

Synergistic effect of business reputation in the result of application of innovations on the enterprises of the transport industry

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Abstract. In the conditions of dynamic innovative development of the enterprises of transport branch along with maintaining economic instability it has become necessary to consider not only traditional factors at assessment of efficiency of activity and cost of business, but also consider business reputation factor, which depends on the level of innovative development of the enterprise and generates effect of synergy. Paper considers the concept of synergistic effect. Classification of types of synergistic effects is cited. Estimation procedure for influence of the technical level and innovative development of transport enterprises on the value of business reputation is considered. Functional dependence of the cost of business reputation on the innovative development and synergistic effect is defined.

1. Introduction

In the modern world, thousands of enterprises suffer from a loss of business reputation (goodwill). Undoubtedly, goodwill is a very significant competitive advantage, especially in conditions of the rapidly changing market and a large number of competitors

Problem of usage of such an asset as a business reputation (goodwill), its positive impact, and economic assessment of business reputation in domestic science by the transport industry enterprises is not considered enough in science. Influence on the reputation of the synergistic effect as a result of the usage of innovative production is studied even less.

Synergy (in Greek means cooperation, assistance, complicity, fellowship, together) is the summing effect of interaction of two or more factors, characterized by the fact that their action significantly exceeds the effect of each individual component in the form of a simple sum [1].

Examples of such phenomena as synergy can be:

1. Connection (synergy) of two or more pieces of radioactive material at excess of the critical mass gives an energy release which exceeds the emission of energy of simple summation of individual pieces;
2. Knowledge and efforts of several persons can be organized in such a way that they are mutually amplified;
3. Interaction of different types of energies in comprehensive action, which enter into partnership with each other;
4. Profit after the association of two companies may exceed the amount of profits of these companies before the association [2].



Synergistic effect (derived from the Greek word- acting together) is an- increase of the efficiency of activities as a result of integration, association of individual parts into a single system at the expense of the so-called systemic impact (emergence). Exchange of ideas leads to synergistic effect, because as a result there are becomes two ideas of each one.

2. Materials and Methods

Synergistic effect is an excess or increase in the value of a company as a result of the impact of some factor or as a result of a business reorganization (avt). Synergy of direct application leads to the increase of the market value of associated companies over and above the sum of the market values of these companies before this association. Reverse synergy is characterized with a fall in market value after withdraw of participants from associated company.

Synergistic effects may arise either directly or indirectly.

Synergistic effect can compose an amount (based on the concept of the size of the net effect achieved only through synergy):

$$E_{sin} = C_p - (C_A + C_B) - C_i, \quad (1)$$

where:

C_p is a market value of the combined company;

C_A is the value of company A before association;

C_B is the value of company B before the association;

C_i is the cost of expenses resulted in the association process.

In accordance with directions of corporate policy, synergistic effects can be financial, marketing, investment, industrial, technological, scientific, technical and professional [3].

But another type of synergistic effect is of interest comes within this paper. It is Reputation, which is, in our opinion, is a quintessence (i.e., the most significant, notional) of all other effects, that is shown on the Figure 1.

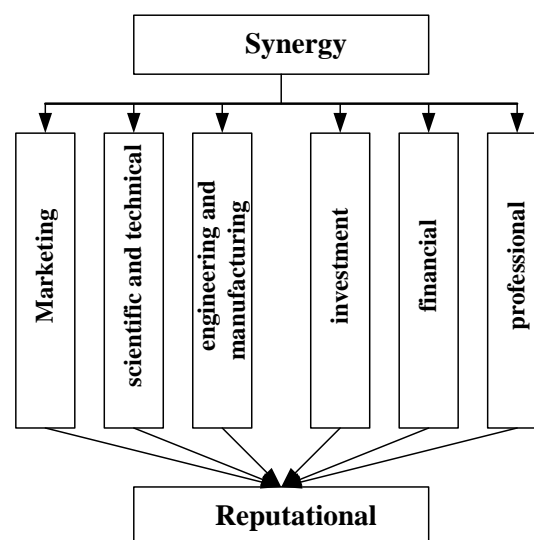


Figure 1. Types of synergistic effects and their interrelation

So, the strongest effect can be considered the reputation effect. In turn, it is significantly influenced by the use of inventions, technologies and other products of the scientific and technical plan by the company.

