

CLUSTER ANALYSIS OF LUXURY BRANDS ON THE INTERNET

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ABSTRACT

This paper examines the way luxury brands use the Internet in their communication strategy. The research is based on a literature review of luxury brands and Internet concepts as well as the way luxury brands use the Internet as a media. The paper develops an analysis grid based both on academic and managerial perspectives. A content analysis of web sites is realized to propose a typology of luxury brands in four categories: Traditional E-shops; Artistic E-shops; Luxury Interactive; Traditionalists.

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KEYWORDS: Internet, Luxury Brands, Typology, Web Sites

INTRODUCTION

Despite luxury sector success in 2010 (Xerfi, 2011), conciliating luxury and Internet is a growing necessity to ensure supplemental income sources. Today, more than 30% of the 77 Colbert Committee brands offer e-commerce. According to Xerfi (2011), the increasing presence of luxury brands on the Internet, through the creation of their own website or on multibrand websites, provides evidence that reconciling the Internet and luxury is possible, desirable and even unavoidable. This reality has resulted in wide advances in the literature regarding this field of study. The first articles related to the Internet as a communication tool for luxury brands were published in the late 90's (Nyeck and Houde, 1996; Nyeck and Roux, 1997). At that time, there was a shared reluctance to use this method from both the luxury brand manager and consumer's point of view.

Nyeck and Houde (1996) nevertheless underlined the importance and growth of Internet media, and pinpointed the necessity of integrating the Web into communications strategies. Little research was conducted on this subject in the following years (Dall'Olmo Riley and Lacroix, 2003; Seringhaus, 2005). Study conclusions highlight that managers saw the Internet as an inevitable development for their brand, offering both opportunities and threats. Regarding websites content analysis (Nyeck and Houde, 1996; Dall'Olmo Riley and Lacroix, 2003), studies revealed that website suffered from a lack of interactive functions and originality, with the focus set on brand image only. More recently, the question of luxury brand e-commerce was raised (Seringhaus, 2005; Kapferer and Bastien, 2008; Okonkwo, 2009). Authors agreed on the inappropriateness of this channel regarding luxury products. Moreover, the behavior of the brands on the Internet is far from homogeneous. Some use e-commerce (Louis Vuitton, Tiffany), others use interactive tools (Chanel, Cartier) and others are still "passive" actors with websites simply displaying images such as Fendi or Versace. This research examines how luxury brands use Internet tools in their communication strategy, despite earlier reservations of its efficacy. The study objective is subdivided into two sub-objectives on base of which we will build our research process.

O1 : Identifying online luxury brand communication strategies;

O2: Creating a typology allowing classification of luxury brands regarding their online communication behavior.

The paper is organized in the following way: first, a literature review focusing on luxury brands is realized. Communications concepts in luxury and more particularly the use of Internet tools are examined. Secondly, we explain the methodology and data collection. An analysis grid is implemented to audit the luxury brands Websites. Then, a principal components analysis is completed, followed by cluster analysis performed on data collected from the audit. This allows a classification of luxury brands according to their behavior on the Internet. Finally, the results of the research are discussed and study limitations are identified.

LITERATURE REVIEW

The luxury brand is consubstantial with the luxury product but not with the luxury concept which is abstract (Kapferer and Bastien, 2008:151). The luxury brand was defined according to several perspectives. The economic vision of the luxury brand was developed by Mc Kinsey (1990) who defined luxury brand as that being at the top of the price pyramid, by category of products. Prices are appreciably higher to products presenting comparable tangible features. Rather close to this very pragmatic vision, Nueno and Quelch (1998) as well as Dubois and Laurent (1993) consider luxury brands in a descriptive way with concepts such as the functional utility, price and the socio-demographic characteristics.

Kapferer (1998) criticized Mc Kinsey's definition (1990), and blamed it for not dissipating confusion over the minimum threshold below which we exit the luxury category (Phau and Prendergast, 2000). This can also be said regarding definitions proposed by Nueno and Quelch (1998). In the dichotomous perspective of luxury, the authors define luxury brands by contrast to non-luxury brands (Lipovetsky and Roux, 2003), because any specificity defines itself by difference. In their first works, Vigneron and Johnson (1999) defined the specific difference between a prestigious brand and non-prestigious brand.

