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# Forming an Open Structure of Consumer Knowledge: the Case of Lithuanian Beauty and Personal Care Mass Product Industry

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#### **Abstract**

**Purpose of the article.** Scientific research implies that current tectonic shifts, taking place in the external environment, have been reforming the consumer market. In the context of these tendencies, the knowledge seeded in consumer's consciousness keeps fluctuating in the direction hard to identify. The article investigates the problem of how the dynamicity of consumer knowledge manifests itself.

**Scientific aim:** The present paper aims at suggesting guidelines for constructing an open structure of consumer knowledge.

**Findings.** In grounding the object of the current article, theoretical investigation has been carried out to reveal that consumer knowledge dynamicity is the change of product-related information and subjective experiences, stored in consumer's long-term memory and allowing the consumer to make purchasing decisions. It manifests through certain structural parts of knowledge, open to the external environment change and interrelated, dealing with product terminology and attributes, with the evaluation of those attributes and the ways of usage as well as facts about the brand. Those structural parts are influenced by marketing activities of an organization, by macro-environment factors, by consumer characteristics, and by changes in purchasing decision making. The present article introduces the case of Lithuanian beauty and personal care mass product industry.

Conclusions. The overview and analysis of qualitative research results have revealed the following path of the open consumer knowledge structure formation. Consumer's knowledge about a product is built when the consumer has certain knowledge on product terminology and on product usage ways. The knowledge of product terminology and usage, then, determines the creation of knowledge on product attributes evaluation. The latter knowledge category builds synergy in the interaction with product attributes which, consequently, influence brand facts.

**Keywords:** consumer knowledge, dynamicity, structure.

#### 1. Introduction

Contemporary organizations are doomed to experience competition under difficult conditions of uncertainty. Knowledge is a fundamental basis for a modern organization to increase its competitive capability. Market changes influence the demand and technological advancement of production; therefore, organizations have to build their internal knowledge using external knowledge. Consumer knowledge is a crucial organizational resource which can help advance research and development, or create processes which facilitate effective management of the organization-consumer relationship.

Turbulences in the external environment cause changes in consumers, their values, knowledge, preferences, and behavior. "Daymon Worldwide, Inc." [23] point out six tectonic shifts in the global end-retailer market. Population growth, on the one hand, and population decrease in certain countries, on the other hand, the aging society and the impact of economic changes explore the changing demographic landscape globally and its impact on retail. Another long-term megatrend is health and wellness. Consumer health and wellness exigencies keep changing. Specifically, a consumer shift from a reactive health culture to a proactive wellness culture has been taking place. Next, digital technologies, including the internet, mobile phones, in-store technology, robots, etc., create consumer willingness and the expectation to satisfy individual needs anytime, anywhere. The world experiences huge alterations in consumption patterns. Consumer outlooks and behaviors, related to environmental issues, do change; what caters to popular taste is, for instance, the perspective that our individual actions impact the whole planet, or the promotion of international communities without national borders. Then, human reinforcement of individual expression, creativity, and the willingness to stand out from the crowd takes place. In this turbulent world, along a growing threat of upheavals, terror, or crises, consumers still seek happiness and joy by looking for goods, services, or experiences. Next, consumer spending as well as attitudes and behaviors toward spending also change; this includes the quest for value, which extends beyond price alone. Finally, in pointing out the emerging forces that shape consumer behavior Angus [22] mentions the tendency of Clean Lifers. In practice, this trend asserts itself in consumers' choice of clean-living and more minimalist lifestyles with moderation and integrity. Clean Lifers have strong beliefs, ideals, and a feeling that they can make a difference and all this influences their spending choices.

In the context of the above-mentioned tendencies, the knowledge seeded in consumer's mind keeps changing, moving into an obscure direction. Organizations find it important to proactively capture the shifts of consumer knowledge. The aim of consumer knowledge management is to discover, create, organize, share, transfer, and manage the knowledge, related to consumers, for organizational benefits [15]. As Reichheld and Scheffer [5] state, accumulating and analyzing *knowledge about consumers* covers their present concerns and demands, future needs, connections, past transactions, and the purchasing power. This kind of knowledge is often obtained passively, through interactions with a consumer (based on investigation, interview, or observation results, obtained by market research institutions). Nevertheless,

Khodakarami and Chan [6] affirm that consumer knowledge about products and services is getting more and more important. This knowledge is mostly obtained directly; it allows getting to know consumers and identifying their buying models and demands. Wilde [19] claims that this category of knowledge encompasses market interpretations, knowledge about competitors, technology, and decision making suggestions. Sometimes knowledge about consumers and consumer knowledge is difficult to distinguish. It stands to reason to call those two types of knowledge active (consumer knowledge) and passive (knowledge about a consumer) [19].

Schaefer [2] emphasizes that consumer knowledge should be considered a multipartite construct. Authors who have been developing knowledge theory agree that consumer knowledge has a particular structure [1, 11, 4, 9, 14]. In the organizational context of consumer knowledge dynamicity, the question arises if the available structures of consumer knowledge are suitable for identifying the alternations in it.

