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# Innovative digital technologies in the concept development of brand equity management

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**Abstract.** The concept of branding takes a special place in the system of entrepreneurship. Development of branding in trade is determined by peculiarities of this field.. The article deals with relevance of branding use as a concept of company management. The basic concepts in the field of brand equity are analyzed and the main trends of brand cost valuation are investigated. Advantages of a brand strategy development are defined. Strategies for expanding the boundaries of brand use are presented. Innovativetools that increase the effectiveness of branding and influence the growth of brand equity are studied. These tools include the use of Big Data technologies for the collection and processing of information, improving marketing research used in situation analysis; the development of the Internet of things as an innovative direction for the formation of a marketing mix; the use of mobile technologies. Peculiarities of brand management activity in running an organization are considered. The main directions influencing increase of the market value of a company are given. The role of the value-based approach as a criterion for the success of the company's activities in brand management is defined.

**Keywords:** brand management, digital marketing tools, brand equity, Internet of things

## 1. Introduction

Branding is one of key tasks of a successful enterprise. At present, when brands account for a considerable part of the consumer goods and services market, having a successful brand is the most important thing for the developing and profitable enterprise. The main task of branding is to provide a set of activities that will make a brand popular with consumers, and, as a result, will contribute to increasing the profit of the enterprise. To leave an imprint of the brand in consumer's mind the brand management should be professional.

Currently consumers have begun to pay great attention to brands. The well-known brand guarantees quality, consistency, availability. The consumer knows what he will receive by buying this or that item. Buying goods with familiar brand names saves time. Even if there is a brand equivalent that has the same price but better quality and it is unknown to the end consumer, its success is



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improbable. It is very important to learn about a brand, to look at, touch, and taste it. Only after that, the consumers will have their opinion about these goods. Brands occupy an important position in consumers' minds evoking a uniform set of associations and a holistic image of goods. The development of branding in the sphere of trade is conditioned by the peculiarities of the service. In general sense, services differ as they are intangible and therefore they are incapable of being perceived by the senses, short-lived, and inseparable from the person providing the service. They cannot be stored, transported, they are short-lived, have different quality that is difficult to assess before and after the purchase of the service. In addition, the homogeneity of the basic services provided in the market should be noted [1].

The above-mentioned features of the service make the process of brand formation and development a priority task of the trade enterprise.

Thus, the task of studying the effectiveness of brand management processes in the service sector is relevant. Besides, the theoretical foundations of the research, development and evaluation of the brand with the use of innovative digital technologies are required.

## 2. Methods

To solve the task methods of scientific cognition, such as observation, analysis, comparison, description, as well as systemization, classification, deduction and analogy were used.

## 3. Results and Discussion

### 3.1. Comparative analysis of modern brand equity concepts

At the current stage of entrepreneurship development the brand is considered to be a necessary strategic competitive advantage as the uniqueness of the image created in the branding process helps to build and maintain strong long-term relationships with the consumer as well as to turn a brand into a means of meeting the consumers wishes. The effective branding brings high grade tangible and intangible assets to the offeror.

A successful brand is seen as a resource that enhances the market attractiveness and value of the offer so there is the desire for effective activities aimed at developing and promoting brands.

Most successful enterprises have classic brands in their assets, which are attractive to consumers and are a key factor in the success of the enterprises.

Considering the place of branding in the modern concept of entrepreneurship, it should be noted that depending on the branch of industry and the specific nature of the enterprise activity the following points can be emphasized:

- Branding is considered as one of the tools of marketing communications acting as a way to integrate them into a single system;
  - Branding is an enterprise management concept and marketing tools are used to implement it.
- The significance of branding to modern business theory and practice is that:
- the brand becomes one of the most important objects of management;
  - brands influence the market structure; on the one hand, increase the amount of information delivered to the consumer, reducing the material and time costs of finding an alternative, on the other hand, a successful brand weakens competition in a certain product category and increases barriers to entry into the market, while reducing a consumer choice in the long-term prospects;
  - the brand generates additional benefits for both the provider and the consumer;
  - the brand is considered as a competitive advantage and unique competence;
  - the brand is considered as capital (the possibility of franchising);
  - a successful brand helps to form and maintain a strong relationship with the consumer, which gives the company durability and potential immortality.