In 1899, Veblen, in his famous "Theory of Leisure Class", argued we cannot classify products/brands in luxury or non-luxury categories. These must be examined in their socioeconomic context. He indicates luxury means the most desirable socially. This dichotomous perspective set the luxury brand against the non-luxury brand. Nueno and Quelch (1998) went further by integrating the concept of continuum into luxury by arguing that not all luxury brands are equal. A brand can be a luxury brand in certain product categories and not in others (Kapferer, 1996; Vigneron and Johnson, 2004). Research on luxury can further integrate concepts of needs and symbolism. This is called the "symbolist perspective of the luxury". Indeed, there is tacit agreement in the literature to define luxury products as products for which the simple fact of using them give the owners special status above the functional utility of the product itself. The product satisfies both functional and psychological needs and it suggests these psychological benefits provide the key distinction between luxury products and non-luxury products or counterfeits (Vickers and Renand, 2003). According to Roux (1991, 1996), a luxury brand is characterized by a symbolic, imaginary or social added value, which differentiates it from other brands. The luxury brand meets symbolic needs because it has a strong image, remains consistent in all its components, conveys asserted values and shares an ethics and an aesthetic with the consumer.

The second part of our concern is the Internet. The Internet is not only a means of communication, but it also an unprecedented phenomenon in history. The Internet is an important part of brand communication strategies for ordinary consumer goods as well as luxury products (Dall' Olmo Riley and Lacroix, 2003). With increases in the number of brands specific websites, an increased interest in the literature has been recorded (Chen, 2001; de Chernatony, 2001). The Internet has specific characteristics. We note specifically the interactivity (Hoffman and Novak, 1996; Ind and Riondino, 2001; Chaffey and al., 2003), the intelligence (Chaffey and al., 2003), the individualization (Chaffey and al., 2003), the speed and the accessibility, the absence of contact (de Chernatony, 2001), and the loss of control (Viot, 2009). These characteristics make the Internet an adapted channel of distribution and communication to the mass audience (Okonkwo, 2009) and consequently we understand the reluctance of luxury brands to use it.

If we confront these characteristics with those of the marketing of luxury brands, it is obvious that they are not compatible. The features of both concepts are highlighted regarding the communication and the distribution perspectives in Table 1.

Table 1 : Luxury Features Versus Internet Characteristics

Luxury Marketing Features	Internet Features
<p>Communication: Elitist support, limited use of mass media, events, sponsoring etc. (Alléres, 1991,1997 ; Chevalier and Mazzolovo, 2008)</p> <p>Distribution: (Alléres, 1991, 1997 ; Okonkwo, 2009) Point of sale experience, Service, Consumption experience, individualized sales, Only in prestigious venues or Capital cities Price rarely displayed</p>	<p>as communication tool: Very wide target → few or no targeting Globally accessible (Chaffey et al., 2003 ; Okonkwo, 2009)</p> <p>As distribution channel: international, accessible, few or no contacts, limited service, limited buying experience → focus is set on consumption experience (Chaffey et al., 2003 ; Okonkwo, 2009)</p>

Table 1 shows the antagonism between the internet and luxury concepts. The Internet is dedicated to the mass market and luxury brands are reserved for the elite. We can understand the reluctance of luxury brands to integrate Internet in their communication strategy and furthermore as a distribution channel. The risk of devaluating the brand image can be perceived as high.

To pinpoint the challenges of introducing the Internet to brand management, A.T. Kearney developed the theory of the 7C’s which aims at creating a high impact digital consumption experience (Atwal and William, 2009). The following categories are to be considered: Content, Customization, Customer care, Communication, Community, Connectivity and Convenience. Constantinides (2004) describes the Web experience according to three major factors: Functionality, Psychology and Content. We highlight in Table 2 the key elements of the digital experience in the field of the luxury: the brand identity and its aesthetics, the usability and the interactivity.

Table 2: Key Elements of the Digital Experience of the Luxury Brand

Brand Identity & Aesthetics	Usability	Interactivity
Online consistency (Ind and Riondino, 2001) Design/Aesthetics (Isaac and Volle, 2008) Level of service (Constantinides, 2004) : Product (Personalization) (Clauser, 2001) Price (Chen, 2001) Place (E-commerce) (Okonkwo, 2009) Trust (Constantinides, 2004) Communication (Larbanet and Ligier, 2010)	Functionality (Chen, 2001) Rapidity (de Chernatony, 2001) Search engine/ accessibility (Chen, 2001 ; Isaac and Volle, 2008)	Communities (Casaló et al., 2008) Interaction with the brand (Constantinides, 2004)

This table highlights the key elements of the digital experience in the field of the luxury brand .3 major factors have been identified to implement an Internet Strategy when it comes to luxury brands: Brand Identity and Aesthetics, Usability and Interactivity. This table highlights the importance to re-create the luxury experience online in order to protect luxury brand image.

In conclusion, it appears there is a clear division between the academic considerations to moderate the use of the Internet as a communication tool for luxury brands and their effective presence on-line. An audit of luxury brand websites has now to be completed to bring about a better understanding of the positions adopted by luxury brands on the Internet.