In research, great emphasis is placed on the classification of consumer knowledge according to its nature, that is, on subjective and objective knowledge as well as on its investigation. Consumer knowledge research most often focuses on such aspects as, for instance, objective and subjective knowledge relation [28, 29], subjective knowledge impact upon consumer attitude and behavior [30, 31, 32]. It also emphasizes objective and subjective knowledge influence on the sources of information, relied on by consumers [14], or subjective and objective knowledge as determinants of consumption [34; 33]. Ellis and Caruana (2018), for example, point out the segments of wine consumers, based on the combination of objective and subjective consumer knowledge. There is also a clear research trend on consumer personal characteristics' impact upon structural alterations of knowledge: numerous studies have found consumer knowledge and self-confidence to be influential [36; 37].

Therefore, the article makes a supposition that the changes of consumer knowledge display through its structural parts. Consequently, a proactive response can only be implemented when the structure is open and flexible with regard to external environment variations.

The article aims at suggesting guidelines for the formation of a consumer knowledge structure. Empirical investigation has been based on the case from Lithuanian beauty and personal care mass product industry. This sector is peculiar for fast-changing tendencies, high competitiveness, and growing consumer expectations towards better product quality and higher effectiveness.

## 2. Theoretical grounding

Scientific works treat the concept of consumer knowledge in a few ways. Given a classical view, knowledge is the structure and the information content, embedded in the memory [14]. Knowledge with the focus on consumer behavior is defined as consumer knowledge that encompasses all the information related to the product and to the market, stored in the long-term memory of the consumer, allowing to act on the market [17] and enabling him/her to form experiences, related to a specific product. Rowley [9] expands the concept of consumer knowledge pointing out three

knowledge types, pertinent to the management of organization-consumer relationship, and that would be knowledge for a consumer, knowledge about a consumer, and knowledge from a consumer. Wang and Hazen [27] expand the concept of consumer knowledge noting that, in many cases, consumer knowledge is tacit - held within the holder, even subconscious and difficult to express. This knowledge, however, shapes consumer behavior and is deeply rooted within it. Given the fact that the concept of consumer knowledge is closely related to the definition of knowledge in a broad sense, it could be admitted that knowledge is time-dependent.

The aspect of knowledge dynamicity, or the dynamic theory of knowledge creation, was first introduced in Nonaka and Takeuchi's [8] SECI model which reveals that, under specific circumstances, knowledge converts. During the processes of socialization, externalization, combination, and internalization, individual tacit knowledge converts to organization's explicit knowledge, and vice versa. In the course of new knowledge creation, socialization and externalization take place in organizational communication processes, whereas combination and internalization processes are fostered by formalizing organization's norms, values, and procedures. From the consumer perspective, consumer response to a product is influenced by environment dimensions, such as marketing means at an organization, macro environmental factors, consumer characteristics (e.g., attitudes, motivation, perception, personality, lifestyle, etc.) as well as a purchasing decision process (Buyer's Black Box Model). Therefore, consumer knowledge shifts are shaped by the following: external macro environment, organizational marketing stimuli, individual characteristics, and purchasing decision process variations. However, scientific sources have not yet revealed any structure through which consumer knowledge shifts form.

Literature provides classifications of consumer knowledge structure. So far, it has been customary to consider two constituents of consumer knowledge: product category information and expertise [1, 11, 4].

Product category information provides knowledge as a certain amount of information, either correct or incorrect, stored in the memory. This information can be objective (such as a specific number of brands) or subjective (such as consumer's perception of product class information). Alba and Hutchinson [11] identify product category information with the brand familiarity and define it as a number of product-related experiences, accumulated by consumers. Product-related savviness is shaped by a number of experiences, for instance, by the effect of marketing communication means, information search, liaison with an enterprise, choice and purchasing decision making, acquisition, and product usage in various situations.

Expertise encompasses different rules about the use of declarative knowledge when referring to real objects or concepts. In the opinion of Alba and Hutchinson [11], consumer expertise is a multilayered construct embodying cognitive structures (for instance, beliefs about product attributes), cognitive processes (for instance, decision rules for acting on those beliefs) required to successfully perform the tasks, related to the product. Consumers may have similar amounts of information, but make different product-related decisions. Actually, objective and subjective expertise can be singled out. Objective expertise reflects consumer skills which allow him/her to solve real

problems, whereas subjective expertise reflects the perception of one's ability to perform product-related tasks.

The given classification suggests still another division of consumer knowledge. According to its nature, knowledge can be objective or subjective [1]. Carlson et al. [12] conceptualize consumer's objective knowledge as accurate stored information, and subjective — as consumer's self-beliefs about his/her own knowledge. In other words, objective knowledge depicts what consumers know and subjective — what they think they know.

