1.1 History and conditions for success

FACTORS GROUPS OF SUCCESSFUL ORGANIZATION OF INNOVATION BUSINESS

Artem V. Borodin, Tomsk state university of control systems and radioelectronics (TUSUR), Faculty of innovative technologies, Department of innovations management: 1st year postgraduate.

634050, Tomsk, 40 Lenin prospect. Tomsk state university of control systems and radioelectronics (TUSUR), e-mail: borodinartem1@gmail.com, tel: +7-952-895-5111

Bio: Artem Vadimovich Borodin (born on May 9, 1988). In 2010 Artem V. Borodin finished Tomsk state university of control control systems and radioelectronics (TUSUR), Faculty of management systems, Department of automated management systems as informatic-economist. In 2011 Artem V. Borodin finished Tomsk state university, Business higher school, Faculty of economics and finance, department of finance and credit as economist. Since 2010 Artem V. Borodin has been a postgraduate of Tomsk state university of control systems and radioelectronics (TUSUR), Faculty of innovative technologies, Department of innovations management. Artem V. Borodin has following area of scientific interests: management of innovative projects, factors of successful innovative business organization, tax incentives and effectiveness of tax incentives of innovative business.

Key words: innovator, personality factor, organization factors, innovation factors, key success factors (KSF).

Copyright of the paper belongs to the author(s). Submission of a paper grants permission to the Triple Helix 9 Scientific Committee to include it in the conference material and to place it on relevant websites. The Scientific Committee may invite accepted papers accepted to be considered for publication in Special Issues of selected journals after the conference.

The historical development of globally famous companies has made us think if their rapid take offs were only governed by chance or coincidence, that allowed such people like Bill Gates, Steve Jobs, Akio Morita, Sergey Brin and Larry Page, Mark Zuckerberg to found the companies, without which one cannot imagine not only the modern world but the future. Otherwise their histories have their own repetitive natural laws, there is nothing accidental; so the accurate factors analysis can allow us to discover the “new next” Microsoft, Apple or Facebook at their conceptual stage. Success is a result of hard work for 99 percent, and only 1
percent depends on the “accidental factors” influence. It means that success may be analyzed, systematized and evaluated; and this is the main thesis of this article.

At the first stage it is necessary to single out the factors groups according to which one can form an expert analysis system of a successful innovation project organization.

The methodology of defining of factors groups for the expert evaluation of a new project is based on the analysis of the successful innovative projects and the analysis of existing models of innovative business assessment on the basis of research and development. The hypothesis is put forward, according to which the given set of factors groups is complete and may contain all the components that influence on the success of innovative business success. The assessment and prognostication of innovative business success in the frame of our approach is suggested to be more accurate than the assessment of the most well-known models based only on the analysis of business plan and commercialization potential. In our concept the weighting coefficient are assigned to every factors group and components inside the group. The final result comes from the total score that shows the success degree of a project realization.

The social network Facebook, led by Mark Zuckerberg, may be considered as one of the most impressive success stories in the recent years. It is difficult to imagine more rapid company development. It seemed that there was not any service that could compete with Google on the Internet, but the student project appeared and its traffic volumes surpassed Google’s traffic levels. As a result, its founder has become one of the youngest billionaires in the world. Thereby the first factor from the factors groups that influences the innovation of business success is the personality factor.

A whole number of similar personalities which all world famous innovators have was defined:

- **Convincingness.** To be convincing means the ability to set forth unassailable arguments in order to transmit one’s own belief’s system to another person. This personality has a crucial influence for any innovative activity, as the promotion of new ideas is accompanied by misunderstanding in most cases. The example of the Facebook founder is not an exception. Everybody says that he infects people around him with his ideas and energy [1].

- **Rebelliousness.** Rebelliousness is the most significant trait of creative personalities and innovators. Psychological researches have shown that such people portray rebelliousness from their earliest years.
- **Intuition.** Einstein said ‘Intuition is a really valuable factor’. Fred Smith from “Federal Express” said ‘If you want to be on the way of innovations, you should be open to an intuitive opinion’.

- **Self-confidence.** The following conclusion was made in the business article in “The Wall street Journal” that ‘all well-to-do business owners are incredibly self-confident’.

