BRAND EQUITY INTEGRATED EVALUATION MODEL: CONSUMER-BASED APPROACH

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Abstract

There are several ways to measure brand equity. One method approaches the financial-company level, other analyses consumer level. Although both approaches can be treated as equal to each other, but only when the consumer-based viewpoint is fully revealed the financial brand value can be effectively measured. Consumer-based approach seeks to identify brand associations the consumer has. Theoretical brand equity models are difficult to apply in practice due to the distinction of brand equity attributes and the lack of their weights identification in the overall equity.

Although applied brand equity evaluation models as “BrandAsset® Valuator”, “Equity*Engine” and other are effective, but not fully revealed in the literature due to the copy right restrictions. These statements show that there are almost no possibilities to evaluate one’s brand for companies that can not afford expensive commercial brand equity analysis. The goal of the article is to prepare consumer-based brand equity evaluation model, based on theoretical data and the results of Lithuanian brand experts semi-structured interview and questionnaire survey of enterprises. The suggested authors’ model covers several brand characteristics like brand awareness, brand image, product quality, product price and loyalty for the brand. In the process of goal achievement brand attributes and their interaction were identified, the weight of every attribute in the overall brand equity was measured as well as basic rates of the total brand equity were estimated. The methodology for model application is also given in this article.

Keywords: brand equity, brand equity evaluation model, consumer approach, quality.

Introduction

At the time of world economical integration and competition becoming stronger, effective management of quality and its means of identification (trade and quality marks, brands, etc.) system becomes one of the most important factors of company activity success in national, regional and world markets. Along with the rise in consumption of goods, it can be noticed the growth in the products marked with different trademarks and brands as well. According to J. N. Kapferer (2008), the abundance of brands has become a phenomenon in both marketing and cultural fields, affecting all daily areas in the modern society starting with economic or social spheres and ending with education or even religion.

Brand contains diverse information that, differently form ancient times, acts not just as identification mean. Modern brands embody different sets of meanings that generate specific associations or emotions for every consumer. Brand can be defined as important marketing mean for both manufacturers or traders and consumers. Thus on the one hand, the brand for consumer is not just a static combination of different attributes allowing an identification of goods, but also the physically implicit emotional factor determining the final decision. On the other hand, the brand for company is the source of surplus value and competitive advantage. That is why it is necessary to execute permanent and systematic brand management that demand deep understanding of versatile brand concept along with the factors determining the overall brand equity.

There are two major approaches to treat a brand and its equity. One method approaches the financial-company level, other analyses consumer level. The latter approach is about intangible attributes that, according to the authors, are the most important in brand equity development process. The branding guru D. Aaker (2008) has noticed that even now some entrepreneurs find hard to identify or properly evaluate brand attributes. Despite of the fact, the concept of brand equity is mentioned frequently in scientific literature and more than 20 million results with the keyword “brand equity” can be found on “Google” search engine, the vast majority of the available material is useful just for establishing general, not practical perception of brand evaluation. Several Lithuanian scientists (Grundey, 2002; Ruževičius & Savkova, 2003; Virvilaitė & Jucaitytė, 2008) have noticed that the main attention is paid to only traditional economic brand value or theoretical brand equity models, adding that insufficient conceptually reasoned and practically applied brand equity evaluation methods, integrating both consumer and financial perspectives, are missing. The authors of this article specify the later approach with the statement that first of all, the development of every consumer-based brand equity attribute is even more important, before formation of the model integrating both perspectives. That is why to begin with it is necessary to discriminate and evaluate brand equity attributes. However, some obstacles can be noticed in this field. There are many models dedicated to
brand equity evaluation, but vast majority of them are not fully revealed in the literature due to copy right restrictions, others are hard to apply because of their conceptual framework.

The goal of the article is to prepare consumer-based brand equity evaluation model, based on theoretical data and the results of semi-structured Lithuanian brand experts interview and questionnaire survey of enterprises. In the process of goal achievement brand attributes and their interaction were identified, the weight of every attribute in the overall brand equity was measured as well as the basic rates of the total brand equity were estimated. Research methodology includes systemic and comparative literature analysis, secondary data analysis, semi-structured expert interview, questionnaire survey of executive managers working in enterprises established in Lithuania and qualitative analysis. The questionnaire of the semi-structured expert interview was based on D. Aaker, J. N. Kapferer, K. L. Keller, „Young & Rubicam“, „Research International“ and „Ipsos group“ brand equity models. Overall 5 Lithuanian branding experts that had experience in evaluating brand equity were participating in semi-structured expert interviews. The survey carried out in Lithuanian enterprises has examined the perception of brand equity and its intangible attributes among 218 executive managers working in different Lithuanian companies, selected according to the standards of representative sample. The methodology of the research is specified in particular parts of the article.

