

APPROACH FOR MANAGEMENT OF BRAND POSITIONING: QUANTIFICATION OF VALUE MATCHING BETWEEN BRAND AND TARGET AUDIENCE

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Abstract: The paper aims to propose innovative ideas on developing brand management techniques. The authors apply a novel quantitative approach involving semantic analysis of external brand communications to determine whether the brand value system is aligned with customers' core values. Based on the survey on the main life values of the selected audience, a standard scale was compiled, in which the structure of values is represented as a vector of 26 variables. On the other hand, the semantic core of each of the studied brands was analyzed and presented as a vector of comparisons with this scale. This allowed calculating the cosine proximity of the vectors of the value structure of brands to each other. To prove the concept, the research compares value structures of six luxury brands ranked among the most expensive in 2020. The suggested technique can be used as a tool for market analysis, in particular, strategic brand positioning management and setting up communication strategies of companies.

Key words. Customer values, semantic analysis, luxury brands, vectorization

DOI: 10.17512/pjms.2021.24.1.06

Article history:

Received May 13, 2021; *Revised* November 01, 2021; *Accepted* November 10, 2021

Introduction

The digital age opens up fundamentally new approaches to research in management, as well as expands the possibilities for personalization in relation to the company's interaction with customers. Management actively introduces digital technologies for consumer analysing into daily practice. One of the promising technologies is the technology of semantics vectorization. Marketers have learned to use these technologies for their purposes, in particular, to personalize communications with their consumers.

The concept of consumer value contains an assessment, which means an attitude and, specifically, the degree of interest in the subject being evaluated. The value of any item is an important part of the motivation that a person feels regarding this given item. In order to move from selective suggestions based on the consumer's digital trace, to suggestions based on their value structure, it is necessary to find a way to formalize this structure.

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The chosen object of research was the communications of the most successful global luxury brands sold in Russia. Luxury brands provide good material for building a model to study the interface between the structure of values postulated by brands and the values professed by consumers. The semantic core formed during the processing of big data sets can be used as the basis for creating such a scale.

This paper aims to find a way to assess the degree of conformity between brand values and the values of a potential target audience. Six successful luxury brands were selected as the focus, all of which simultaneously featured in three different rankings of the most expensive brands for 2020. The semantics of these brands' external communications were studied through two alternative versions of scales for analysing the structure of values: 1) on the basis of the scales of motivation for luxury buyers 2) on the basis of a reference scale of values made up of the semantic core of nouns that Russian youth associate with the most important thing in their life.

Literature Review

Economic theory has made significant progress in understanding customer behaviour across a wide range of brands and purchase situations (Molthersbaugh and Howkins, 2016; Sheth, 2021). Modern digital technologies open up fundamentally new opportunities and methods for analysing consumers. The development of such methods gives us a new understanding of the characteristics of consumer behaviour. It forces us to revise the traditional theories of consumer behaviour and brand management theory (Kliestikova et al., 2019). According to Kliestikova and her colleagues, it can be concluded that the leading phenomenon of branding theory and practice is the schism between homogeneous nature of brand identity and heterogeneous approach to brand value building and management (Kliestikova et al., 2019).

The concept of value has occupied an important place in marketing (Zeithaml, 1998, Kumar and Reinartz, 2016; Gerasimenko, 2019; Zavolokina et al., 2020). In particular, it has been claimed that the marketing of luxury and premium products is largely driven by the relationship between the brand and the target audience (Srivastava, 2021). The traditional perception of luxury items implies high quality, costliness, exclusive distribution, personalized experience, heritage, and unique consumer experience (Naletelicha and Paswan, 2018; Ochkovskaya, 2018).