Such an asset as goodwill remains almost unaccounted in Russian practice because of its imperfect legislation and of the lack of experience in the competent management of this specific asset. Additional complexity is that goodwill is inseparable from the enterprise, it can not be sold separately, but as a part of the enterprise. Goodwill is considered to be relevant to a group of unidentifiable assets for this reason.

Most of the Russian enterprises do not consider, do not assess and do not use intangible assets in their activities. And unselected alternative possibilities can be considered as a lost of profit [4].

There are differences in business reputation (goodwill) from the "brand" category. Brand includes so-called "goodwill-type assets", such as the client base, personnel potential (knowledge and experience of employees), marketing tools, business reputation, i.e. inseparable from the enterprise components, as well as a trademark, service marks, which can be alienated (sold, transferred in franchise).

Brands thrive and are created with a continuous flow of innovation. Flow of innovations is really important, because the innovations cause temporary competitive advantage. It gives a sense of brand leadership and greater effectiveness of its influence.

Every time when share of the brand falls, range is the same, this is the share of innovation in the brand. Conversely, whenever the brand's share increases, one should take a look at the degree of innovation [5].

Innovations are new tool for renewal of the existing brands, which increases their value and overall impact. Brands are able to grow only if they are constantly updating, and new goods occupy a significant part of the turnover of the company. In many sectors of the economy, this part varies between 25 and 33%.

Development of the innovative component leads to competitive advantages, and, consequently, to seizure of the market share (or of the entire market, depending on strategy and significance of investment and innovation commitments). Correspondingly, growth of the market share, and increase in business reputation has a positive impact on financial indicators, increasing the stability of the enterprise.

Conversely, high business reputation gives the opportunity to introduce innovative products first for the company and decreases risks, reduces funds for advertisement and marketing. Only enterprise which has a stable financial position can find significant financial investments which are required for the development and implementation of innovations. Presence of non-current funds in the structure of intangible assets, such as business reputation (goodwill), gives many advantages for organizations [6].

It should also be stated that high business reputation helps to attract more qualified employees to the company. Intellectual capital of enterprises today means a lot because its formation, training and development can take years.

Brands demonstrate their relevance in the modern world, when they show their ability to find market for new production, which satisfy new needs and meet the latest expectations.

3. Results

As a system, enterprise consists of technological, organizational, economic subsystems and of human resources management subsystem [7]. In the market conditions functioning and efficiency of enterprise system is characterized by its cost, which depends not only on the availability and efficiency of use of all of its fixed assets by its functional subsystems, but on the level of its business reputation, which is formed by the intellectual competitive advantages.

Considering enterprise as a system, there should be used system approach and consideration of the notion of reputation synergy, which, in addition to the generally accepted characteristics, in our view, includes the synergy effect from provision of interaction of all elements of the system from the point of view of the business reputation of the enterprise. So, value of the enterprise and its brands, with consideration of business reputation of the enterprise, based on the synergistic interaction of effectively functioning elements, will be greater than the sum of costs assets of all elements of the enterprise system. At that, basis of the synergistic effect is innovation as the only source of sustainable competitive advantages, which not only allow to "monopolize" segment of the market for the certain time before the start of the innovations imitation, but contribute to the improvement of the efficiency of the brand influence (Fig. 2).

Innovative activity of the enterprise is characterized by indicators of cost, indicators, which characterize the dynamics of the innovation process by indicators of refreshing, structural indicators. Cost indicators include specific costs for RTD in the amount of sales which characterize the index of science intensity of products produced by the enterprise; specific costs for acquisition of licenses, patents, know-how; availability of funds for the evolvement of initiative development. Indicators which characterize the dynamics of the innovation process include the indicator of innovation of TAT (Turn-

Around-Time); duration of the process of development of the new production (new technology); duration of preparation for the production of a new product; duration of the production cycle of the new product. Indicators of refreshing include the number of developments or implementation of innovative products and processes; indicators of the dynamics of renewal of the product portfolio (proportion of production produced in 2, 3, 5, 10 years before); number of new technologies (technical achievements) acquired; amount of exported innovative products; amount of new services provided. Structural indicators could include the composition and quantity of research, designing and other scientific and technical structural subdivisions (including testing and experimental laboratories); number and structure of employees who engaged in RTD; composition and number of creative initiative temporary teams.