Considering the exposure of consumer knowledge structural parts, such as consumer's familiarity with the product and consumer expertise, it can be stated that consumer expertise forms based on brand familiarity. However, does it mean that the higher brand familiarity formed by way of company marketing means is, the more exalted consumer expertise gets? The answer to this problem aspect may be disclosed if the aspect of dynamicity is considered a characteristic of the presently discussed consumer knowledge structure. Theoretical investigations by Alba and Hutchinson [11] reveal that product-related consumer expertise grows when the product familiarity level rises. Alba and Hutchinson [11] claim that consumer's reduced cognitive effort and his/her increased automaticity in selecting a product is directly influenced by product familiarity. The repetition of, or practice on, product-related tasks not only determines faster task performance, but also reduces cognitive resources, needed for the completion of a product-related task. Loyal consumers who keep performing shopping-related tasks for a long term develop automaticity in visual detection of certain brands. Once a visual identification of a brand gets automatized, the process develops independent of the information processing stage. In this way, the effectiveness of all marketing communication means, related to a tangible brand depiction, is ensured.

Brucks [14] has suggested a typology for consumer product knowledge content. This structure is not oriented towards disclosing the nature of consumer's objective or subjective knowledge; neither would it reveal the level of consumer familiarity with the product. Rather, this construct exposes the multidimensionality of knowledge structure.

Terminology reveals verbal and non-verbal product related meanings or symbols. It could be presumed that consumer knowledge of product terminology is formed by visual elements of brand identity, such as a brand name, symbols, logos, or a character. Kapferer [10] claims that a brand name is a major source of brand identity. It not only expresses the whole idea of the brand, but also evokes main associations of the brand name [13]. According to Keller [13], in spite of the fact that a brand is critical in forming consumer based brand equity, visual elements of a brand play an important role. Brand symbols take up a position here: they enable consumers' brand awareness, guarantee brand durability, and allow its differentiation and personalization [10]. Viewing the above Brucks' [14] consumer knowledge content typology from a dynamic perspective, it could be argued that fundamental changes which take place in the external environment can be reflected neither pre-actively, nor pro-actively through the knowledge of the terminology of a product. This is due to the reason that,

on the basis of classical branding theory, the identity of a brand, developed by an organization, is a lasting and well established vision of what this brand should be.

**Product Attributes** refer to the knowledge of the attributes which enable a consumer to evaluate a brand. Brucks [14] claims that produce attributes include knowledge about the qualities, potentially involved in making a purchasing decision. They also include the knowledge, which the consumer will not apply in the process, but would be aware of. In the classical marketing theory, product attributes are usually divided into internal and external. Internal product attributes reflect basic characteristics, such as product shape, components, odor, etc; external product attributes are not integrated into a product core, and those are a brand name, price, origin of the product, etc. [21].

With the development of tectonic shifts in the external environment, consumer behavior characteristics and consumer experience change. Modifications of consumer characteristics also result in the changes of consumer needs and expectations, the latter influencing the formation of associations, both product-related and product un-related ones. It could be argued that the above mentioned changes would be soon reflected in the structural part of the knowledge on product attributes, since, after those changes, a consumer, making his/her buying decision, would evaluate different alternatives.

General and Specific Attribute Evaluation. A general attribute evaluation refers to knowledge about the overall estimate of an attribute or the attribute level. A specific attribute evaluation refers to the knowledge of specific criteria, used to evaluate an attribute. The assessment of specific attributes is the knowledge of specific criteria, used to evaluate product properties; it also estimates how attributes are related to other properties or attributes [14].

In the field of consumer behavior research, it is usually assumed that consumers carry out a pre-purchase evaluation as well as a post-purchase evaluation (Keller (2013). Therefore, it can be argued that attribute evaluation is formed during both stages of purchasing decision making. As Day [18] states, during consumer's prepurchase stage, attribute evaluation is based on past experiences, related to the same or similar products. During the post-purchase stage, consumer's product evaluation is made on the basis of his/her user experience which results in consumer satisfaction or dissatisfaction. The following aspects of the nature of satisfaction, as a result, shape consumer satisfaction. 1) Emotional satisfaction, when it is a surprise element of the product acquisition or consumption experience, or as an emotional response to specific consumption experience. 2) Consumer satisfaction, as an outcome, which can be of the following nature: (a) emotional – satisfaction being a surprise element of product acquisition or consumption experiences (i.e., satisfaction as an emotional response to consumption experience); (b) fulfillment - satisfaction being viewed as an equivalent end-point in the motivational process; (c) state – when satisfaction relates to reinforcement and arousal. Low arousal fulfillment is reached when the product or service perform adequately. High arousal satisfaction is conveyed when satisfaction comes as a surprise, either positive (delight) or negative (shock) [3].

It could be concluded that an organization can identify changes in the knowledge on general and specific attributes evaluation. For that, it should set the level of consumer satisfaction in two stages, pre-purchase and post-purchase, by using consumer knowledge management (CKM) principles. Boeteng [7] states that the knowledge on the existing consumer knowledge can be obtained only through continuous interaction with consumers.