Among other approaches, there are detailed analyses and multiple classifications of motives and decision-making mechanisms with regard to premium and luxury brands – the reason why individuals regularly purchase products and services that are deliberately overpriced relative to the minimum economically feasible price (Khalifa and Shukla, 2017; Hennigs, Wiedmann et al., 2012; Shukla, 2017). The key factor that explains the seeming paradox of overpriced consumption is the value structure of a certain segment of customers, who are willing to pay more for luxury products. Four groups of motives should be considered: 1) "financial" (because they are expensive and I am one of the few people who can afford them); 2) "functional" (I am willing to overpay for a good's quality and quality guarantees); 3)

"individualistic" (I pay money because I enjoy owning and buying such things); 4) "social" (a brand is a symbol of belonging to a certain social group and I am willing to overpay to be able to demonstrate this status) (Hennigs, Wiedmann et al., 2012). Suppose we accept this classification of the motives. In that case, the question arises: is there any way to measure the extent to which the positioning of a particular brand matches the value orientation of a particular target group. To answer this question, we need a set of quantitative criteria to describe a particular brand. In addition, these criteria have to be relevant to the values of customers. Moreover, it is necessary to decide criteria for describing customers' value systems.

In search of a universal scale of customer motivation, it makes sense to consider higher-level values as a division into terminal and instrumental values (Rokeach, 1973). Terminal values are beliefs that a particular end goal of individual existence is worth pursuing; instrumental values are beliefs that a certain course of action is preferable. To build a reference list of terminal values in this study, the authors used an array of data collected for the works (Andreyuk and Khrabrovskaya, 2019; Andreyuk et al., 2020), the semantic core of which became the basis of the scale for describing the structure of values.

Next, the logical question arises – how to assess the correspondence of the value orientation and motives of consumers with the way brands try to interact with them. The novel approach to solve this problem would be to borrow ideas from information technology and linguistics, namely, vectorization of semantics.

The digital age provides us with two fundamentally opportunities: the analysis of consumers, including the study of their values (Jacoby, 1979; Pepper et al., 2009) and personalization of customer experience (O'Donnell and Cramer, 2015). The great success of applied solutions has emerged based on the vectorization of semantics (Harris, 1954; Riger, 1991; Boleda and Herbelot, 2017). It encourages researchers to look for a way to describe more complex communication processes in the form of scalable and calibrated scales requiring evaluative analysis by each participant in the dialogue.

The idea behind the approach based on the vectorization of semantics is that each word is assigned to a multidimensional vector, essentially a set of variables, each given a decimal number. Some of the variables have a purely technical function, such as word length in letters or frequency of occurrence in certain corpus of texts. In contrast, others give a meaningful characterization, such as the frequency of occurrence in this or that context. Based on such a set of quantitative characteristics, a researcher can perform formal mathematical operations on initially "non-quantitative" categories (words) and, more importantly, use artificial intelligence to analyse such categories. Current algorithms for web search (Manning et al., 2008) and personalization of advertisements based on user queries use fundamentally the same kinds of multidimensional vector representations of words.

Here the problem arises: on the one hand, management is always in need of analysing brand value structure; on the other, today's digital economy requires new techniques of more accurate analysis, suitable for large amounts of data treated by artificial

intelligence capable of machine learning. The challenge for customer experience management today is looking for approaches to vectorize the value structure of brands in relation to a specific target audience, that is, to find approaches that can help quantify the degree of proximity of the brand's value system to the value system of a given target group. This article is aimed at making a theoretical contribution to the solution of this problem. The practical value of this study is determined by the search for new approaches to the analysis of brand value structures in the form of digital vectors.

Research Methodology

Selection of material for content analysis of external brand communications

The research was carried out using luxury and premium brands included in “The most expensive brands 2020” list according to three rankings: The 2020 World's Most Valuable Brands (Forbes), Best Global Brands - 2020 (Interbrand), Luxury & Premium 50 (BrandFinance 2020). Table 1 shows the names of the brands selected and their position in the relevant rankings. For value analysis, the authors used those sections of the company website where brands articulate their mission. Word clouds were created for each brand: this is a convenient method of visualizing content for rapid qualitative analysis. Quantitative research was conducted using a table obtained from Wordclouds (<https://www.wordclouds.com>).

Semantic analysis of brand value structure

In the frequency-sorted list of words from the array for each brand of interest, the analysis involved calculation of the relative frequency for each word as well as the word's share in the total array, expressed as a percentage. For further analysis, the focus was limited to the top part of the list - the most frequent 25-50% of the words. The exact value was set so that the analysed sample included all words with the same frequency of occurrence in the source text. Generally, based on a source text size of 400-700 words, words with three or more repetitions were included in the analysis.