The concept of brand equity and its evaluation models review

Branding is a complicated process that demands a lot of time and organizational efforts. Particular regard here is paid for the development of brand image and its identity. The focus of these attributes lies on intangible attributes that create surplus value for a product and raise its brand competitive ability (Kotler & Keller, 2007). The concept of brand equity is defined ambiguously in scientific literature. There are two major approaches to treat brand equity – financial approach and consumer-based approach. Brand equity treated by consumer-based perspective, analyse consumer perception and behaviour models, that have an influence on a final purchase decision (Keller, 2003; Kotler & Keller, 2007). This approach assumes that brand equity, which is formed by individual experience, lies in the mind of consumer. Knowledge and experience the consumer has creates differential effect that broadly speaking is a perception of brand equity. Financial brand equity approach covers two major brand equity valuation trends. The first one is about direct brand valuation which takes into consideration all expenditures spent on creating and developing brand, the second one is about price comparison while valuating products in the category with certain brands and without (Žostautienė & Marcinkevičienė, 2005). Although the latter approach could be convenient to use in a balance sheet of organization, but it does not thoroughly evaluate intangible attributes that, according to the authors of this article, are the most important since its influence on both development of surplus value and change in demand level. There are many models that seek to evaluate consumer-based brand equity. Further in the article the most popular are briefly discussed.

David Aaker’s conceptual consumer-based brand equity model (1991) is known as a pioneer in this field. It covers 5 attributes: brand loyalty, brand awareness, perceived quality, brand associations and other brand assets. The Aaker’s model is valuable for general perception of brand equity establishment. The forte of this model lies on integration of both consumer-based dimensions perceptional and behavioural. The weakness of the model is about its superficiality: there are no indications of links among attributes and their individual weights in the overall brand equity.

The author of consumer-based brand equity model called “Brand resonance” is famous scientist of branding K. L. Keller (2003). This model treats brand equity as a development process. Strong brands have to achieve the final level of development called resonance that is approached as loyalty. The advantage of “Brand resonance” lies on the duality of brand equity concept – consumer perceive brand equity on a basis of emotional and rational factors. It is important to mention that this model includes brand equity attributes as well as their links.

Consumer-based brand equity model “BrandAsset® Valuator” is designed by international marketing and communication company „Young & Rubicam“ (BrandAsset® Consulting, n. d). This model covers 4 attributes: brand differentiation, brand relevance, brand esteem and brand knowledge. The forte of this model comes from versatile evaluation approach. It seeks to identify current and potential brand position in the market. More over the evaluated brand result is integrated into market matrix that enables organization to establish brand’s strengths and weaknesses as well as to identify its market position and the stage of development.

Consumer-based brand equity model „Equity*Builder” is developed by international market research agency „Ipsos Group“ (Ipsos Asi, 2008). It includes 5 brand equity attributes: brand differentiation, brand
relevance, brand popularity, brand quality and brand familiarity. The important highlight of the models is that brand equity is treated from a broader perspective. Consumer-based brand equity is evaluated here including brand involvement and price dimensions.

“Research International model “Equity EngineSM” is one of the most straightforward commercial brand equity models (Knowles, 2005). It treats brand equity as a sum of brand affinity that includes brand authority, brand identification, brand approval, and performance level related with a product. In other word it appeals to emotional and functional benefits the consumer obtains. It is important to mention that this model covers the price factor as well, though here, it does not act an influential role, it is being influenced by the brand equity.

To conclude with, the certain tendency can be noticed: conceptual brand equity models created by D. Aaker (1991), K. L. Keller (2003) are difficult to apply in practice due to the distinction of brand equity attributes and the lack of their weights identification in the overall equity. Although applied brand equity evaluation models as “BrandAsset® Valuator”, “Equity*Engine”, “Equity EngineSM” and other are effective, but not fully revealed in the literature due to copy right restrictions. These statements show that there are almost no possibilities to evaluate one’s brand for companies that can not afford expensive commercial brand equity analysis. That is why authors of the article declare a necessity of a research that would clarify a practical demand on consumer-based brand equity evaluation models.