DATA AND METHODOLOGY

In this research, our main interest is understanding how luxury brands utilize the Internet as a communication tool. To do so, content analysis of selected websites were undertaken, applying classic data analysis techniques. First, qualitative data such as the marketing-mix used within sites, technologies implemented to create Web interactive and quality interfaces, were collected. For this purpose, we built an analysis grid allowing us to score web sites. Second, all the sites listed in our sample were audited to proceed to the data analysis. Our empirical research is based on a web sites audit. An analysis grid, based

on an iterative process consisting of round trips between the literature, the ground and the experts, was created. First, a rough draft was established, taking into account the completed literature review. Pretesting was then conducted on variables initially retained on a selection of luxury brand websites providing the grid with additional observations. Next, we analyzed the grid implemented by Pr. S.Galloway (NYU) to establish the websites scoring. This stage provided the opportunity to complete and correct our original grid. Finally experts'opinion were asked regarding the completed grid. These experts were from such luxury brands as Chanel, Van Cleef and Arpels, Francis Ferent, Delvaux and from Internet communication agencies like Emakina, SCS and Genius. Following their recommendations, analysis grid was improved and finalized.

During the websites audit, the assessment method consisted of a binary coding processes, which estimates either the presence (1) or the absence (0) of the variables tested. This technique presents a major interest for the objectivity of the research undertaken. Indeed, whatever the researcher is analyzing, identifying whether the variable is present or absent is an objective fact. It confers on the analysis the characteristic of inter-coder reliability or of reproducibility (Gavard-Perret et al , 2008: 274). The coding results are comparable between two coders within the framework of a qualitative approach.To maintain a systematic approach and avoid certain sectorial biases effects, the research focused on brands belonging to " personal luxury goods ". This sector includes ready-to-wear clothing, leather accessories and watchmakers and/or jewelers. A set of luxury brands was first listed in the personal luxury goods sector. To this end, French luxury brands listed by the Colbert committee and those listed in the top 15 " luxury brands " of Interbrand (Interbrand, 2008) were used.Then, brands belonging to famous luxury groups were included: LVMH, PPR-GUCCI and PERNOD RICARD.

Finally, these lists were completed with the brands often referred to in the literature, retaining only those from the personal luxury goods sector. Authors whose work focused on and provided a clear vision of the brands belonging to this luxury industry were chosen (Phau and Prendergast, 2000; Dubois and Laurent, 1993; Dubois and Paternault, 1995; Kapferer and Bastien, 2008; Lipovetsky and Roux, 2003; Okonkwo, 2007, 2010; Chadha and Husband, 2006). Furthermore, authors from different origins were chosen, thus ensuring the international recognition of the selected brands.The final sample included 78 luxury brands websites, as listed in Table 3. The data collection from the website audit of the selected sample with the analysis grid lasted four weeks and took place between 01-10-11 and 01-11-2011.Once all the data was collected, the analysis was conducted using the SPAD software. According to the variables used, the appropriate exploratory approach varies. Jolliffe (2002) indicates that a Principal Components Analysis (PCA), built to handle continuous data, can be used on qualitative data. It is necessary to note the PCA of binary variables provides the same results as the Multiple Correspondences Analysis (MCA) (Meyer and al., 2010). The principal components analysis aims at identifying, from a set of k variables, an underlying structure in the collected data. If such a structure exists, identifying it allows us to simplify the gross information contained in a database, by substituting in k initial variables, a smaller number of m factors. These factors are trained by linear combinations of the initial variables (Gavard-Perret and al., 2008).

Once the principal components analysis was conducted, the cluster analysis was completed using the factors resulting from the principal components analysis (by default SPAD retains the first ten factors). In terms of proximity measure, the distance usually used is the Euclidian distance (Thiétart et al., 1999; Gavard-Perret et al., 2008; Jolibert and Jourdan, 2011), it is also the one used by SPAD. Based on the hypothesis, that an individual can only belong to a single group, methods of partition were applied, simplifying the analysis of the obtained results (even if it could provoke a certain data structure distortion). Polythetic methods were chosen, forming groups based on the proximity of the subjects. All variables retained for the typology were taken into account to establish the distance between the subjects (Gavard-Perret et al., 2008; Jolibert and Jourdan, 2011).Within the polythetic methods, SPAD, by default, applied the hierarchical ascending classification, because the number of groups to be obtained was not

fixed in advance. The algorithm used by SPAD is Ward, which is one of the most precise methods when an indicator of Euclidian distance is used (Jolibert and Jourdan, 2011).