Like any organization, enterprise needs constant development in its activities. If consider the issues of economic policy of the enterprise, then the development of scientific and technological progress should be considered the first among the key problems of the development on the enterprise.

Innovations become not only the tool for the real improvement of the production of the companies, but a means of improvement of impressions of them. And ideally:

- not only impressions of specific clients should be improved, but also of society as a whole;
- and not only impressions about specific products and services should be improved, but also the impression about the company as a whole [7].

If consider that in many large corporations' budget for marketing and PR often multiple exceeds the budget for innovation, it becomes obvious, why the task of transferring innovation into reputation (and vice versa) becomes more and more priority.

Creation of good business reputation and strong brand, strengthening and promotion in the market depends on the many factors. Usage of innovations is rightfully considered the most relevant of them in the globalized economic space in the conditions of the development of the knowledge in economy. As it is known brand and consumer are inextricably linked. The very creation of brand has its ultimate goal, which is the conquest of consumer sympathies, that seems more real, embodying in its products quality and innovativeness, which bring new opportunities and new characteristics of production, which can satisfy the most refined demands of consumers.

It is important to note that innovations bring indirect benefits for the brand in the form of building market strength [8]. At the same time, benefits brought to the brand of the company acquire their real value eventually increasing the business reputation of the company and bringing to the company revenue, which can be defined with one of the following ways:

1) *Premium prices.* Companies perceived by consumers as innovative, often have the opportunity. In contrast to their competitors they can assign higher prices for their products and services, that leads to the increase of the amount of revenue received by the company.

2) *Larger volumes.* Brand, which is associated with the word "innovative" automatically gives the company a groundbreaking leeway over competitors, even if they outstrip the company and enter the market earlier. This advantage often reduces time which is taken for the achievement of the required volume.

3) *Better perception of the product by the market.* Usually, it is much easier to find way into the new spheres of goods and services for the innovative brands, than for brands which are perceived as traditional. Consumers expect the aspiration to the new ways of development from the innovative brand and they are more willing to follow it to an uncharted territory. This rapid acceptance by the consumers firstly helps new product to achieve reach optimum production volumes quickly and secondly it can reduce associated costs, as much less effort is needed to explain the essence and benefits of the new product and to persuade them to purchase it in this situation [9].

Strengthening of the position of enterprise in the market thanks to its strong brand leads to increased income, which is manifested in the following:

1. Higher price of manufactured products that leads to growth in amount of profit;
2. Rapid response to the emergence of innovative products in competitors and advancing them;
3. Investment attractiveness of enterprise increases;

4. Developed in the innovative way brands introduce new products, penetrate into new spheres of production, find new ways of development more quickly and have preferential rights.

