in France, what could be the reaction of the French hypermarket companies in a declining market? Some of them could decide probably to sell some of their chains to concentrate on foreign markets. That should alarm the French authorities.

In case of choosing resistance, the hypermarket companies could decide to still enlarge their assortment to cars, electricity after having succeeded in insurance, mobile phone, swimming pools and jewelry[2]. The hypermarket format is very flexible and one can try to add any new product or service to the assortment with a good chance of success even though right at the beginning, many people predict a failure. It was the case for micro-computers and now *Carrefour* has been the leading retailer in France for many years in this market. But, once again the arrival of category killers could change the problem. From opening new departments within the hypermarket, these retailers could have also to close others. What would be then the image of these stores in public opinion? Creating other formats and their own specialized stores like *Auchan* group with *Decathlon* (sport goods), *Boulanger* (electrical apparels), *Kiabi* (clothes), and so on, ready to become category killers when needed, can also be a possible reaction. In trouble, hypermarkets need to re-think their strategies maybe to find back the “Big Middle” (Levy *et al.*, 2005) where their revenues and profits were higher some years ago. The Big Middle is the market space where every retailer should go when he succeeded in entering the market through either innovation or low price strategies and where retailers and consumers “exert a mutual gravitational pull” (Arnould, 2005). The problem is: when you quit once the Big Middle, is it possible to come back? In other words, is it possible to invert the retail life cycle curve when the decline has begun? By examining what happened to variety stores in France despite *Monoprix*’ efforts (Cliquet, 2000), it seems to be hard especially when innovation stems from e-commerce and low prices from German hard discounters.

This paper has some limits. Indeed, the decline of the hypermarket format was shown in France. A pessimistic future was actually drawn for this kind of stores even though some reactions that could be desirable from French retailers were figured out. Nevertheless, any

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[1] Interview of Philippe Moati in http://www.journaldunet.com/itws/it_moati.shtml
[2] Interview of Philippe Moati in http://www.linternaute.com/acheter/entreprises/hypermarches/interview.shtml

explanatory variables were not introduced in the life cycle modeling process. One track for future research could consist in highlighting the possible reasons of this hypermarket decline. Several ways could be explored: saturation of the market measured by relative entropy, consumer behavior changes more oriented towards services and smaller and closer suppliers, legislation, hard-discount competition, etc….

The final purpose of this paper was to trace perspectives for the future from past and present observations. Defining a framework from the past and present for retail companies to predict the future is a difficult task (Savitt, 1989), but it can be of interest for many countries. And another track of research could be given by the definition of a model able to predict the retailing process in an emerging country.

6. CONCLUSION

First, very few marketing papers have exposed the history of hypermarkets in France (outside France). Only few papers (Langeard and Peterson, 1975; Cliquet, 2000) and books (Villermet, 1991; Marseille, 1997; Lhermie, 2003) focused on hypermarket history. It is time to go further in research dealing with the hypermarket format because problems are appearing in France despite its success in many other countries (Southern Europe, South America) and more recently (USA and China).

The present research highlighted the existence of difficulties to be faced by hypermarket operators. Indeed, the saturation point seems to have been already reached in the French market (perhaps even the decline stage has begun). The retailers have to transform the hypermarket format in order to face the hard discount competition and attract again the consumers. But, at the same time, the French retailers have to develop this format in some countries for which this format is still attracting (Italy, China, etc.). The difficulties faced in the domestic market and in some other countries will perhaps help them to better adapt their format to consumer expectations and to differentiate themselves from the hard discount chains. Either by transforming radically this retail format or by creating a new one, something should be done if the French retailers want to control the turn of the retailing wheel (Hollander, 1960). Otherwise foreign retailers could take benefit of the situation and catch this opportunity to finally enter the French market.

Some recent actions of hypermarket operators can be quoted to illustrate this need for change. For instance, *Auchan* launched a hypermarket of the future in 2000: *Val d'Europe*. It is composed of four different spaces: food, person, home and leisure. The decor contributes to reinforce the comfort and the intimacy of the consumers. Additional services are offered to these consumers (fast-ffod restaurant, café, nursery, etc.). Another example deals with *Casino* which opened *Magelan*. This is a hypermarket with a reduced size, like a proximity store. The offer is more limited and is organized around two entries: food and beauty. Other changes concern the possibility for the consumers to buy on line with *Ooshop* by *Carrefour*, or to find diversified products and services in a hypermarket (insurances, travels, tickets for concerts, jewels, etc.).

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