Table 3: Brands Listed in the Sample

Brands'origin				
Country	Ready-to-Wear/Leather Goods		Jewelry/watchmaker	
	Group	Independant	Group	Independant
France	Louis Vuitton	Hermes	Boucheron	Lorenz Bäumer Joailler
	Céline	Chanel	Breguet	Mellerio
	Chloe	Lanvin	Cartier	Bell & Ross
	Lancel	John Lobb	Chaumet	Mauboussin
	Givenchy	Lacoste	Fred	
	YSL	Leonard	Van Cleef & Arpels	
	Dior	Longchamp		
	Azzedine Alaia	Balmain		
		Pierre Hardy		
		Pierre Cardin		
		Christian Lacroix		
		Karl Lagerfeld		
		Chhristian		
		Jean Paul Gaultier		
	Sonia Rykiel			
	Nina Ricci			
	Gucci	Ermenegildo Zegna	Officine Panerai	Bulgari
	Bottega Veneta	Armani		
	prada	Versace		
	Salvatore Ferragamo	Dolce & Gabanna		
	Emilio Pucci	Ferré		
	Fendi	Valentino		
	Stefanobi	Missoni		
	Berluti	Roberto Cavalli		
	Sergio Rossi			
	Stella McCartney	Burberry	Baume et Mercier	Patek Philippe
	Dunhill	John Galliano	IWC	Rolex
	Alexander Mc	Paul Smith	Roger Dubuis	Omega
	Thomas Pink	Jimmy Choo	Jaeger Lecoultre	Chopard
			Tag Heuer	Audemars Piguet
			Zenith	
			Hublot	
			Piaget	
			Girard Perregaux	
			Vacheron	
			De Beers	
	Marc Jacobs	Ralph Lauren		Tiffany&co
	Donna Karan	Calvin Klein		
		Coach		

In this table, all the brands that were audited trough the analysis grid are listed. Those brands are from 3 sectors: Ready-to-Wear & Leather goods, Jewelry and Watchmaker. They are from 5 different countries considered the birthplace of luxury: France, Italy, UK, USA and Switzerland. Some brands belong to Luxury group and others are independent.

EMPIRICAL RESULTS

After having established that variables were factorisable by examining the values tests matrix, and examined the communities table to make sure that these were equal to at least 0.5, a principal components analysis was undertaken. The KMO equals 0.665, and is considered satisfactory according to Jolibert and Jourdan (2011). The Barlett test of sphericity is also significant (approximate Chi-square = 1,025.253; Ddl = 300). Thus, no rotation was performed. Regarding the number of factors retained, the criterion of explained variance was used. This method led to retaining two factors, corresponding to 36.04 % of the restituted variance. However, an additional factor was retained to increase the variance. This amounted to 42.76 % of the restituted variance, a more satisfactory result. This was confirmed by use of the Catell criterion, which also requires the preservation of three factors.

Table 4 shows components matrix analysis. The correlations between variables and factors indicates the extent to which every initial variable finds itself in each factor, allowing interpreting axes in the following manner: Factor 1 (26.11 % of restituted variance) is related to the E-shopping aspect of the website, namely if the website has an E-Shop and related features such as the possibility to return the product, various delivery services, after-sales service etc. Factor 2 (9.93 % of restituted variance) represents the Interactive aspect of the website, namely if the site proposes interactive interfaces such as privileged access to a club, RSS feeds, forum etc. Factor 3 (6.72 % of restituted variance) represents the usability of the website in particular the ease and speed with which the Internet user is able to find the information which he is interested in.

Table 4 : Components Matrix Or Variable-Factor Correlation

Components	Factor 1 26.11%	Components	Factor 2 9.93%	Components	Factor 3 6.72%
E-shopping	0.942	club/privileged access	0.669	Easy access to information	-0.611
Product return	0.924	Product sheet	0.548	Forum	0.550
Product prices	0.882	RSS feeds	0.540	Brand Interaction	0.496
Contact means	0.858	Forum	0.515	Wishlist	0.421
Integrated E-shopping	0.853	Mobile Application	0.464	Music	0.348
SAV	0.774	Brand Interaction	0.393	Newsletter	0.323
Various delivery services	0.566	Social website links	0.341		
Wishlist	0.521				
Newsletter	0.475				
Search engine	0.470				
Online Exclusivity	0.456				
Product sheets	0.442				
Products Personalisation	0.356				

This table identifies the 3 factors retained through the principal component analysis, and explaining together 42.76% of the restituted variance. Factor 1 is mainly explained by items related to E-shopping; Factor 2 is related to interactive items; Factor 3 is explained by items illustrating the usability of the website.