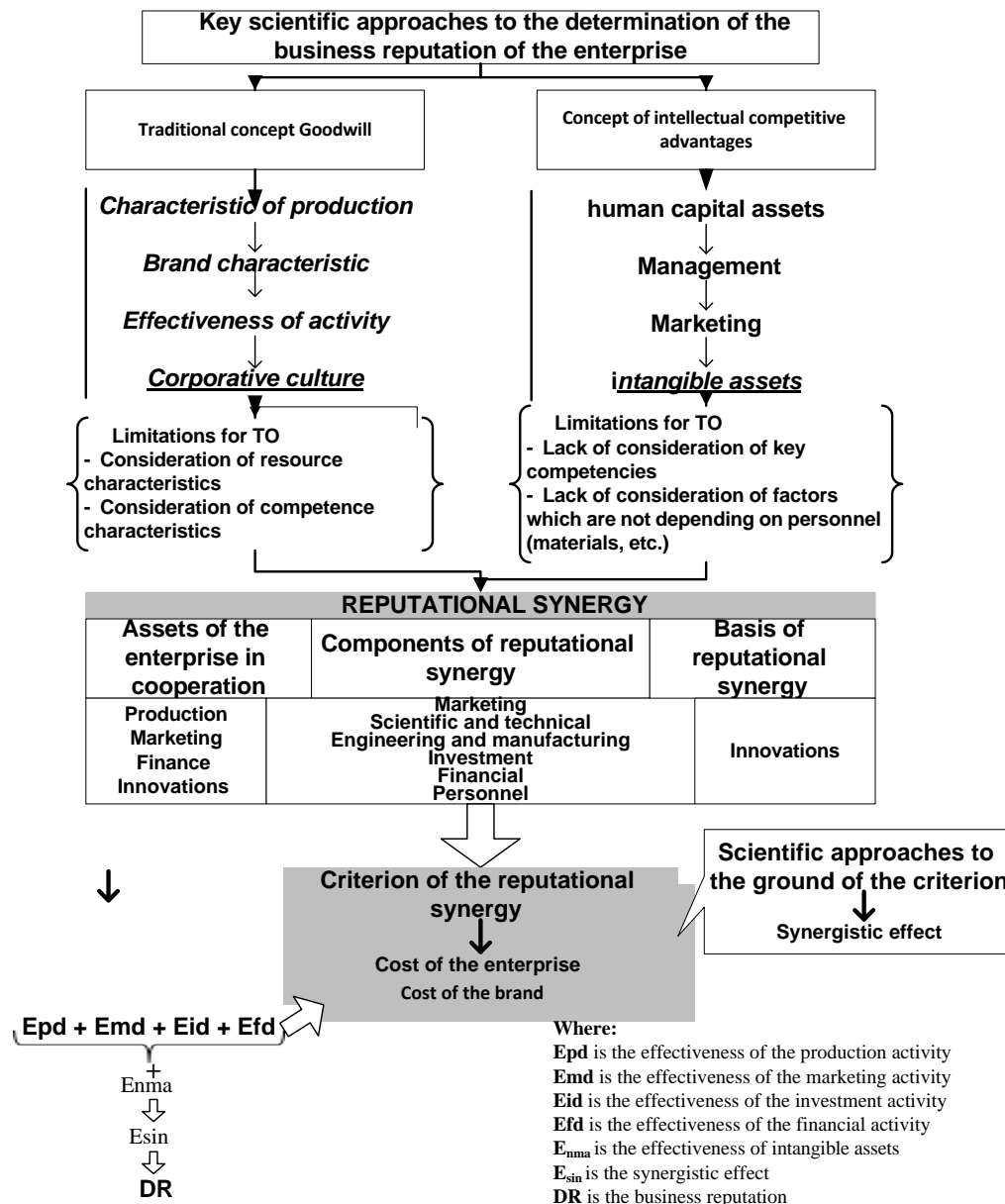


Figure 2. Conceptual scheme for formation and assessment of the business reputation of the enterprise on the basis of synergy

Function of dependence of the cost of business reputation on innovative level of development of enterprise can be presented in the following form:

$$Cr = f(Ki, D, IR, SMI, M, Esin), \quad (2)$$

where:

Cr is the cost of goodwill (business reputation);

Ki is the coefficients, which mean the influence of the production of the enterprise (product price, quality, terms of production, etc.);

D is the market share occupied by the enterprise;
 IR is the innovative development of the enterprise;
 SMI is the influence of the media - coverage of the activities of the enterprise;
 M is the marketing policy of the enterprise (advertising activities, website creation and its support, etc.)

$Esin$ is a synergistic effect of innovative and marketing development.

Correlation analysis of arguments of the function in equation (2) performed on the basis of statistic data on the activity of enterprises of the transport sphere revealed the presence of autocorrelation dependencies among indicators of the impact of production and market share of the enterprise (value of the pair correlation of coefficient $R = 0.63$), and indicators of the impact of media and marketing policy of the enterprise. At that sufficient significance of coefficient of determination of the multiple regression of synergistic effect from predictors of the level of innovation and marketing development ($R^2 = 0.43$) draws the attention. So, it can be concluded that there is a synergy between criteria of business reputation of the enterprise and its innovative and marketing development.

Then conceptually the process of formation of business reputation of transport enterprise can be represented as the result of effective interaction of enterprise subsystems. Its key aspects are effective production (commodity), marketing and, especially, innovation policy (Figure 3).