General and Personal Product Usage. According to Brucks [14], the dominant use of a product comprises a few things: the knowledge about how the product can be used, the situations it can be used, and the knowledge relevant when considering a purchase. A personal way of product use is the knowledge which includes memories about product usage experience as well as 'silent' characteristics, experienced in personal use situations. Ram and Jung [20] point out three dimensions of product usage. 1) Product usage frequency reflects the rate of product use, regardless of the application of distinct product features and functions or different interpretations of product adaptability. 2) Product usage function means the extent to which product features and functions are used for the main intended purpose, whatever the product usage frequency is. 3) Product usage situation covers varied ways of product adaptation and different usage situations, regardless of product usage frequency and functions. The latter conceptualization enriches the understanding of Brucks' [14] concept of personal product usage knowledge, stating that it also includes the knowledge about product usage frequency, functions, and situations.

In the context of the tectonic shifts, under changing consumers' needs and expectations, transformations in product usage frequency, usage function, and product usage situation are very likely. Therefore, a supposition can be made that these changes could be very well reflected in the knowledge on general and personal product usage. However, this change could only be identified through effective consumer relations management.

**Brand Facts** comprise knowledge about the brand, its overall evaluation, and comparisons with/between/among competing brands.

The discussed consumer knowledge structures, viewed from the dynamic perspective, allow the supposition that a fundamental difference among these structures reveals itself through the completeness of structural parts and the depth of justification. This suggests that Brucks'[14] consumer knowledge structure can be adopted and operationalized by identifying consumer knowledge changes.

The analysis of the consumer knowledge structure by Brucks [14] conveys that consumer knowledge components are interrelated, because only the presence of all the above-discussed parts forms an aggregated set of tacit and explicit consumer knowledge as the total of the market- and product-related information, stored in the long-term memory of consumers and enabling a purchasing decision. So far, scientific research has not demonstrated theoretical and empirical justification of interconnections among Brucks' [14] consumer knowledge structural parts. However, from the perspective of a classical purchasing decision making process it could be hypothesized that a consumer, prior to purchasing a product and evaluating it on the basis of his/her subjective experience, has to form a whole set of product features. This entirety would reveal itself only through the ability to decode product and brand related terminology and through the discovery of personal and general product usage situations. Therefore, in order to comprehensively reveal the tendencies which change

consumer knowledge, it is important to view a consumer knowledge structure not only from the dynamicity perspective, but also from the structural one.

Thus, to summarize the provided theoretical insights, the concept of consumer knowledge dynamicity could be further suggested. The dynamicity of consumer knowledge is the change of product-related information and subjective experiences, stored in consumer's long-term memory and allowing the consumer to make purchasing decisions. It is manifested through structural parts of knowledge, those segments being open to environment changes and interrelated, combining such structural parts as product terminology, attributes, their evaluation as well as usage and facts about the brand. It is influenced by organization's marketing activities, macro-environment factors, consumer characteristics, and changes in purchasing decision making.

#### 3. Research methodology

#### 3.1. Principles of methodological strategy

The research has been based of the constructionism epistemology. Constructionism allows researchers to explore the views of different participants within the subject context, recognizing that each individual might have a different view or understanding of the same situation, and that truth or reality exists only through interaction with the realities of the world [24]. The nature of this empirical investigation requires a conceptual and contextual understanding of tectonic shifts, which take place within a definite industry sector and shape consumer knowledge.

#### 3.2. Industry sector context

The case of Lithuanian beauty and personal care mass product industry has been considered for the current empirical investigation. Beauty and personal care products are in daily need for 500 million European consumers of all age groups. The produce ranges from everyday hygiene products, such as soap, shampoo, deodorant, or toothpaste to luxury cosmetics, such as perfumes and decorative cosmetics. The value of the sector itself is 77 billion Euro (in 2015), and it is one of the few sectors not affected by the global financial crisis.

Due to high competition in the cosmetics industry, recognition of a brand is important. Consumer loyalty depends on reliable advertising, quality, security, and on the development of new products; this can be compared to the fashion industry, currently characterized by trends, changing every season.

The European cosmetics industry has taken the initiative to completely ban the use of animal testing for the industry needs, at the same time, encouraging innovation and competitiveness. The dynamics of the present market today is equally driven by safety and innovation, new color palettes, product applicability for specific skin types, antiaging products, and unique formulas. Consumers are in constant need of a larger assortment, greater individualization, and even higher efficiency. In order to take user

preferences and expectations into account, consumer groups and organizations are being continually immersed into the earliest stages of produce development.

Lithuanian beauty and personal care product market amounted to 263,3 million Euro in 2016. A relative growth in sales has been planned until 2021. The competition in this market remains high, which means that almost all of its participants seek to increase their market share by applying price reduction strategies. Therefore, the price in this sector practically does not go up.

As a matter of fact, a stable climate in Lithuanian economy in 2016 made the growth for the share of disposable income of the Lithuanian population possible. Consumers have been getting more and more confident about their financial situation which increases the demand for more exquisite and higher quality products. A growing segment of consumers chooses more expensive 'premium' products. Consequently, producers keep investing in the development of new production, seek new formulas and different means to give the products more added value. Several producers and traders occupy a strong position in the Lithuanian market, dominated by international brands. A local producer, company "BIOK" has been among those which have won stronger positions in the Lithuanian market [25, 26].