According to Jolibert and Jourdan (2011) interpretation of the aforementioned factors which leans towards a theoretical approach familiar to the researcher, is the best method in reaching a final decision. SPAD identifies partitions by using an automatic search for the best partitions and improves them by applying mobile center iterations called consolidation. According to Table 5, the process results in a partition of four classes.

Table 5: Four-Class partition

Class	Size	Weight
1	33	33.00
2	6	6.00
3	16	16.00
4	23	23.00

Table 5 illustrates the partitions obtained through cluster analysis. Four classes have been identified. The first class is composed of 33 brands., The second has only 6 but is still of interest. The third has 16 and the fourth has 23.

As identified in Table 5, classes 1 and 4 provide significant sizes 33 and 23 notably, whereas classes 3 and 2 provide inferior numbers, with the latter reaching only 6. The weights of the classes are identical to the sample sizes because all the sites have a weight equivalent equal to 1. The intra-classes inertia quotient calculated after consolidation of the partition is 0.45 %, which is considered satisfactory for an exploratory research (Thiéart et al., 1999).

CLASS 1 : Traditional Eshops: The 33 websites constituting Class 1 offer an E-shopping service. A majority accepts product returns and provides customers with the possibility to contact the company. Generally, the E-shop is integrated into the website, eliminating the need to open a new window. All the Class 1 websites offer customer service, however, only half propose various delivery options. Most offer the opportunity to place products in a "wishlist" independent of the purchase basket. This option allows

customers to show their preferences for certain products and also refer them to their contacts as gifts idea for example. Further, several websites offer online exclusive products together with detailed product descriptions including different views and characteristics of the product. In terms of interactivity, all the sites propose a newsletter. However, no other variable of interactivity significantly defines this class.

Regarding usability, the Class 1 websites are straightforward, with access to information readily available. Furthermore, a site map is provided in a majority of the sites, facilitating the Internet user’s search. The Class 1 websites comprise of luxury brands offering a user-friendly, on-line purchasing experience, albeit with an average level of interactivity. In this category, the brand aesthetics are visible and the codes of the luxury are respected. Nevertheless, emphasis is put on the E-shopping aspect while maintaining traditional communication codes. The results of the cluster analysis regarding Class 1 are highlighted in Table 6. This table shows the characteristic variables inherent to the first category.

Table 6: Class 1 Characteristic Variables

Test V.	Proba	Mean		Characteristic Variables Name
		Class (Weight – 33.00)	General (Size – 33)	
7.32	0.000***	1.00	0.51	14. E-SHOPPING
7.06	0.000***	0.97	0.50	22. PRODUCT RETURN
6.87	0.000***	0.97	0.51	17. CONTACT MEANS
6.47	0.000***	0.85	0.42	15. INTEGRATED E-SHOPPING
6.41	0.000***	0.94	0.51	12. PRODUCTS PRICE
5.31	0.000***	1.00	0.67	23. CUSTOMER SERVICES
4.86	0.000***	0.48	0.22	21. VARIOUS DELIVERY SERVICES
4.35	0.000***	0.64	0.36	39. WISHLIST
3.70	0.000***	0.27	0.12	16. ONLINE EXCLUSIVITY
3.04	0.001**	1.00	0.86	10. PRODUCT SHEET
2.86	0.002**	0.94	0.78	32. NEWSLETTER
2.54	0.006*	1.00	0.90	30. EASY ACCESS TO INFORMATION
2.38	0.009*	0.61	0.45	31. SITE MAP

This table shows the variables that highly characterized the class 1 Traditional E-shops. All the variables related to the presence of an E-shopping on the website are significantly represented in this category. *, **, *** indicates the level of significance at the 10, 5, 1 percent level respectively

As illustrated here below, the Traditionalist E-shops are essentially represented by ready-to-wear clothing and Leather Goods brands, with 87,88 % of the Class 1 websites active in this sector. However, the Swiss and watch-making brands (which are often one in the same) have a significantly lower representation in the Class 1 framework. Table 7 presents the illustrative variables of the Class 1 websites.