The main purpose of branding is to make a new brand recognizable by the consumer. Only after a continuous hard work it can be said that the new brand has become really famous and can bring real profit to the owner. Proper brand management will allow creating influence, value as well as "brand

equity." Brand equity is the net present value of future cash flows generated thanks to the company's brands.

In the 1980s, the difference between the brand valuation carried out for inclusion on the balance sheet and the price that a buyer is willing to pay for a brand has increasingly been attributed to the "brand equity." The brand has ceased to be an abstraction and has become a very specific item with real value to its owners. This rethinking of the brand's meaning was reflected in the fact that the traditional term "brand image" are increasingly being replaced by the financial equivalent "brand equity."

The term "brand equity" is holistically explained in the works of David A. Aaker. Brand equity, according to D. Aaker, is a combination of assets and liabilities related to the brand, its name and symbol, which increase or decrease the value provided by the product and service of the company and/or its consumers [2,3]. The assets and liabilities on which brand equity is built may be different. In order to be the basis of the brand equity these assets or liabilities must be associated with the brand name and/or symbol. When changing the brand name or symbol, there is a high probability of damage to some or all assets/liabilities (or even their loss). At the same time, some assets/liabilities can go to a new name/symbol.

Brand equity, in its essence, implies descriptive aspects of the brand - symbols, images or associations of consumers. This term refers to subjective, intangible brand evaluation from the point of view of consumers.

The starting point for further research on brand equity is the view expressed by the branding theorist Paul Feldwick in 1996[4]. He believes that all interpretations of the concept of "brand equity" can be reduced to three ideas. Brand equity is:

- general value of the brand as a separate asset, which can be included in the company balance sheet;
- degree of attachment of consumers to a brand (brand strength; it is also loyalty to the brand);
- set of the impressions and associations of the consumer evoked by a brand (brand description or brand image). It is very important that the difference between the third idea and the first two, according to P. Feldwick, is that the brand description cannot be quantified.

It can be assumed that these three ideas are closely connected with each other: brand strength can serve as the basis for determining the approximate price of the brand; brand description can influence or at least explain brand strength. However, in fact, such a link cannot be clearly demonstrated. The set of impressions evoked by a brand cannot be measured with the use of a scale, whereas to measure customer expectations several different scales can be used. It has become obvious that term "brand equity" is overinclusive to use, measure and study it according to the same standards.

Leuthesser (1988) gave the following definition of brand equity: "the set of associations and behavior on the part of a brand's customers, channel members and parent corporation that permits the brand to earn greater volume or greater margins than it could without the brand name" [5].

Simon and Sullivan defined brand equity as follows "the incremental cash flows which accrue to branded products over and above the cash flows which would result from the sale of unbranded products" [6].

The definitions given characterize brand equity as "perceived" or "psychological" value and indicate the financial or economic value of the brand. In scientific literature the two given ideas exist jointly, some researchers use the terms brand equity and brand value as interchangeable. Although the most popular use of the term brand equity refers to a set of attributes related to consumer's perception rather than economic evaluation.

The concept of brand equity has become widely known to great extent thanks to Keller's research (Keller, 1993) [7] and to the subsequent Lassar's works (Lassar, 1995) [8] on measurement of brand strength, Park and Srinivasan's ones (Park, Srinivasan, 1994) [9] on evaluation of brand equity expansion. Kamakura and Russell (Kamakura, Russell, 1993) [10] used data from a single-source scanner panel to measure brand value, and Aaker (Aaker, 1996) [11] studied brand equity evaluation in domestic and international markets.

There is a number of brand equity assessing models that take into account the results of the consumer research. According to Jan Lindemann (2004) "These do not put a financial value on brands; instead, they measure consumer behavior and attitudes that have an impact on the economic performance of brands. Although the sophistication and complexity of such models vary, they all try to explain, interpret and measure consumers' perceptions that influence purchase behavior. They include a wide range of perceptive measures such as different levels of awareness (unaided, aided, top of mind), knowledge, familiarity, relevance, specific image attributes, purchase consideration, preference, satisfaction and recommendation. Some models add behavioral measures such as market share and relative price"[12].