The research on brand equity concept perception and its evaluation models demand

This research aimed to reveal these scientific and methodological aspects:
 a) initial perception of brand equity concept among executive managers working in the largest organizations established in Lithuania;
 b) knowledge level on consumer-based brand equity among executive managers;
 c) experience in brand equity evaluation among top companies in Lithuania;
 d) present situation in information market covering consumer-based evaluation models as well as its demand level.

Research method. Questionnaire survey method was used in the research implementation. Web-based questionnaire, employing survey pall „Aplausa.lt“ (“Survey.lt”), was chosen as the most convenient mean to collect data. E-mails with a direct link to a questionnaire, based in survey pall, were sent to selected representatives of certain companies that were sampled according to Top 100 list of the largest companies by annual turnover in 2008 in Lithuania. The list was prepared by a business newspaper “Verslo žinios” (“Business News”). The research aimed to achieve 90 % of confidence level, while applying 50 % degree of variability and 5 % confidence interval. Representative sample of 214 respondents was assed by statistical methods, integrating above defined parameters. Factually, 218 responses were obtained.

The research revealed that majority of executive managers (42 %) the concept of brand equity are tended to associate with consumer approach – consumer perceived brand equity as non-monetary source of value. However, the concept itself is not thoroughly perceived. Academics and business practitioners usually discriminates these consumer-based brand equity attributes: brand awareness, brand associations, perceived quality of a product and loyalty (Aaker, 1996; Keller, 2003; Virvilaitė & Jucaitytė, 2008; Pappu et al., 2005). Only one-fifth of respondents could identify all mentioned attributes. Brand awareness, perceived quality and brand uniqueness were among the most popular citations (see Figure 1). It is worth to mention that some respondents (18 %) consumer-based brand equity confused with financial brand equity.

Only 8 % of respondents discriminated loyalty as the most important attribute of Consumer-based brand equity (see Figure 2). Whereas branding guru D. Aaker (1991), K. L. Keller (2003) and J. N. Kapferer (2008) unanimously accepts loyalty as a major attribute of consumer-based brand equity. The research revealed that 74 % of organizations have never evaluated their brand equity. Organizations that did it usually were delegating this task for competent employees (55 %) and only 8 % were hiring external consultants for this purpose. The rest of organizations were evaluating their brands by other means.

The research confirmed authors’ hypothesis on lack of information reflecting consumer-based brand equity evaluation. This attitude was expressed by more than half of respondents. Only 15 % indicated that they are content with a present situation in information market. To specify the later tendency, respondents have noticed that the majority of problems associates with lack of applicable methodologies in evaluating brand equity (39 %), with shortage of such information in general (34 %) as well as deficit of freely accessible information sources (34 %).
Figure 1. Consumer-based brand equity attributes discriminated by representatives of selected organizations (quantity of responses)

Figure 2. Major attribute of consumer-based brand equity (opinion of respondents, %)

The implemented research allows authors to conclude that executive managers working in the largest companies in Lithuania have general perception on consumer-based brand equity concept. However it is quite superficial. Moreover, the appropriate attention is not paid for consumer-based brand equity evaluation in business of Lithuania. This tendency is influenced by several factors: lack of information on brand equity evaluation, its poor applicability in practice and deficit of freely accessible information sources.

The research confirmed D. Aaker’s statement (2008) that executive managers usually have superficial perception on importance of brand activities in organizations. Authors of this article reasonably declare a need for further research, that would enable development of new applied consumer-based brand equity evaluation model and its methodology.

Expert interview results analysis

The aim of the second research of an article was to identify tendencies of consumer-based brand equity evaluation as well as specify attributes of brand equity. Data obtained from the second research was used for development of integrated consumer-based brand equity model that would enable approximate evaluation of consumer-based brand equity by organizations themselves. It is important to mention that main focus lay on the practical application and its simple complexity in the development process of integrated model. The research employed semi-structured expert interview method. Five distinguished experts, that have academic and practical experience in brand management or brand equity evaluation was selected for a research implementation.

The designed questionnaire paid a regard to consumer-based brand equity models developed by academics as D. Aaker (1991), J. N. Kapferer (2008), K. L. Keller (2003) and market research and advertising companies as „Young & Rubicam“, „Research International“ and „Ipsos group“. The research aimed to reveal:

- major problems in consumer-based brand equity evaluation;
- the most important attributes relevant to consumer-based brand equity as well as their weights in overall brand equity.