Marking of value meanings

In the first block of analysis, the word arrays were marked depending on how closely each word corresponds to one of the four basic values. For this purpose, the scale of motivation (Hennigs, Wiedmann et al. 2012) and word tables were used for each of the brands. The words from the list were viewed in the context of their source texts (the texts were provided as impersonal text arrays) and correlated with one of the four blocks from the questionnaire.

Reference list of values from a group of young people

The used dataset was collected from previous studies (Andreyuk and Khrabrovskaya, 2019; Andreyuk et al., 2020) to construct a reference list of values. During the offline lectures, participants were given worksheets for anonymous answers and asked to write down three words successively (noun, adjective and verb) that they would associate with the most important thing in their life.

In total, 625 persons were questioned using this method. These respondents mainly came from the four largest cities in Russia: Moscow, Nizhniy Novgorod,

Chelyabinsk, and Vladimir. The average age of the participants was 19.5 years (with a range of 14 to 27 years), and the sex ratio was 1:1.38 (with 10 people not indicating their gender). The survey was carried out during 2019. All respondents belonged to families with higher-than-average incomes.

Only nouns were taken from the resulting word array and ranked them by frequency of occurrence, similar to the method used for the word arrays collected from the brand ideology pages. In other words, it was calculated the relative frequency for each word. For further analysis, 26 words were taken, representing 73% of the total list (the rarest of these words were named four times each). It is important to note that the frequency distribution in the reference list differs significantly from that in the content lists of brands, with a much more pronounced consensus on the main values. Just four words – “family”, “happiness”, “love” and “life” – accounted for 50% of the total list. A list of high-frequency words from the reference list is shown.

Research Results

The first part of the research is dedicated to analysing how six chosen brands communicate with the target audience, what main messages they send via their official channels of communication, particularly in the sections of their official websites titled "Mission", "About us" and "Corporate Social Responsibility" or "Social Commitment". It was assumed that this is where companies promote their values to customers. Next, the authors sorted words by frequency of use and selected the most frequent. According to Wiedmann (Wiedmann et al., 2007), this can be represented by words and/or by the semantic correlations of a word (considering the context in which it was used in the brand text), with one of the four scales of motivation to purchase luxury items. This markup resulted in a list of high-frequency words relevant to the brand ideology, with each word assigned to one of the scales. Obviously, not all words can be unambiguously attributed to one of the possible motivations, so in each sample, a large number of "technical" words remained (the most high-frequency of them being the brand names themselves). Figure 1 summarizes the markup results for all six brands, where the frequencies of the marked words in the highest-frequency sample are given as 100%. Figure 2 shows what proportion each of the scales occupies in terms of the sum of frequencies from all marked words.