Table 7: Class 1 Illustrative Variables

Test V.	Proba	Percentage		Modality	Variables name
		CI/Mod	Mod/CI		
3.81	0.000***	59.18	87.88	42.31	CLASS 1/4
-3.19	0.001**	6.25	3.03	62.82	RtW/LG
-3.81	0.000***	13.79	12.12	20.51	SWISS
				37.18	JW

This table shows the illustrative variables of the Class 1. The ready-to-wear sector is highly represented in this category. By contrast, the Swiss brands of Jewelry or Watchmaker are significantly less represented in Class 1. **, *** indicates the level of significance at the 5, 1 percent level respectively

CLASS 2: Artistic E-shops: The Class 2 category also includes websites that offer E-shopping services, however, unlike its predecessor, information is not readily available and the sites are difficult to use. Class 2 is characterized by its extremely weak “Easy Access to Information” variable. Despite its limited size, Class 2 provides an interest regarding its usability. Although the Class 2 websites prove to adhere to the importance of aesthetics very much valued in the luxury sector, they neglect to appreciate the

significance of clarity for its users. Cautious of damaging their brand image by establishing an E-shop, the emphasis is put on creating an aesthetic website rather than a functional one. With an average level of interactivity, this category does not distinguish itself from the previous one. Regarding the illustrative variables, no variable is significant.

CLASS 3: Luxury Interactive : The Main Characteristic Of This Class Is That No E-Shopping Service Is Provided. Rather, Communication Is Key; Promoting Interaction With The User By Exploiting The Possibilities Offered Through The Web 2.0. Class 3 Is Characterized By Interactivity Variables. Indeed, The Sites Have Rss Feeds, Forums And Clubs With Open Or Limited Access To Privileged Customers. These Variables Are Characteristic Of The Interactive Aspect And Translate A Will Of The Brand To Use The Internet As A Platform Where Communication Is Bilateral. The Brand Gives Information To Its Internet Users But Also Collects It.

Class 3 websites are comparable with those of Class 1, in that both have an average level of usability. Most websites in this category also have a search engine. These brands do not choose to sell on-line but are not "passive" actors either. The Internet is used for interactivity and this aspect is more developed than on the websites belonging to the Traditionalist E-shop class. Indeed, while the latter has an average level of interactivity, a high level categorizes Class 3. The illustrative variables show that Class 3 is widely represented by jewelry brands with 93.33 % of the luxury interactive websites representing Jewelers/watchmakers. Furthermore, this class is widely constituted by Swiss brands, which is logical considering all the Swiss brands in the sample are watch-making brands. By contrast, only 6.67 % are active in the ready-to-wear clothing sector.

CLASS 4 : Traditionalists: Most sites belonging to Class 4 do not provide an E-shopping service. The characteristic variables including price display, customer service, possibility to return the product or a means to contact the company are limited or, in some cases, absent. Furthermore, a very small number provide the option to create a wish list. Class 4 websites have a low level of interactivity, as reflected by the variables "mobile application" and "product customisation". They have no means of interaction with the consumer and are limited to traditional communication functions; Since the 2.0 features have not been applied, the Internet is only used as "basic media" without further utility. Regarding usability, no significant difference can be identified between Classes 1 and 3. Class 4 websites have no search engines and the site maps are used infrequently. It may, therefore, be inferred that the level of usability of Class 4 websites are inferior to Classes 1 and 3 but superior to Class 2. No illustrative variable have proven to be significant characteristic of Class 4. Class 4 websites are considered traditional, given their position of using the Internet solely as a channel of enhancing brand image. With the absence of E-shopping services and customer interactivity, it is clear the emphasis is put on aesthetics, a core value of the luxury industry. The characteristic variables of Class 2 to 4 are highlighted in Table 8.

Table 8: Class 2, 3 & 4 Characteristic Variables

artistic e-shops characteristic variables				
Test v.	Proba	Mean	Characteristic Variables	
		Class	General	Name
	class 2/4	(weight size – 6)	– 6.00	
2.53	0.006*	1.00	0.50	22. Product Return
2.47	0.007*	1.00	0.51	14. E-Shopping
2.47	0.000***	1.00	0.51	12. Product Price
-7.49	0.000***	0.00	0.90	30. Easy Access To information
luxury interactive characteristic variables				
Test v.	Proba	Mean	Characteristic Variables	
		class	general	name
	class 3/4	(weight size – 15)	– 15.00	
3.65	0.000***	0.33	0.09	35. rss feeds
3.27	0.001**	0.53	0.22	33. club/privilege access
2.68	0.004**	0.80	0.49	29. search engine
2.38	0.009*	0.20	0.06	38. forum
2.35	0.010	1.00	0.77	26. news/event
-3.67	0.000***	0.00	0.42	15. integrated e-shopping
-4.28	0.000***	0.00	0.50	22. product return
-4.39	0.000***	0.00	0.51	14. eshopping
-4.39	0.000***	0.00	0.51	12. products price
-4.39	0.000***	0.00	0.51	17. contact means
traditionnalists characteristic variables				
Test v.	Proba	Mean	Characteristic Variables	
		class	general	name
	class 4/4	(weight size – 24)	– 24.00	
-2.37	0.009*	0.04	0.21	36. mobile application
-2.62	0.004**	0.00	0.17	11. products personalisation
-2.83	0.002**	0.21	0.45	31. site map
-3.00	0.001**	0.04	0.27	18. faq
-3.09	0.001**	0.00	0.22	21. various delivery services
-3.87	0.000***	0.04	0.36	39. wishlist
-4.00	0.000***	0.50	0.78	32. newsletter
-4.54	0.000***	0.13	0.51	12. product price
-4.54	0.000***	0.13	0.51	17. contact means
-4.63	0.000***	0.58	0.86	10. product sheet
-5.01	0.000***	0.00	0.42	15. integrated e-shopping
-5.36	0.000***	0.04	0.50	22. product return
-5.51	0.000***	0.04	0.51	14. e-shopping
-5.70	0.000***	0.00	0.49	29. search engine
-6.72	0.000***	0.13	0.67	23. customer services