### 3.3. Method of data collection and processing

The method of in-depth interviewing has been used for the empirical investigation. During the interview, an attempt was made to identify the tendencies of the Lithuanian beauty and personal care mass product industry, which are likely to change consumer knowledge. Taking into account the fact that particular tendencies of an industry can be professionally identified by the employees who monitor and analyze trends in the external environment, an expert group was established, including employees, responsible for the management of consumer knowledge of organizations which agreed to participate in the investigation. Therefore, in order to identify code saturation for the tendencies that determine the shifts within consumer knowledge indepth interviews have been conducted with five experts:

- 1. The head of a professional beauty and personal care commodity producer;
- 2. A project manager of a Lithuanian beauty and personal care mass product producer;
- 3. A trademark manager at a shopping center, distributing beauty and personal care mass products in Lithuania;
- 4. The head of an organic beauty and personal care product manufacturer;
- 5. An independent expert on beauty and personal care products.

The interview took place in the fall of 2017. Each interview lasted from 1.5 to 2 hours.

Content analysis was applied while analyzing the data:

1. In order to identify all possible and relevant trends in consumer knowledge shifts, a systematic analysis of the data was started as soon as the first interview was conducted. The analysis of the initial data obtained allowed to improve the questionnaire for in-depth interviews and thus avoid non-identification of important trends.

- 2. Encoding: Researchers work with data conceptualization, and not with the actual data per se, i.e. the consumer knowledge structure is built from raw data. In order to identify trends in the beauty and personal care industry in Lithuania that would change consumer knowledge, the method of open coding was applied, open coding being the creation of concept categories, based on the available data.
- 3. When no more specific aspects, which form the categories, can be found and the relations among the categories begin to crystallize, then the saturation of the theory is complete. Saturation of the categories of codes, reflecting the Lithuanian beauty and personal care production trends, able to change consumers' knowledge, was achieved by interviewing five experts.

A qualitative data analysis program MaxQda was used to process the primary oral information, obtained during the in-depth interviewing. The developers of this program identify its numerous benefits, such as: functionality, great usability, unique multimedia capabilities, intuitive analysis of qualitative data, and other.

#### 3.4. Research limitations

The in-depth interviews encountered a problem. Experts, involved in the research, despite being asked about the present, tended to identify industry trends, likely to prevail in the future. Therefore, it is probable that current trends have been encoded as future trends. Also, the number of experts who agreed to participate in the survey to identify the trends within the Lithuanian beauty and personal care mass product industry, which would change the consumer knowledge, is not substantial to draw unambiguous conclusions.

#### 4. Empirical analysis

# 4.1. Tendencies changing consumer knowledge in the Lithuanian beauty and personal care mass product industry

Tendencies, which change consumer knowledge, related to beauty and personal care mass products lying within the beauty and personal care industry in Lithuania, have been saturated and singled out with the help of the in-depth interview method. The aforementioned tendencies have been identified by the formation of a single hermeneutical unit, comprising five transcripts of in-depth interviews, 43 trend-reflective codes and three code families that integrate them, as well as 130 encoded authentic citations.

Meanwhile, despite the application of the saturation principle, it could be stated that research limitations have determined not fully saturated categories of product terminology knowledge and brand facts. It is also important to note two trends in the categories of product attributes knowledge and their evaluation. Those could not be ascribed to any of their subcategories, as they affected the comprehensive knowledge of product attributes and attribute evaluation.

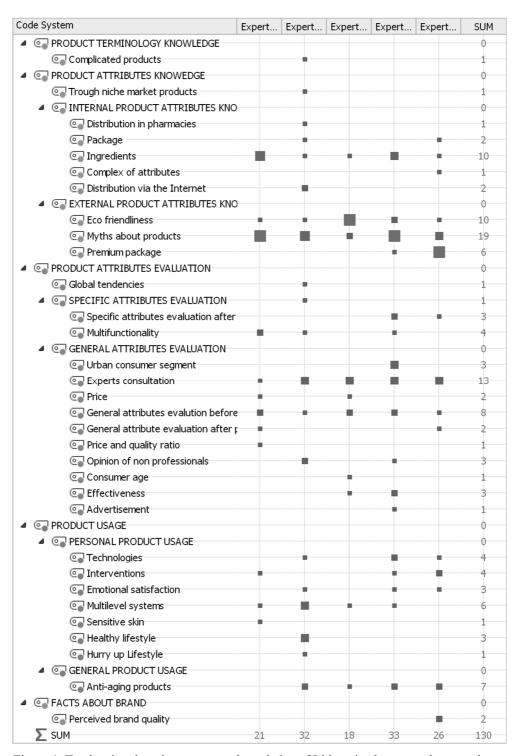


Figure 1. Tendencies changing consumer knowledge of Lithuanian beauty and personal care mass products.