The research revealed that consumer-based brand equity is much harder to evaluate than financial brand equity. Majority of experts (3 out of 5) indicated intangibility and subjectivity of a brand as a major problem of its evaluation. According to them, consumer-based brand equity level strongly depends on brand image and related associations that is hard to evaluate objectively. Relatively high expenditures of time and money were mentioned as another problem of consumer-based brand equity evaluation. More over, the last problem that was marked by one expert directly reflected research, carried out in the largest companies of Lithuania, results on a lack of accessible and applicable consumer-based brand equity evaluation models and methodologies. The mentioned problems, according to the authors, are main reasons influencing low rate of consumer-based brand equity practical evaluation in the largest companies of Lithuania.

Majority of experts (4 out of 5) discriminated two sorts of consumer-based brand equity attributes: attributes important for consumer and attributes important for company. This approach indirectly reflects to a consumer-based brand equity dimensions of perception and behaviour described in a marketing literature (Keller, 1999; Myers, 2003; Pelsmacker et al., 2007). In this case attributes important for a consumer associate with perceptual dimension, attributes important for a company - with behavioural dimension.
All experts marked brand awareness and loyalty for a brand as very important attributes of consumer-based brand equity. Product quality and associations related to a brand were discriminated as other significant attributes. Two experts marked product price as influential attribute as well. Most of traditional consumer-based brand equity evaluation models, with some exceptions as „Equity*Builder”, does not indicate product price as influential factor. It is important to highlight that all experts marked an importance of comparative aspect. In other words, it is necessary to compare brand’s position with rival brands in overall market situation.

To sum up, consumer-based brand equity is more difficult to evaluate because of its intangibility and subjectivity, high expenditures on time and money as well as the lack of accessible and applicable methodologies. Consumer-based brand equity attributes can be sorted in two sections: attributes important for a consumer, as brand awareness, brand image and associations, product quality, product price, and attributes important for a company, as loyalty for a brand. The latter attribute is treated as a combination of repeated purchases and differential price level. Attributes of both sections form actual consumer-based brand equity.

Consumer-based brand equity evaluation model development and its interpretation

Authors referred to conceptual and practical consumer-based evaluation models, discussed in this article, results obtained from expert semi-structured interview as well as enterprise research in a process of integrated consumer-based brand equity model development. Every remark on important consumer-based brand equity attributes and their individual weights expressed by interviewed experts were considered in a model formation process. The final weight of every attribute was estimated in consideration of importance rating defined by respondents.

Authors sought to develop a numeral form for every attribute whose total sum would define an overall consumer-based brand equity level. The model integrated both attributes important for consumer and attributes important for company that respectively reflects perceptual and behavioural consumer-based brand equity dimensions discriminated in literature (Myers, 2003; Keller et al., 1999). Brand awareness, brand image, product quality and product price were discriminated as attributes important for consumer, loyalty for a brand was marked as attribute important for company. According to this model, the overall consumer-based brand equity (\(Q\)) can be expressed by an authorial formula (1):

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Q = 5 \times (\text{Awareness}) + 4 \times (\text{Brand image}) + 4 \times (\text{Product quality}) + 1 \times (\text{Product price}) + 5 \times (\text{Loyalty}) \tag{1}
\]

Numbers in a formula, set before the attributes, mean an individual weight for certain attribute. Figure 3 presents consumer-based brand equity and its individual attributes evaluation definitive matrix suggested by authors. The integrated consumer-based brand equity model also includes sub-dimensions for several attributes, as brand awareness, brand image, loyalty for a brand and suggests their evaluation methods. Evaluation methods for rest attributes, as product quality and product price, are proposed here as well (see Formula 1 and Figure 3). Once again authors highlight that all attributes and sub-dimensions, that are being evaluated, according to the model, should be converted into a numeral form.

1000 point system, i.e. one attribute can be assessed with a maximum of 1000 points, was used in development of this model for the purpose to make it clear and simple. Though final result of an attribute should be assessed by multiplying estimated points and individual weight of an attribute, identified in a formula. In this case maximum result of consumer-based brand equity, after assessment of every attribute, can reach 19 000 points (i.e., \(Q = 5 \times 1000 + 4 \times 1000 + 4 \times 1000 + 1 \times 1000 + 5 \times 1000 = 19 000\)).

Attributes of the model and their value estimation methods are discussed further in the article.