This table shows the variables that highly characterized Class 2, 3 and 4. Artistic E-shops have an E-shop but the variable “easy access to information” is particularly weak regarding this category implying a lack of usability. Regarding Luxury Interactive, there is no E-shop in this category but all the variables related to interactivity of the website are significantly represented in this category. As far as Class 4 is concerned, no E-shopping is performed and variables of interactivity are particularly low for this category, which means that sites of this category are only communication support. *, **, *** indicates the level of significance at the 10, 5, 1 percent level respectively

RESULTS DISCUSSION

After completion of the principal component analysis, three factors were considered: E-shopping, interactivity and usability as exposed in Table 2. These factors are linked to the three key elements ascertained in the literature review: brand identity and aesthetics, usability and interactivity (Constantinides, 2004; Okonwo, 2010), highlighted in the Table 2. Interactivity and usability are directly related to 2 factors we have identified (axes 2 and 3), whereas the main factor, E-shopping, is related to one specific component of the axis brand identity and aesthetics.

The key elements identified in the literature review are considered essential components when analysing websites. However, it must be considered that since all websites use the Internet as a communication tool, the defining difference is not the transfer of the brand on-line but the website’s overall performance for retail purposes through the presence or absence of an E-shop. The research constituted in drawing up a

typology of luxury brand websites. These have implications in terms of theoretical and managerial perspectives. In the literature review, it was noted that many luxury brand typologies have been proposed from a theoretical perspective (Allères, 1991; Castarède, 1992; Kapferer, 1998; Twitchell, 2002; Sicard, 2003; Vernier and Ghewy, 2006). By way of reminder, it was previously accepted that a luxury continuum exists, as well as the coexistence of several levels of luxury within the continuum itself. The problem met with these types of theories is that they raise the following question “to what level of luxury does each brand belong? There is limited consensus in this regard. Moreover, according to Kapferer (1996), Vigneron and Johnson (2004), the level of brand varies depending on the category of its product. Returning to the example of Chanel, while it is at the top of the pyramid regarding its haute couture and exclusive jewelry products, its positioning is considerably lower when assessing its cosmetics and sunglasses. The typology in this research focuses on brands using their websites as part of their communications strategy. Four categories were identified based on three discriminate key elements: E-shopping, interactivity, and usability.

Unlike the previous results, this typology does not require tackling the challenging problem of defining the luxury level. In this case, the classification is defined by examining the three key elements of the website. Flores and Volle (2005) have also proposed a classification of brand websites to achieve the best possible understanding of the use a brand could make of it. For this purpose, five types of websites were identified (corporate, relational, promotional, tribal and transactional site). As this classification is dealt with from a generalist perspective, it was more difficult to apply it to this particular case of luxury brands. With that said, there are obvious similarities between the two. Indeed, the E-Shopping aspect is a characteristic feature in both cases. However, this study delves deeper in that it differentiates Traditionalist E-shop websites from Artistic E-Shops, which have a rather ineffectual usability factor.

Furthermore, the key element of usability is lacking in the generalist classification proposed by Flores and Volle (2005), which seems inappropriate since this concept is considered essential in the literature review (Constantinides, 2004; Okonkwo, 2010). Comparisons may also be made between the Traditionalists category and the “institutional websites” class pinpointed by the both authors (Florès and Volle, 2005), since both act as a simple communications platform presenting the brand and its products.

Finally it can be stated that the Luxury Interactive class may be found, to a certain extent, in both relational and tribal classes, due to its interactivity characteristic. The difference lies again in the luxury specificities, as the interactive aspect is under control, much more than in mass market brands. In this analysis, no brand community has led to an official website linked with the brand website. To date, on-line communications strategies considered from a theoretical point of view have been neglected in the literature. It was thus deemed important for this paper to shed light on this subject matter. The typology provided helps to recognize different types of E-Shopping websites available and also get a grasp of usability and interactivity levels. This study has the advantage of being complete and well adapted to the specificities of the investigated industry. However, implications of this typology should be considered not only at a theoretical but also at a managerial level.