# 4.2. Relationships within the structural components of consumer knowledge of Lithuanian beauty and personal care mass products

Product terminology knowledge influences attribute evaluation. Data aggregation from in-depth interviews has revealed that the shifts in the consumer knowledge of product terminology will be influenced by beauty and personal care mass products, constantly advancing in their composition, technologies, and, consequently, by brand identity changes. A summary of experts' opinions in the study has shown that this change in the knowledge of product terminology directly influences the knowledge of the respectable attribute evaluation in using beauty and personal care mass products. With the advancement of mass products for beauty and personal care, a consumer evaluates key attributes of the product, based on the judgment of experts and publicly known figures, but not on that of cosmetics professionals: "Yet, there is a really big part of consulting. As a matter of fact, this tendency will grow in the long run. On the one hand, there is this reason that cosmetic products are getting more and more complex. Well, new technologies, new ingredients completely transform consumption, change its properties [and] communication. And sometimes they are difficult to understand. Even if you want to conceive whether it's good or bad, you need a lot of information that can be specifically provided by a professional consultant." "First of all, naturally, there stands the advice which comes not from a professional level: it's friends' remarks, reading the information, etc. Nevertheless, consulting takes a really big part. As a matter of fact, this trend will grow in the future, partially, due to the fact that cosmetic products are further becoming more complex and complicated."

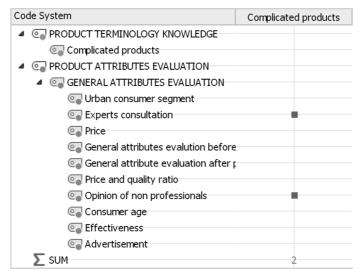


Figure 2. Relationship between the knowledge of product terminology and attribute evaluation.

Internal product attribute knowledge influences external product attribute knowledge. As shown in Figure 3, the knowledge of internal and external product attributes interacts, forming comprehensive consumer's knowledge on beauty and

personal care products. In the case of Lithuanian beauty and personal care mass product industry, despite the fact that the changes of consumer's internal product attribute knowledge are conditioned by a difficulty for a consumer to decompose the ingredients of a cosmetic product, the knowledge of the external product attributes will be changed by the necessity to use organic products. This need will encourage market players to compete creating myths about products that also directly affect consumer knowledge of the external product attributes: "You see, it's terrible sometimes to hear all what they say. For example, [they] emphasize something that is totally unimportant, or highlight something which even does not exist. [They] make people think that this is good, not telling exactly what that would be. Of course, they exaggerate, like some ingredients make miracles, while, in fact, it's just a simple thing. If there is little of that substance, then this ingredient does not do anything at all, but the person does not even understand how much of it is [in the product]. This is bluff, but all marketing is built on it"; "An attempt to influence the consumer, choosing one ingredient and creating tales about it, will surely remain. I do not believe that users will learn how to properly read a list of ingredients, and [that] this would encourage marketers to talk about the reality and not to show it the way [one] want[s] it to show."

The summarized research data has also revealed that the product attribute knowledge interacts with the attribute evaluation knowledge. It is difficult for a consumer to decompose the ingredients of a beauty and personal care product. Therefore, he/she will evaluate the product on the basis of the knowledge, generated by expert advice ([And] the composition of the same product, only medically packaged in a bottle at a cosmetologist's will seem higher-performing to a person; possibly, a placebo effect takes place. Having bought an expensive product, or a recommended one, [a consumer] will say – this [product] suits me well, it was really effective), on the basis of product price (The [product] price can be (-) relatively small, but the seller can charge a very high price and the user may not know what he/she has purchased. Of course, these things get sorted out over time. I can only say, you won't buy a good product cheap), or based on the knowledge of general attribute evaluation before purchase ([And] the composition of the same product, only medically packaged in a bottle at a cosmetologist's will seem higher-performing to a person; possibly, a placebo effect takes place. Having bought an expensive product, or a recommended one, [a consumer] will say – this [product] suits me well, it was really effective). Therefore, in this case, user's knowledge of the product affects the product evaluation knowledge. However, the study has also identified an interconnection between the knowledge of the external product attributes, being changed by organization's myths on beauty and personal care products. This encourages the use of anti-aging products as the main way of using personal care and beauty products: "I think, it's anti-aging (-). I do not know if it looks like now we have enough of those products. I doubt (-) () but [yes], those are the products that offer youth in some different way. Vitamin A now, retinol (facial cosmetic products with retinol?). Any product that will offer a new myth about youth, I think, and (-) I do not know (-)". However, the latter myth would not be an effective tool for the competition among organizations in the given industry if consumers had no particular need for anti-aging products. "Sure, that aging exists (-) but the growth of anti-aging products is again partly a consequence of marketing; and this cult of beauty - 25 years old girls already think that they are old and that there can be no wrinkles, or not a single gray hair / errr / ".