- **Persistence.** ‘Persistent people aspire to perfection’ – the motto of all great innovators. As the most successful people think ‘creativity is for 99 percent hard work, and for one percent is an inspiration’.

- **Impatience.** Patience may be necessary in some life situations, but it is an obstacle in the process of innovations implementation. The fact that Mark Zuckerberg had been realizing Facebook project for months, without any distraction, is a brilliant example.

- **Despotism.** Innovators act like all-powerful monarchs. Authoritarianism in their relations with colleagues and employees is set to achieve their own personal and business aims.

- **Charisma.** The word ‘charisma’ came from the Greek phrase ‘gift favored by God’ or ‘divine favor’. German sociologist Max Weber defined charisma as a talent that marks out the leaders from the ordinary people. Jay A. Conger in “Charismatic leader” states that charisma is a stem of the successful business; it changes management, strategic prediction and motivation.

- **Swiftness.** Alfred Adler said that successful people are led with an aspiration for superiority. Bill Gates, the father of the computer software industry, is an Adler embodiment of a successful personality. One can make an example with Mark Zuckerberg: only after five years Facebook has seized the audience of more than five hundred million people. It is an example of an aspiration.

Other characteristics are enthusiasm, competitiveness, adventurism and purposefulness.

The next factors group of success is an organizational one.

**Organizational factors.**

According to most analysts, all successful businessmen have a definite organizational structure for their business. Sometimes they subconsciously arrange the structure of their innovative business according to the rules described in modern economical treatises. Therefore the lowest indicator of effectiveness could be a conceptual framework of business management in the organization of one’s own business.
Business should be oriented in the directions as follows [2]:

1. Organizational structure of business;
2. Functional interaction scheme;
3. Strategic direction;
4. Tactical measures;
5. Competition policy.

Finally, one of the most important indicators in the organizational factors group is the specialization level of a company top-manager in relation to the main production string. Almost all successful top-managers are not just theoreticians, but good engineering specialists in their sphere of business. G.Ford, B.Gates, A.Morita, M. Zuckerberg and many others began to realize their projects technically by themselves, and only then they became top-managers. Therefore, the risk of lead-time is greater when organizing an innovative business as an ordinary manager and employing specialists in the particular sphere. Consequently it may lead to the loss of time which increases the risk failure [3].

The evaluation of the company’s competitiveness is an important stage in the organizational factors group.

Competitive analysis of the sector involves the identification of the main economic parameters of the sector and dynamics of the sector development, the evaluation of the competitiveness force and competitive positions of business rivals, the analysis of immediate rivals, prospect assessment of the sector development, and the key factors of success, the realization of which offers a challenge for the improvement of competitive position [4].

Key success factors (KSF) are common for all companies in the sector. Their realization opens the prospects of competitiveness advance. The aim is to define the factors that are essential to a successful competitiveness in this sector. To differentiate the KSF for a particular sector is the first step. Then it is necessary to develop the way of the usage of the KFS typical for this sector. This work is the essential part of development of a company’s strategic plan, taking into account the nature of the aims and tasks as seen by the management. The KSF should be considered as a foundation of the developed strategy. The KSF for different sectors are not the same; and for a particular sector they can change in time. Never-the-less, one can try to segregate the basic KSF, some of which are given in the extended variant of the article. The aim of analysts is to choose 3-5 KSF which are more important for the nearest prospect, for example
ranking factors that are significant for the sector. These KSF should be the main directions in the developed company strategy[5].

Further the group of assessment indicators of an innovative component of a project is represented.

**The indicators of an innovative activity.**

Any activity is subjective, if standard criteria, factors or laws are not the foundation for this activity. An innovative business is not an exception. Today, however, innovation assessment, strategic and tactical indicators of a business is formed more on the base of the conceptual analysis.

The origin of innovations, their purpose, influence and other characteristics create big variety. It requires certain classification that will make their identification possible. And transfer of each indicator on the basis of an expert estimation in digital expression will give the chance to construct the forecast on the basis of mathematical algorithm. For a base we take the general (traditional) classification of innovations and innovative products taking into account their development [6].

1) **The source of idea for an innovation.**

Let's designate this variable as $k_1$.

A source of idea for an innovation can be:

- a) discovery, scientific idea, the scientific theory, the phenomenon;
- b) invention, a number of inventions, licenses;
- c) rationalization proposals;
- d) other situations.