Brand awareness. According to the interviewed experts and K. L. Keller (2003) recommendations, brand awareness is treated here as a set of brand recall that is considered as unaided brand remembrance and brand recognition, that is approached as aided mean, while showing or citing different brands. It is recommended to evaluate both sub-components, beginning with brand recall. Both sub-components have the same weight in an overall estimation of an attribute. That is why positive response of the respondent in both cases is worth 500 points, negative response – 0 points. The maximum result of brand awareness can reach 5000 points – 5 x (500+500). It is important to highlight that brand recognition acts the role of filtration here. If a respondent can not recognize the brand that is evaluated, he has to be eliminated from a survey.
**Figure 3. Consumer-based brand equity evaluation model – matrix**

**Brand image.** Brand image is related here with associations the consumer has about the brand. This attribute was developed with the regard to Keller’s (1998) brand image dimensions and the opinion of interviewed experts. They discriminated the importance of association uniqueness and its polarity (positive or negative association). According to recommendations of the experts, not more than 2 - 4 associations, formulated by the company owning the brand, suggested to evaluate. Associations are estimated in field of polarity and uniqueness. If evaluation is carried out on 2 associations, a positive respond of one association is worth 250 points, negative respond – 0. Moreover, if association is unique, in other words typical just for certain brand, the scored polarity points should be multiplied by 2, if it is not unique – by 1. The maximum result of this attribute can reach 4000 points – 4 × (250 × 2) + (250 × 2) if two associations are evaluated.

**Product quality.** This model treats the attribute of product quality as consumer perception on product quality level. It is recommended to use simple evaluation system that covers 3 possible answers: good quality, medium quality, bad quality. 2 experts have mentioned that such scale is the most convenient for consumers, thus more objective responds can be expected. The good quality is estimated by 1000 points, medium quality by 500 points and bad quality by 0 points. The maximum result of this attribute can reach 4000 points – 4 × (1000).

**Product price.** Two experts have discriminated product price as an influential factor of consumer based brand equity. This remark was based on their professional experience. This model holds a position: the higher the price the greater the estimation of consumer-based brand equity. There are almost no consumer-based brand equity model integrating the price attribute except „Ipsos group“ „Equity builder“. The other distinctive aspect of the attribute is that the price should be evaluated by a company itself while assessing market situation. The product price level is recommended to attribute to one of the group: very high – 1000 points, high – 750 points, medium – 500 points, low – 250 points. The maximum result of this attribute can reach 1000 points.

**Loyalty for a brand.** The last attribute of the model is considered as an important factor for a company that seeks to evaluate consumer-based brand equity. The loyalty attribute is treated here not only as repeated purchases, but as multiplication of repeated purchases and consumer agreement on paying differential price for a product. That is why it is recommended to begin with the identification of repeated purchase, while using simple scale: regular buy – 250 points, rare buy – 125 points, accidental buy – 0 points and no buy (none) – 0 points. The 2 later tendencies have nothing in common with a true loyalty that is why it is recommended estimate them by 0 points. Furthermore, the purchase regularity points should be multiplied by differential price level, that have to be estimated by the organization owning the brand itself. If the price of a product is very high compared with the products in the same category it is suggested the scored purchase
regularity points multiply by 4, if high – by 3, if medium – by two, if low – by one. The maximum result of this attribute can reach 5000 points – 5 × (250 × 4).

The suggested consumer-based brand equity evaluation methodology is recommendatory and not obligatory, therefore organizations adapt it according to their activities particularity or individual needs. However, authors recommend maintaining the principle of 1000 points and identified weights of individual attribute. More over, rival brands evaluation, by the same methodology is also recommended. It would enable a company to define its brand position in the market. Finally, consistent implementation of brand evaluation would also be a benefit since it would allow following the trends of the managed brand.

Conclusions

The research, carried out among more than 200 largest companies in Lithuania, revealed that majority of executive managers are tended to associate the concept of brand equity with consumer approach. However, the concept itself is perceived superficially. Only one-fifth of respondents could identify all principal attributes of consumer-based brand equity. Attributes, as brand awareness, perceived quality and brand uniqueness were among the most popular citation of respondents. Majority of companies have never evaluated their brand equity. This tendency could be influenced by several factors like lack of information on brand equity evaluation, its poor applicability in practice and deficit of freely accessible information sources.

The integrated consumer-based brand equity evaluation model was developed on a basis of scientific literature, data, obtained form semi-structured expert interview and results, and enterprises questionnaire survey results. The Model covers such principal attributes of consumer based-brand equity as brand awareness, brand image, product quality, product price and loyalty. The strength of the model lies on its applicability in practice, due to the clear and explicit structure and presented methodology. More over, it clearly identifies consumer-based brand equity attributes as well as their individual weights. Another important highlight is an involvement of monetary factor, like product price, as influential consumer-based brand equity attribute.

References