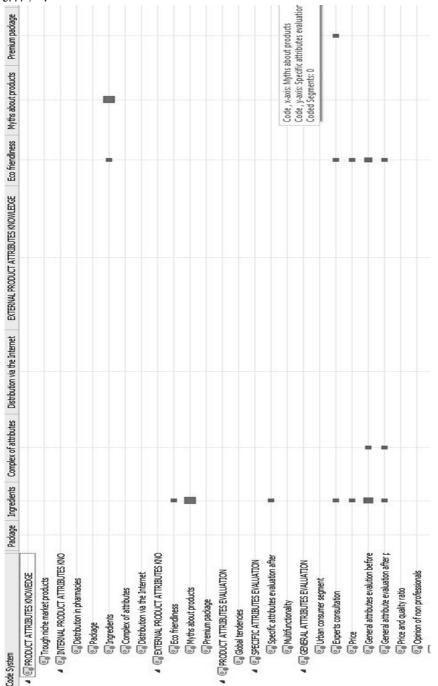


Figure 3. Product attribute knowledge relation to the attribute evaluation knowledge.

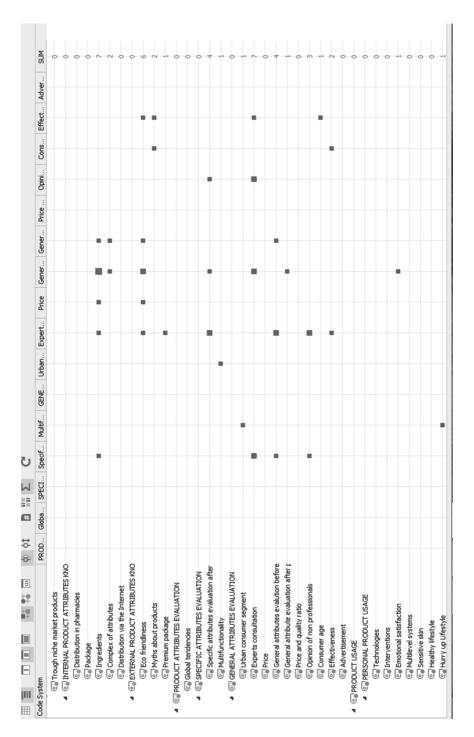


Figure 4. Product attribute evaluation in relation to other segments of the consumer knowledge structure.

General product attribute evaluation knowledge interacts with the specific attribute evaluation knowledge. After processing and summarizing authentic quotations of the experts who participated in the study, a reciprocal link between the above sub-dimensions appeared in the case of the Lithuanian beauty and personal care mass product industry. As seen in Figure 3, in the market analyzed, the changes in consumer knowledge on general product attribute evaluation for the products being analyzed are shaped by experts in beauty and personal care products, which affects the assessment of specific attribute evaluation after purchase. "Well, there is still this understanding (-) /errr/ the user can not infer the quality of the cream (-), even if they try hard they can hardly imagine if they really have changed somehow, whether one has got one's wrinkles reduced, or not (-); neither one can measure that. He/she can only imagine. (-) So, the looks, the price, and place of distribution mean a lot. [And] the composition of the same product, only medically packaged in a bottle at a cosmetologist's will seem more effective to a person; possibly, a placebo effect takes place. Having bought an expensive product, or a recommended one, [a consumer] will say – this [product] suits me well, it was really effective". Also, there has been a reverse link revealed. The knowledge on general product attribute evaluation before purchase influences the knowledge of specific attribute evaluation after purchase. "Well, there is still this understanding (-) /errr/ the user cannot infer the quality of the cream (-), even if they try hard they can hardly imagine if they really have changed somehow, whether one has got one's wrinkles reduced, or not (-); neither one can measure that. He/she can only imagine. (-) So, the looks, the price, and place of distribution mean a lot.".

Product attribute evaluation knowledge is influenced by the product usage knowledge. In addition to the above-described knowledge of product attribute evaluation, as related to the already discussed parts of the consumer knowledge structure, the summary of the authentic views of the participating experts has revealed certain issues. In the case of the industry investigated, consumer use of beauty and personal hygiene mass products under the conditions of constant urgency is likely to cause change in the knowledge of attribute evaluation of the mentioned products. To achieve this, a specific feature of multifunctionality is crucial: "In fact, I would think that, on the one hand, the life itself forces this. As I mentioned, the very pace of life is different. As we can see, more and more people are not able to do anything [on time] and actually start saving time that is meant for themselves, or they divert it to another direction, i.e. to rest, to some kind of leisure. And, let's say, the use of cosmetics, which more often involves hygiene products, self-care, self-improvement, the care for a physical shape, is given less time. This automatically brings to the conclusion that the trend for the cosmetics market is to adapt to make products comfortable, easy, and quick to use. To make them multifunctional in relation to men."

In addition to the discussed links between product usage knowledge and other segments of the consumer knowledge structure, it is important to note that the summary of the data obtained during the study provides the following outcome: the theoretically substantiated sub-dimensions of general product usage and personal product usage are not interrelated. This suggests that in the case of the Lithuanian beauty and personal care products industry, the supposition provided by Ram and Jung

(1991) is conformed. That is, the personal product usage situation is not affected by such essential aspects of product use as the necessary frequency of product usage or the function.