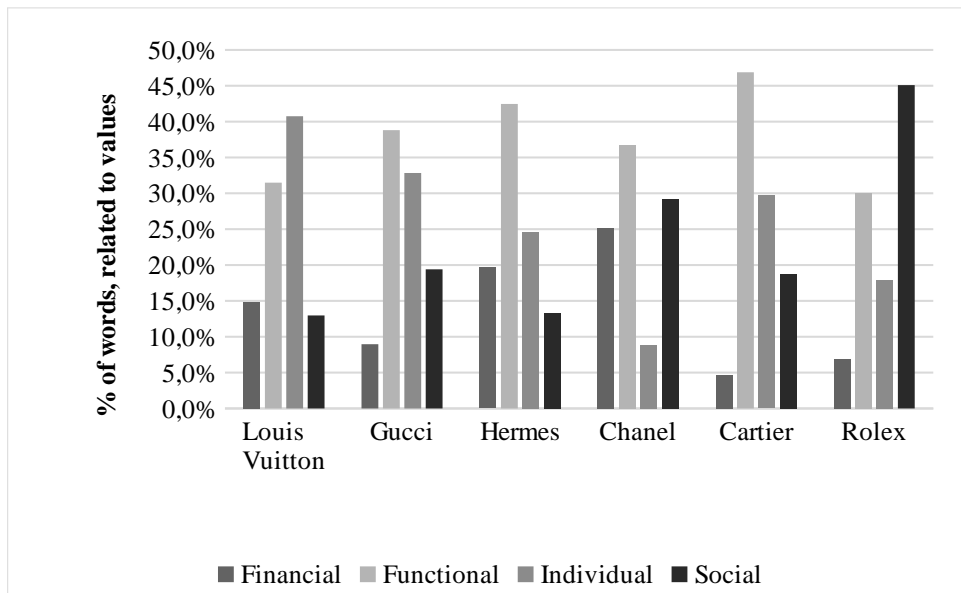


Figure 1: Value markings for six luxury brands

*compiled by the authors

Thus, the most evident differences between brands observed through the analysis relate to the type of motivation a brand uses. For example, Louis Vuitton appeals to the individualistic motivations of potential buyers to a greater extent than others; Cartier and Hermès focus their communications on the functionality of their products; Chanel evokes financial motivations more often than other brands.

Obviously, we cannot use this data to make comparisons at the level of statistically proven reliability, but scaling up this approach – namely by marking up a large number of texts, including social media feedback, generating dictionaries with lists of words that uniquely relate to a particular scale, and automating the markup process – will allow us to quantify changes in the communication cues of a particular brand and compare brands to one another.

The second part of the paper pursues the idea of expanding our understanding by developing a method that allows us to quantitatively describe the relevance of brands' communication messages to the value orientation of a particular audience. In search of a universal scale of motivation, we turned to higher-level terminal values, according to Rokeach (Rokeach, 1973). To determine terminal values, the authors asked a sufficiently large sample of middle-income, well-educated young people to name three words – a noun, an adjective and a verb associated with the most important thing in their life (for a detailed description of the survey, see Andreyuk et al., 2020). Then, it was sorted the nouns from the words obtained (625 words) by frequency and used the top 73%, which amounted to a total of 26 words, as a reference word array.

Figure 2 shows an example of an alternative markup of brand value words, namely, relating them to a reference list of words from the core values of the youth sample. The first three columns are dedicated to the reference list itself, containing the position number, the word, and the frequency in the original list of 625 words. The last three columns include a list of the highest frequency idea-loaded words from the brand website (in our case, a list of Louis Vuitton brand words is given). In the middle, the columns show the algorithm matching the brand values to the reference list of values. The authors have taken the first word from the reference list, which is "family". Then authors go through the list of brand words and select the numbers that can be matched by associative correlations: here, they are numbers 3 and 24 (the words "house" and "founders"). For simplicity, they have introduced only two gradations of the degree of matching. If a word was a literal match, it was assigned a compliance coefficient of 1 (for example, the word "house" in the first list is number 20, and the same word in the second list is number 3). If there was no literal match but an associative match, then a coefficient of 0.2 would be assigned. Next, all the frequencies of the associated words in the brand list were summed. The sum, adjusted for the compliance coefficient, was multiplied by the frequency of the word from the reference list. This is how we arrived at the final Matching of Values Coefficient (MVC).

REFERENCE VALUES			MATCHING ANALYSIS				BRAND VALUES		
N	TOP Values_Eng	Frequency total, %	N related	Sum of freqs related	Comp lience coeffi cient	Matching of values coefficient	N	Word	Frequ ency total, %
1	family	31,2	3,24	2,8%	0,2	0,00173333	1	Louis	3,8
2	happyness	8,5		0		0	2	Vuitton	3,5
3	love	6,4		0		0	3	House	2,1
4	life	4,2		0		0	4	leather	1,4
5	health	3,2		0		0	5	new	1,4
6	goal	2,2	14,27,28	2,1%	0,2	9,3333E-05	6	spirit	1,4
7	money	2,1	35	0,7%	0,2	2,8889E-05	7	world	1,4
8	self-development	1,4	9,14,19,20, 22,27,28,29	5,9%	0,2	0,00017	8	canvas	1,0
9	self-realization	1,1	9,14,19,20, 22,27,28,29	5,9%	0,2	0,00013222	9	creations	1,0
10	human	1,1	16,23,24,33	2,8%	0,2	6,2222E-05	10	legendary	1,0
11	development	1,0	5,9,14,19,20,22,27,29	6,6%	0,2	0,00012667	11	Monogram	1,0
12	success	1,0	10,26,34	2,4%	0,2	4,6667E-05	12	Since	1,0
13	harmony	0,8	6,9,10,19,20,22	5,6%	0,2	8,8889E-05	13	since	1,0
14	children	0,8		0		0	14	adventure	0,7
15	friend	0,8	Partial matching	0		0	15	bag	0,7
16	relatives	0,8		0		0	16	clients	0,7
17	movement	0,6	7,14,27,28,32,33	4,9%	0,2	6,2222E-05	17	Collections	0,7
18	business	0,6	14,16,23,25,35	3,5%	0,2	4,4444E-05	18	continues	0,7
19	goodness	0,6		0		0	19	creation	0,7
20	house	0,6	3	2,1%	1	0,00013333	20	Creative	0,7
21	knowledge	0,6		0		0	21	day	0,7
22	mother	0,6		0		0	22	designed	0,7
23	freedom	0,6	7,14,27,28,32,33	4,9%	0,2	6,2222E-05	23	Director	0,7
24	sense	0,		0		0	24	founders	0,7
25	pleasure	0,6	Full matching	0		0	25	goods	0,7
26	me	0,6	Vector of value matchers	0		0	26	great	0,7
						Σ0,00278444	27	horizons	0,7
							28	journey	0,7
							29	making	0,7
							30	something	0,7
							31	time	0,7
							32	travel	0,7
							33	travelers	0,7
							34	unique	0,7
							35	values	0,7