It must be stressed that the typology does not aim to determine the characteristics of a “good” luxury website. It enables us to place a communicational strategy in relation to others with each category’s inherent strengths and weaknesses. This is of fundamental interest to the luxury brand, as it allows it to situate itself amongst the four classes with a view to appreciating which aspects should be focused and improved upon. This typology also allows the brand to situate itself amongst direct competitors, providing it with the opportunity to compare and evaluate its communicational strategies against those pursued by competitors. Even though luxury is deemed superlative and, not meant to be compared (Kapferer and Bastien, 2008), it is clear that just like any other brand, it is market-driven, and the actions of one can affect the other. Moreover, it is likely that luxury brands establish themselves on the web by imitating each other, despite warnings from literature. Once the Internet was engaged by one luxury

brand, it opened the floodgates of online presence from its counterparts. It should also be noted that none of the four identified classes incorporate both the E-shop and interactivity characteristics. There might exist an opportunity in this respect. Luxury brands that want to differentiate themselves can use the typology in order to identify a new market position that combines, for example, the presence of E-shops as well as a high level of both interactivity and usability. Thus, as a tool, the typology provides a challenge by reconsidering online strategies from an internal perspective.

CONCLUDING COMMENTS

The aim of this paper was to understand how luxury brands use the Internet tool in their communication strategy. Our research process is built on a twofold objective. First was to identify online luxury brands communication strategies. This objective was reached by the content analysis of Websites, highlighting strategies based on three axes: E-shopping, Interactivity and Usability. These strategies vary according to how the brand combines the different axes. Secondly we aimed to create a typology allowing to classify luxury brands regarding their online communication behaviour. This objective was reached by the definition of a typology in four classes based on three axes of actions of websites. The following naming was proposed for these four categories: Traditionalist E-shops; Artistic E-shops; Luxury Interactive; Traditionalists. As far as methodology is concerned, a content analysis was first made on luxury brands websites then a principal component analysis was conducted and then a cluster analysis has been performed. Table 9 described the identified typology according to the 3 factors highlighted in the principal components analysis. The results of the cluster analysis show that two of the four identified categories have E-shopping while the two others do not. The level of interactivity is significantly higher in class 3 and the level of usability is significantly lower in class 2.

Table 9: Key Elements Structuring the Principal Component Analysis

Category	Eshop (F1)	Interactivity (F2)	Usability (F3)
Traditionalist E-shops	Yes	Medium	Medium
Artistic E-shops	Yes	Medium-Weak	Weak
Luxury Interactive	No	High	Medium
Traditionalists	No	Weak	Medium-Weak

This table is summarizing the four classes identified on the three factorial key elements structuring the principal component analysis. This table highlights the specific features of each category. Two of them do have E-shopping but the level of usability is different. The Class 3 is defined by a high level of interactivity and the Traditionalists class do not have an E-shop neither interactive features.

Of course, this research is not boundless. Limits are methodologically related to the exploratory nature of the data analysis. In fact, the research undertaken is in a field where literature is lacking and its purpose is to clarify the situation rather than attempting to explain it with cause-effect relationships. Identifying online communication strategies of luxury brands constitutes a first step in better understanding this subject matter. With respect to the sample, brands belonging to three sectors: ready-to-wear, leather and jewelry/watch making were selected. It is understood that once applied to several other sectors, the study could lead to the creation of additional categories. It should also be noted that websites must be considered units of research and are in constant flux. Therefore, the results provided are time restrained.

The descriptive character of our research could be seen as a weakness. Indeed, this research is based more on the “how” and the specific depiction of the relevant subject matter rather than an all-inclusive explication of a phenomenon. However, given the current literature state, this perspective should not be considered as a weakness but a necessary step in building theoretical foundations, which may later form the subject of research of an explanatory nature. A future path of research could reproduce this study several times a year in order to get a longitudinal perspective of the results. As these brands are fashion related, every new fashion season could be a time of interest to re-conduct the study. As much as fashion luxury brands are interesting, other luxury sectors could be investigated such as services and might lead to other classes for the typology. Finally we have neglected all aspects related to social and mobile

marketing in the analysis grid. These elements could be added to improve the classification. In conclusion, the identification of limits leads to the assumption that there remains a relatively significant potential for investigation in this field. In a fragile economic climate when luxury brands are the only ones in good financial health, it is likely that it will still raise many new questions.

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