#### 4. Discussion and future research directions

Having summarized and analyzed the qualitative data obtained, the paper suggests that the classification of consumer knowledge, used in the article, is open to variations in consumer knowledge since it identifies the main structural elements through which the tendencies, affecting consumer knowledge changes, reveal themselves. As a result of qualitative research in the Lithuanian beauty and personal care mass product industry, it can be stated that, in this case, the changes in consumer knowledge are influenced not only by the tendencies, transforming the knowledge of product terminology, product attributes as well as their evaluation, product usage, and brand facts. They are also influenced by the trends reflecting the core market strategy of the industry under investigation, which can be considered as organization's marketing activity, most influential in consumer knowledge development in that industry. Among other outcomes, the study has identified certain tendencies. Firstly, consumer knowledge of the beauty and personal care mass product attributes will change due to the concept of niche products in beauty and personal care market production. Secondly, the changes in consumer knowledge on attribute evaluation for beauty and personal care mass products will be influenced by the global trend of these products, among other trends. According to a classical perception of market strategies, presented in the Ansoff matrix, the currently identified two tendencies can be categorized as market penetration means. The summarized qualitative research findings have not only revealed the tendencies, transforming consumer knowledge about beauty and personal care mass products. The findings also point out the fact that the analyzed industry is characterized by intense competition ("I do not understand how there are so many products in such a small market"), manifesting through uninterrupted innovation ("It's always necessary to innovate because it is essential for cosmetics") and through the creation of myths about cosmetic products ("an attempt to influence a consumer, choosing one specific ingredient and creating tales about it, is present, indeed, and it will be"). This forces organizations to push for maximal product usage. Thus, in sum, it can be assumed that structural components of consumer knowledge vary, depending on the specificity of the industry, on the purchasing situation, upon the degree of consumer involvement, and, probably, on the region. As mentioned in the paper introduction, the research of consumer knowledge heavily emphasizes subjective and objective knowledge, investigating change and subordination. Based on the results of the present theoretical and empirical research, Figure 5 suggests certain guidelines for the open structure of consumer knowledge. Consequently, the investigation suggests that the objective and subjective nature of consumer knowledge, deliberately unstressed in Brucks' [14] structure, still reveals its multidimensionality through indirectly integrated objective and subjective knowledge. Each segment of Brucks' consumer knowledge structure encompasses the knowledge both objective and subjective in their nature. Following the research by Aertsens et al. [28] and Dodd et al. [29], this is the only means to form aggregate consumer knowledge.

Thus, Brucks [14] has suggested a typology for consumer product knowledge content. It is important to identify these parts when continuing extended research in the future.

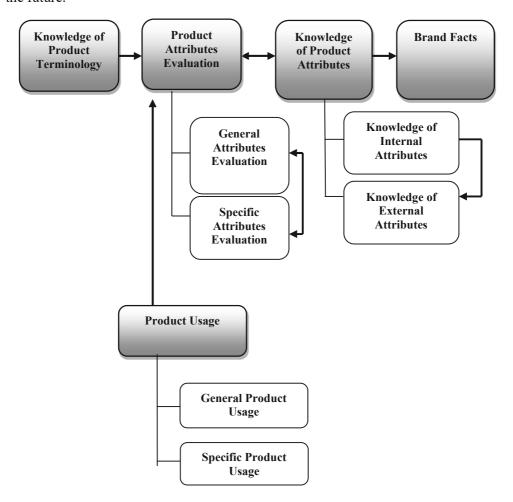


Figure 5. Guidelines for the open structure of consumer knowledge.

Regarding the structural aspect of consumer knowledge, the case of the Lithuanian beauty and personal care industry has revealed that the knowledge of product terminology, formed by brand identity, will directly affect the knowledge of product attribute evaluation both before and after purchasing the product. Changes in the knowledge of product attribute evaluation are directly influenced by the knowledge, particularly relevant to a consumer in the purchasing decision making process: how the product can be used, what the situations of usage could be, or what the memories of usage experience and "silent" characteristics, experienced in personal use

situations, are. The case of the Lithuanian beauty and personal care mass product industry has disclosed that structural components of the knowledge on product attribute evaluation and product attributes interact with each other, influencing each other's transformations. The synergy effect explains this: a consumer can evaluate internal and external product attributes before purchasing and upon purchasing the product, based on the knowledge of those attributes. The above-mentioned findings of the qualitative investigation support the views by Selnes and Gronhaug [30], Feick et al. [31], Ellen [32], Peniak et al. [33], and Verbeke [34] suggesting that objective and subjective knowledge directly affect consumer's opinion about a general brand or product attributes which essentially conditions consumer purchasing behavior.

Due to constant re-assessment of product properties, not only the evaluation knowledge, but also the knowledge about product attributes change. Also, the summary of the qualitative data has shown that the knowledge of consumer's product attribute knowledge affects the perceived quality of the brand as a brand fact. The perceived brand quality is one of the components of a consumer brand value, broadly defined as varied effects of brand knowledge on consumer response to the elements of a marketing mix. The value of a consumer brand is created through the enhancement of brand awareness and the consolidation of affiliated, strong, and unique brand associations in consumer's memory. Integrating the concept of a consumer based brand equity into the consumer knowledge structure, based on additional theoretical and empirical investigations, would allow deeper insights into consumer knowledge and its components.

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