Figure 2: Matching analysis for one of the analysed brands, example of Louis Vuitton
 *compiled by the authors

Using the analysis algorithm described above, each brand can ultimately be represented as an array of 26 variables corresponding to the MVC value for each of the 26 reference list items. The sum of all the MVCs provides a quantitative measure of the consistency of a given brand's value message with the sum of the values of a given reference group. So, for example, the values of Louis Vuitton correspond to the "most important in life" values of Russian youth almost three times more than those of Chanel or Rolex. At the same time, despite the same total value, the two brands differ significantly in the structure of their matches. For example, Chanel has

almost seven times more associations with money than Rolex, which corresponds well with Chanel's superior financial factor rating in the Value markings (how it was shown in Figure 1). In this case, the values for all six brands are presented in the summation row of Table 1.

Table 1. Matching of Values Coefficients (MVCs) for the six analysed luxury brands.
All values are multiplied by 10^4 for clarity

Reference value set		Brand's coefficients of matching to reference values ($\times 10^4$)					
№	Value meaning	LV	Gucci	Hermès	Chanel	Cartier	Rolex
1	family	17.3	9.5	13.8	0.0	0.0	4.3
2	happiness	0.0	0.0	0.0	0.0	2.1	0.0
3	love	0.0	0.0	0.0	0.0	4.0	0.0
4	life	0.0	0.0	0.0	0.6	0.9	0.0
5	health	0.0	1.3	0.0	0.0	1.0	0.5
6	goal	0.9	0.0	0.0	0.0	0.0	0.9
7	money	0.3	0.3	1.0	2.6	0.2	0.3
8	self-development	1.7	1.4	2.5	1.9	0.8	1.2
9	self-realization	1.3	1.1	1.4	1.5	0.6	0.9
10	human	0.6	1.0	0.8	0.0	0.5	0.1
11	development	1.3	0.6	1.0	1.3	0.5	0.8
12	success	0.5	0.3	0.3	0.4	0.6	0.5
13	harmony	0.9	0.6	0.5	0.4	0.8	0.1
14	children	0.0	0.0	0.0	0.0	0.0	0.0
15	friend	0.0	0.1	0.0	0.0	0.0	0.1
16	relatives	0.0	0.0	0.0	0.0	0.0	0.0
17	movement	0.6	0.4	0.3	0.3	0.2	0.2
18	business	0.4	0.3	0.6	1.4	0.1	0.2
19	goodness	0.0	0.0	0.0	0.0	0.1	0.0
20	house	1.3	0.4	1.4	0.0	0.0	0.0
21	knowledge	0.0	0.0	0.1	0.0	0.0	0.4
22	mother	0.0	0.0	0.0	0.0	0.1	0.1
23	freedom	0.6	0.4	0.5	0.4	0.2	0.2
24	sense	0.0	0.0	0.0	0.0	0.1	0.0
25	pleasure	0.0	0.0	0.0	0.0	0.1	0.0
26	me	0.0	0.0	0.0	0.0	0.1	0.0
Sum of all matches to reference set:		27.8	17.8	24.3	10.8	12.8	10.8