The most well-known method of brand equity evaluation was suggested by the British company Interbrand. Its subjectively selected criteria include the brand's business outlook, its market environment, and consumer's perception of the brand. Evaluation criteria include leadership, market stability, market situation, internationality, trend (or brand dynamics), support (costs), and degree of protection of a registered brand.

The practice of monetary brand evaluation makes it possible to draw several conclusions:

- brands have a direct influence on the degree of liquidity of the firm;
- both brand equity and brand can be managed (these processes are very closely connected); all brand assets can be effectively used to become a source of real cash flow;
- cost-based brand evaluation becomes one of the assessment means of brand management and its components, for example, advertising efficiency [13].

It can be concluded that the brand equity performs three functions:

- acts as a magnet attracting new consumers to the company;
- serves as a brand identity to remind consumers of the goods and services of this company;
- provides an emotional connection between consumers and the company.

Brand value does not arise itself: it is created for a long period by systematic brand development, which makes it relevant to the needs and desires of consumers. When consumers become psychologically fixed on a certain brand, they are less sensitive to the price and advertising of competitors.

Thus, in order to increase the value of a company's brand, it is necessary to provide an effective brand management system that is considered as brand investment management. From the economic point of view, company investments, for example, in the advertising campaign are exactly the same investments as the purchase of new equipment. Therefore, just like buying a new technological line, investing in a brand requires economic justification and an assessment of economic efficiency.

### *3.2. Brand strategy development*

The effectiveness of brand management is expressed by the ratio of result to costs, the goal of this ratio is the desire to maximize the uniqueness of the image created by the brand in the minds of target groups, which implies differentiation from competitors and profiling in the eyes of consumers and the public.

Achieving their ambitions in growth, successful companies set brand value/brand portfolio as a target. By developing strategies, they make every effort to identify opportunities that would allow them to differ from industry competitors and create additional cost. By allocating resources, they make carefully considered decisions where to focus their time and financial resources.

Effective brand management requires the development of brand strategies. Branding strategy should be understood as a set of strategic solutions for brand management.

The development of brand strategies will solve the following tasks:

- the possibility to sell the product at a higher cost, which is the so-called price premium;
- the ability to continuously maintain and extend the life cycle of the product without resorting to serious advertising costs;
- increasing product and company resilience to external impacts such as economic downturns and crises;

- increasing the attractiveness of the brand to investors;
- an opportunity to create a sustainable corporate culture that will make the implementation of the main strategy even more effective.

These advantages of strategic branding result in using and developing branding strategies as a key tool for business development.

Top management makes decisions on the strategy of development of both individual brands and the brand portfolio within the framework of the enterprise strategy determination. The first fundamental solution of the enterprise is to determine a strategy within the framework of vertical competition, it is about creating a brand of the manufacturer or trader. Then decisions are made about the strategy within the framework of horizontal competition: monobranding, parallel branding, etc. Finally a strategy in international competition is developed with regard to the necessary degree of standardization and differentiation.

As part of the brand portfolio formation, decisions on creation of a new brand, purchase of someone else's or cooperation are made. This procedure also includes the tasks of aligning the goals and philosophy of individual brands with the philosophy of the enterprise, which contains the mission and social orientation of the enterprise. The determination of brand philosophy is closely related to organizational structure, brand strategy and corporate identity.

As part of the creation of organizational prerequisites for effective branding, an analysis of numerous characteristics and their complex mutual influence in the formation of brand identity is carried out. This requires bringing together the people involved in creating and promoting the brand. In order to provide individuality, it is better to create such an organizational for identity support separately and independently.

To increase the efficiency of branding, it is necessary to interconnect (integrate) separate organizational processes in the company, as well as to share the basic resources possible with a large number of brands, but this should not harm the external or internal identity of the brand.

As part of the formation of the brand portfolio, it is necessary to periodically review the priorities of investments in brands within the framework of budget management.