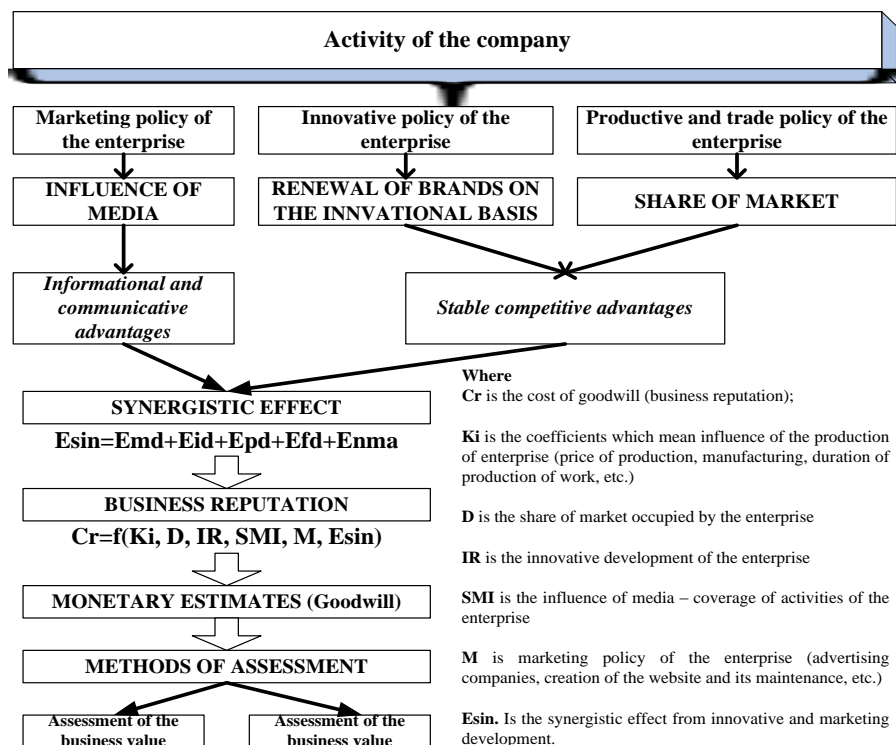


Figure 3. Process of formation of the business reputation of the enterprise is based on the introduction of innovations with consideration of the synergistic effect

4 Discussion

Analysis of the modern stage of development of competition, performed in this work revealed that enterprises are required to accelerate the adoption and processing of information along with the constant introduction of innovations, improvement of customer appeal of the products and provision of information support. Increase in the number of risk-creating factors as a consequence of increasing complexity of global competition processes leads enterprises to necessity of improvement of the management mechanisms. Development of the enterprise on the basis of formation of the key competencies of the personnel, improvement of management, development of communications with market entities, improvement of consumer properties of products and rational marketing policy,

ultimately, is based on the constant renewal of all functional subsystems, which are based on the introduction of innovations. According to the principle of innovation, this development of the enterprise forms stable competitive advantages, which, in turn, are based on the concept of systemic competitiveness and leads to the emergence of synergistic effect. We believe that under the influence of synergistic effect there occurs an increase of the business reputation of the enterprise, quantitative growth of goodwill and, consequently, investment attractiveness of enterprise on the market.

5. Conclusions

Innovations are new tool for renewal of the existing brands, which increases their value and overall impact. Synergistic effect of business reputation of the enterprises, which arises from usage of innovative developments in the transport branch is revealed in the work. Development of the innovative component leads to competitive advantages, and, consequently, to seizure of the market share (or of the entire market, depending on strategy and significance of investment and innovation commitments). Together with marketing activities and consideration of the factor of influence of SMI, business reputation can significantly increase under the influence of additional synergistic effect.

So, the performed research confirms that intangible assets are one of the most powerful strategic and financial assets of the organization. In this regard first goal of management should be to identify, multiply, evaluate, competently manage and protect these assets.

Considering such value as a synergistic effect, transport enterprises will be able to estimate their market value more reliably and manage their assets more effectively, including intangible ones. Researches performed in this paper will help enterprises to develop the strategy of brand development more detailed, increase of the value of business reputation and commercial usage of innovations.

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