*compiled by the authors

Visually, the differences between the brands in terms of the structure of the Matching of Values Coefficients are visible in Figure 3. For example, it can be seen that the Cartier brand is noticeably more represented in the first part of the list – the only one that has some correspondence with the very significant words “happiness” and “love”. At the expense of these "strong" values, it is significantly less consistent in the “money - self-development - self-realization” block, which acts as the main minor value for the other brands. The correspondence with a value such as “freedom” seems quite interesting. Each of the six brands studied appeals to it, and the relatively low specific weight is associated with the low frequency of the word “freedom” in the reference list of values. Obviously, in another target group with a higher proportion of this word, the degree of alignment of any of these brands would increase dramatically.

Similar to the vector operations used in distributive semantics, the approach described here allows us to quantitatively calculate the degree of proximity of the brand value system to the value system of a given target group. The cosine proximity most commonly used in semantics can be calculated using the formula:

$$similarity = \cos(\theta) = \frac{A \cdot B}{\|A\| \|B\|} = \frac{\sum_{i=1}^n A_i B_i}{\sqrt{\sum_{i=1}^n A_i^2} \sqrt{\sum_{i=1}^n B_i^2}}$$

Where, A and B are components of vector A and B, respectively.

For example, the cosine proximity between Louis Vuitton (LV) and Hermès is 0.9928 (see Table 2). In addition to that the proximity between LV and Cartier turns out to be 0.0494. This corresponds well with the visual representation of the vectors in Figure 3. LV and Hermès look as close as possible to each other in terms of value structure, and LV and Cartier look as distant as possible.

Table 2. Cosine proximity of the value system of luxury brands

	Louis Vuitton	Gucci	Hermès	Chanel	Cartier
Gucci	0.9842				
Hermès	0.9927	0.9866			
Chanel	0.1257	0.1727	0.2066		
Cartier	0.0494	0.0968	0.0645	0.2315	
Rolex	0.9466	0.9536	0.9491	0.3094	0.1250