The main tasks of brand management are to build loyalty to the brand and ensure satisfaction and trust in it. This requires the relevance of brand values and sympathy for them.

Achieving these goals relies critically on identifying employees with a brand. In addition, the identification of trade with the brand is necessary, which is a prerequisite for the profiling of the brand through clear proof of its competence.

The processes of brand management that take place in a globalized environment today require rethinking. At a certain phase of their operation, companies face the need to make changes in brand management. This is due to the need to expand activities and maintain a competitive position. One of the strategies used in branding is a strategy to extend the boundaries of the brand use. This strategy can be implemented in several variants (Figure 1).

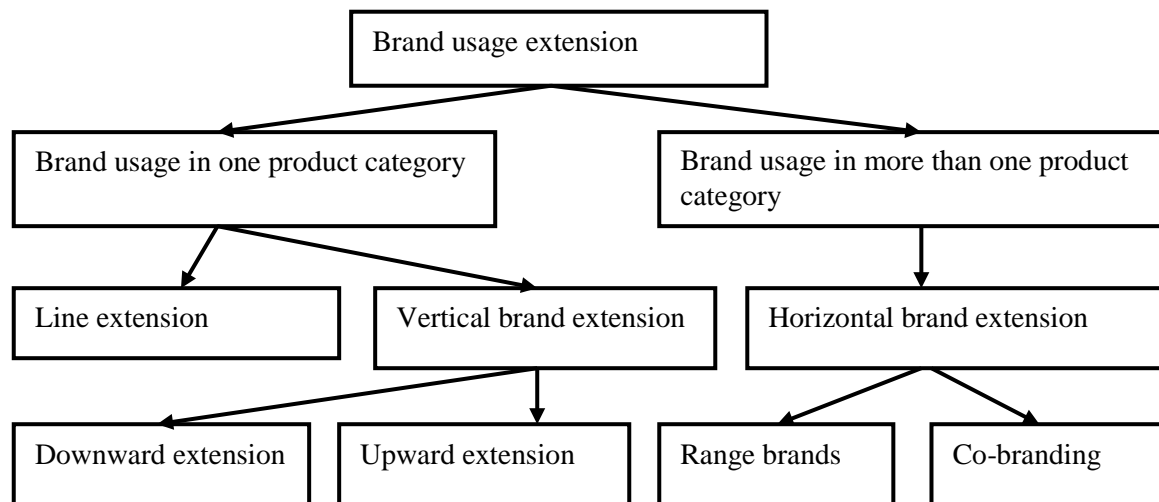
### *3.3. Marketing innovations in brand strategies development*

Process of brand management demands the use of innovations. It is very important to connect innovation in trade [15-18] and brand innovation. Important processes of branding are the research and analysis of the current situation, the development of the marketing mix, planning brand communications, etc. The large role in implementation of these processes is played by the marketing innovations based on the use of the information and communication technologies (CT). They create new opportunities for business development in general and development of brand management, in particular.

The most perspective directions of the marketing innovations used in branding development should include:

- use of Big Data technologies for collecting and processing of marketing information, improvement of the market research used in situation analysis;

- development of the Internet of things as an innovative direction for the formation of a marketing mix;
- use of mobile technologies for improvement of interactive marketing tools.



**Figure 1.** Extension of brand usage [14]

The analysis of Big Data use in marketing activity showed that implementation of the modern Big Data solutions on collecting, processing, the analysis and providing data allows using new opportunities of analysis of data on loyalty of buyers. Combination of these data with data from social networks gives additional information on the interests of the buyer and helps to use the techniques of personification in advertising.

Rapid growth of Internet audience, connection of different devices to a global network leads to the fact that development of the Internet of things becomes a major innovation.

The marketing analysis of the concept "Internet of things" showed that this phenomenon can be considered as an innovation in product policy oriented towards the creation of new goods and/or to giving them new unique properties based on their interaction with each other or with the external environment that can be the basis for brand positioning.

Along with the use of Big Data technologies and the Internet of things, mobile technologies have been widely adopted in marketing activity recently.

The term mobile technologies is usually understood as dynamically developing technologies of mobile communication and data transfer between subscribers whose location is changing. Mobile technologies can actively be used as a tool for brand promotion.