*compiled by the authors

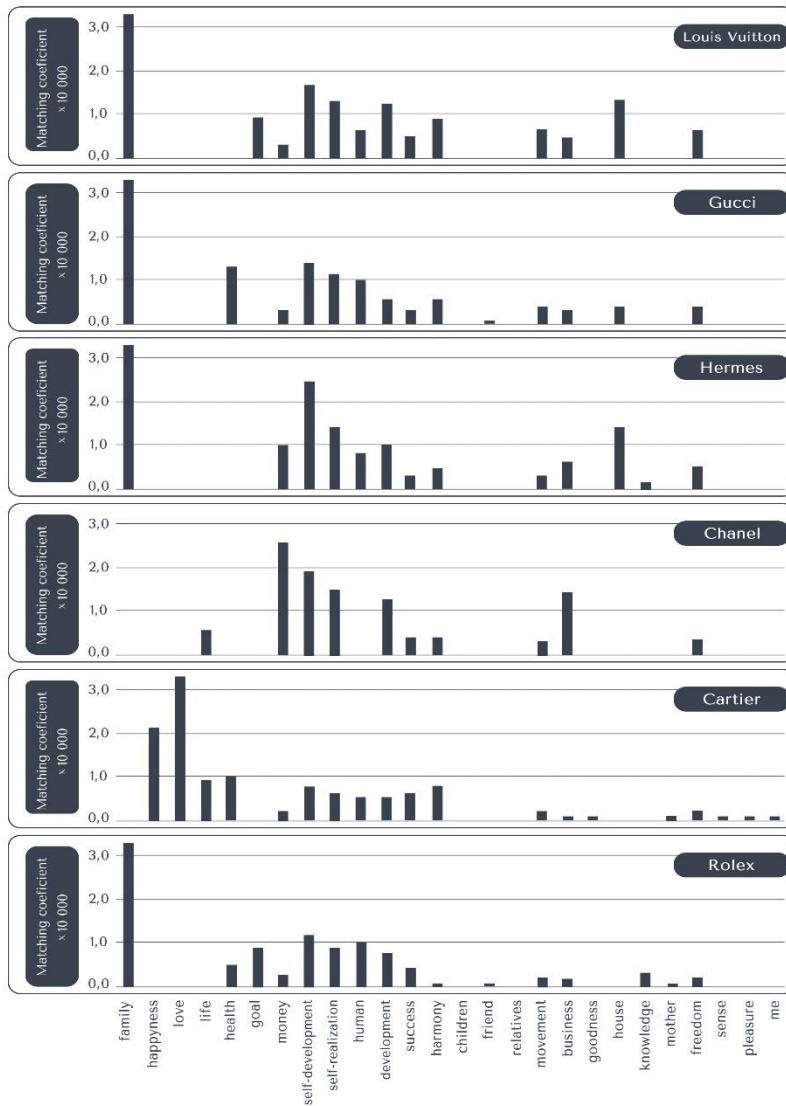


Figure 3: Bar-coding of ideas/values translated through communications in the six most successful brands, as related to reference values of young Russians

*compiled by the authors

Discussion

Behind each brand, there is a certain value and image, which seeks to pass on to its consumers through building its identity. Managers need to understand how effectively the company can transmit this brand identity to consumers. Such

understanding has become an object of interdisciplinary research where linguistics and psychology help in management studies. It has been shown that the quality of communication significantly influences brand loyalty and intention to make a purchase. Nowadays, researchers attach special significance to studying the sociocultural context to which brand communications need to be adapted (Ho, 2021, Cal and Huseyinli, 2021, Faschan et al., 2020). This is most relevant for management since different categories of consumers have different values, and understanding the semantics of external brand communications is of great importance in both theoretical and practical terms. Therefore, the present study contributes to the recent research into visual images as a way of expressing the symbolic meaning of brands (Gurzki et al., 2019, Lim et al., 2021) and brand semantics (Glukhova, 2021, Huand et al., 2018).

The present research also analyses slogans and other forms of verbal brand communication, detecting differences and similarities in brand semantics and cultural codes that determine consumer behaviour in different countries and regions. It extensively uses the instruments of cognitive and linguistic cultural studies together with those of countries' systemic functional socio-semiotics (Glukhova, 2021, Cal et al., 2021). Particular attention is paid to the analysis of communications (narratives) in social nets (Huand et al., 2018, Wang and Chen, 2021).

While these qualitative researches exploring the semantics of brands have rather a narrow focus, the quantitative instrument of analyzing and comparing brand and consumer values used in this study involves the vectorising method based on the data of semantic analysis. This instrument makes it possible to quantify the mismatch between the values transmitted by the brand and those guiding the consumers.

The principal result of the present research consists of proposing a method for quantitative description and value comparison of different brands drawn on one scale, which can be effectively used in management. There have been many attempts to analyse the values and motives of the people who buy, for example, luxury brands (Shukla, 2010, Wiedmann et al., 2007). Applying these approaches to the present-day digital economy, the first part of the study shows that the content analysis of the sites produces results not only comparable to those previously obtained by asking consumers about their values but, owing to the possibility of a more representative sample, even more reliable.

The second part of the study concerns the development of a new approach to the description of the brand value in the form of a multidimensional vector. Its dimensionality and specific components are defined by the frequency distribution of the words which potential consumers associate with the most important things in their lives. It means that the offered scale possesses a high degree of universality and can be used in the management of different companies. Although the method presented in the research is applied to luxury brands, it can help determine and compare the degrees to which the brands correspond to the values of the target audience in any market. This algorithm can be used in machine learning technologies

to integrate and analyse large amounts of data in predictive market analytics, which will improve the effectiveness of strategic management.

Conclusion

This study proposes a method for analysing the values of luxury brands using the vectorization method based on semantic analysis data. The authors have applied a comparative analysis of customer values, to which luxury brands are oriented as market leaders in the online world, with a certain reference list of life values of the youth target audience. These values have been identified on the basis of surveys and processed by semantic analysis. The research involved six brands that performed best in terms of financial brand value in 2020, the six strongest players globally in the premium and luxury segments, and analysed their descriptive texts about their brand mission and philosophy. By applying the theoretical method of structuring and vectorising customer value parameters, the authors of the present study have obtained estimates of the brand positioning vectors' compliance with the perceived value vectors in the target-audience. The study can be scaled up using digital parsing techniques for websites and social media, as well as big data processing using artificial intelligence, which will increase the sample for semantic analysis techniques.

Managerial implications of the study results are determined by the fact that multidimensional vectors are suitable for artificial intelligence systems' learning. It may be expected that the method described in this research will soon be implemented in highly efficient technologies of brand management. Another important application of the method may be managed in the educational sphere, i.e., needs analysis of specific groups of people to develop new educational technologies and programmes. This approach is close to the methods based on distributive semantics and/or individual digital trace. The techniques based on value matching seem to fit better the natural processes behind the individual choice, and this is why the described approach can be useful in managerial practice.

In this article, the authors presented a novel approach to analysing the relevance of brand communications to the value orientations of the audience. The small number of value-oriented words is a limitation, which, however, did not prevent the presentation of this approach. The authors have considered this list of important words for the target audience as a point of reference and quantified the extent to which each of the brands' value word sets matched it.

The researchers also accept the fact that the reference group of potential customers selected in this study may not be representative of a particular luxury brand. However, by representing the higher level of values of the youth audience, this list sets a "frame of reference" for future research, as this youth audience is part of the future target audience of luxury brands and will bring their customer values to this market. The current shift to the "new luxury" and to previously unexploited methods of online luxury sales are already demonstrating new trends. In any case, the

reference list of values allows us to develop quantitative arrays and a vector representation of the value structure of the brands themselves.

It is assumed that the development of this approach could prove very effective for targeting samples in narrower segments. It can be considered as an opportunity for further research. The approach can be applied to other categories of goods and services and different target groups of customers and means that this study is just one step away from the era of mass tuning of brands, or more precisely, their communications, by means of artificial intelligence. The data obtained can also be used as a benchmarking tool for management information systems and tuning companies' communication strategies.

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PODEJŚCIE DO ZARZĄDZANIA POZYCJONOWANIEM MARKI: KWANTYFIKACJA DOPASOWANIA WARTOŚCI MIĘDZY MARKĄ A ODBIORCĄ DOCELOWYM

Streszczenie: Celem artykułu jest przedstawienie innowacyjnych pomysłów na rozwój technik zarządzania marką. Autorzy stosują nowatorskie podejście ilościowe polegające na analizie semantycznej zewnętrznej komunikacji marki w celu ustalenia, czy system wartości marki jest zgodny z podstawowymi wartościami klientów. Na podstawie badania głównych wartości życiowych wybranej grupy odbiorców opracowano standardową skalę, w której strukturę wartości przedstawiono jako wektor 26 zmiennych. Z kolei rdzeń semantyczny każdej z badanych marek został przeanalizowany i przedstawiony jako wektor porównań z tą skalą. Pozwoliło to na obliczenie cosinusowej bliskości wektorów struktury wartości marek względem siebie. Na potwierdzenie tej koncepcji w badaniu porównano struktury wartości sześciu luksusowych marek, które znalazły się wśród najdroższych w 2020 roku. Zaproponowana technika może być wykorzystana jako narzędzie do analizy rynku, w szczególności do zarządzania strategicznym pozycjonowaniem marki i tworzenia strategii komunikacyjnych firm.

Słowa kluczowe. Wartości klienta, analiza semantyczna, marki luksusowe, wektoryzacja

品牌定位管理方法：量化品牌与目标受众之间的价值匹配

摘要：本文旨在提出开发品牌管理技术的创新理念。作者应用了一种新颖的定量方法，涉及外部品牌传播的语义分析，以确定品牌价值体系是否与客户的核心价值一致。根据对选定受众的主要生活价值观的调查，编制了标准量表，其中价值观的结构以26个变量的向量表示。另一方面，对每个研究品牌的语义核心进行了分析，并将其呈现为与该量表进行比较的向量。这允许计算品牌价值结构的向量彼此之间的余弦接近度。为了证明这一概念，该研究比较了2020年最昂贵的六个奢侈品牌的价值结构。建议的技术可用作市场分析的工具，尤其是战略品牌定位管理和公司沟通策略的制定

关键词。客户价值、语义分析、奢侈品牌、矢量化