In our opinion, ICT will have a great influence on consumer's behavior in the nearest future. In the mobile technologies environment new opportunities of interaction with potential consumers appear. Therefore, it is necessary to provide consistent focus on the innovative methods of research, creation and promotion of brands oriented to mobile devices owners. These include, first of all, mobile marketing methods, tools for mobile advertising, integrated marketing communication in a mobile technologies environment [19,20].

### 3.4. Brand equity management

The most successful firms are currently practicing a value-based brand management.

Value as a measure of the company's success in the field of brand management has important advantages:

- this indicator is assigned a financial value;
- it is unambiguous;

- it applies without limitations to any brand in any industry;
- has no time limit. Any brand faces a situation where, for example, further increase of the market share is almost impossible. That cannot happen to value. There are always opportunities to increase the cost of the brand;
- it is oriented towards the future;
- it takes into account all the most important aspects of brand functioning.

An important advantage of the value approach over many others is that value is a measurable indicator. Ultimately, correct conclusions about how successfully the company manages the brand can be drawn only by estimating the value of the brand at different points of time.

The reasons for the increased focus on value management have been objective in recent decades, with irreversible changes in the world economy.

Firstly, there is a sharp increase in the pace of innovations and the variability of the external environment. How successful the company and its brands have been in the past is no longer a guarantee of their efficiency in the future.

Secondly, in the global economy, competition is becoming all-encompassing. It is increasing not only in the consumer market, but also in the markets of resources, information, talents, labor and capital.

Thus, in order to increase the value of a company's brand, it is necessary to provide an effective brand management system considered as brand investment management. The very fact of brand existence should be considered as a result of brand management processes at the strategic level. At the operational level, the amount of price premium that the consumer is willing to pay for the use of this brand as well as the number of additional sales units of the branded product can be considered as the effect of brand management. Efficiency is a comparative assessment of brand management reflecting the ability of a brand to provide sustainable economic growth to its owner.

There are four key management principles that are necessary for the company owning a brand to generate not only income, but also profit and, as a result, added value:

1. Setting the right goals. Many companies set tight targets for increasing revenue from brand sales to encourage their employees to look more carefully for growth opportunities. But the lack of a clear right goal can prevent the brand's value from rising (may even destroy it). Companies that are serious about how to transform a brand's revenue growth into an increase in its value are looking to take a differentiated, conscious approach to shaping goals.

2. Search for differentiating strategic opportunities. Brand leaders in creating value have brought new ideas to shaping strategy. They made efforts not only to simply differ from their competitors (which is also necessary), but sought to be more profitable. They realized that the others would look for opportunities to copy their success and tried to develop such strategies, which are difficult for competitors to reproduce.

3. Selectivity in resources allocation. The company that owns a brand should look for ways to preserve (save) resources, i.e. to invest a minimum amount of resources without losing the result. This can become a powerful source of brand value and a competitive advantage.

4. Increase in value not only for shareholders, but also for consumers. In recent years, many concepts of ways to attract and retain consumers have emerged. Unfortunately, most of these concepts do not take the process of creation of added value into account. The challenge for the brand-owning company is to find solutions that increase brand value for both shareholders and consumers.

Thus, the success of a brand value increasing strategy can only be achieved through disciplined marketing management.

#### **4. Conclusions**

1. One of the factors for increasing the competitiveness of the national economy is the organization of branding. The development of branding as a concept of management is one of the key directions of the modern economy and allows Russian producers to participate in competition in Russian and international markets.



2. Professional management of the brand will create loyalty of consumers to the company, increase the market value of the organization, and, among other things, create brand equity.

3. In order to increase the market value of the company, disciplined marketing management is required, which implies setting the right goals, finding differentiating opportunities for the strategy, selectivity in the allocation of resources and finding a compromise between shareholders and consumers, which will allow to form and develop effective brand strategies.

4. The processes of brand management that take place in a globalized environment today require rethinking. At a certain phase of their operation, companies face the need to make changes in brand management based on information and communication technologies. They create new opportunities for the development of business in general and the development of brand management, in particular.

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