From the point of view of the organization of innovative business the factor «b» has the greatest proportion. $K_{1b}=0.4$. Values for other factors are distributed in the following way. $K_{1a}=0.2$, $K_{1c}=0.3$ и $K_{1d}=0.1$. One of the key criteria is time from the moment of occurrence of a source for an innovation till the moment of the beginning of industrial activity.

2) **Kind of innovation.**

The innovation in a material, tangible kind can take the form of:

- a) a product, its structure or device, system and mechanism;
- b) technology, method, way;
c) material, substance;
d) other decisions.

In traditional classification there are some points that are separately submitted to:
e) living organisms, plants;
f) constructions, buildings, structures, offices, workshops or sites of other architectural decision;
g) information product (project, research, development, programme, etc.);
h) services.

But in a context of office work the classification can be narrowed, and points are united. Now we will place proportion for values of variable $K_2$.

Presence of a ready innovative product always in a greater degree provides competitive advantage and consequently increases probability of the successful organization of business. In the light of it, variable $K_{2a}$ has the greatest proportion and is equal to 0.4. Values of variable $K_{2b}$, $K_{2c}$ and $K_{2d}$ are equal to 0.2, 0.3 and 0.1 respectively.

3) **Application fields in research-and-production process in sphere of the industry, transport, communication and agriculture.**

1) Research ones. They change the process in research and development sphere.

2) Technical or productive ones. They usually arise in manufacture of products with new or improved properties; they lead to the change of technologies of business processes of a consumer.

3) Technological ones. They arise on application of improved, more perfect ways of production work, lead to the change of technologies of business processes of the consumer.

4) Information-communication ones. They lead to the change of technologies of processing of the information and technology of communication of the consumer.

5) Marketing ones. They lead to the changes in a market research and work on it, to the changes of brands of the goods and the organizations.

6) Logistical ones. They lead to the changes in sphere of the organization of movement of production line, supply and sale.

7) Organizational-administrative ones. They lead to the changes in the organizational mechanism and the control system, they improve them;
8) Social and economic ones, legal and others. They change social, economic and legal operating conditions of the enterprise.

Variable $K_3$ always takes on a unique value, it is a constant and it doesn’t influence on aggregate result. It is more used to formalize a scope of an application field. As well as the variable $K_4$ does.

4) Application fields in consumers services.

1) education;
2) food;
3) culture and sport;
4) public health;
5) legal service and protection;
6) tourism;
7) trade;
8) financial service;
9) others.

Then it is necessary to classify the market which an enterprise is entering, because other indicators of innovative activity can depend and be changed according to the correct positioning.

5) Width of influence of innovations.

Variable $K_5$ can possess the following proportion:

a) global, world; $K_{5a}=0.4$;
b) economic, national; $K_{5b}=0.3$;
c) sectoral; $K_{5c}=0.2$;
d) local; $K_{5d}=0.1$.

6) Level of novelty.

The innovative goods and services are divided into those that have:

a) world novelty;
b) domestic novelty;
c) sectoral novelty;
d) novelty for firm;
e) the reduced costs (industrial innovations).
Variable $K_6$ possesses the following proportion: $K_{6a}=0.4$, $K_{6b}=0.3$, $K_{6c}=0.2$, $K_{6d}=0.1$.

7) Scale of distribution of an innovation ($K_7$).

a) transnational;
b) economic and federal;
c) regional;
d) municipal;
e) within the limits of associations;
f) within the limits of the organization;
g) within the limits of subdivision.

Proportion for values of variable $K_7$ is distributed in the following way: $K_{7a}=0.35$, $K_{7b}=0.25$, $K_{7c}=0.15$, $K_{7d}=0.1$, $K_{7e}=0.07$, $K_{7f}=0.05$, $K_{7g}=0.03$.

The capitalist and writer David Silver said: «Businessmen are able to use time with bigger advantage than any other group of a society …». Time is the most important indicator practically for any sphere of human activity. And for innovative it is, perhaps, the key one. The faster the innovation is introduced, the bigger commercial effect it will bring. And delay, at times, can become a fatal flaw of the whole business.

8) Rate of innovation realization.

a) fast, increasing;
b) decelerated, uniform;
c) slow, diminishing.

Values of variable $K8$ have the following proportion: $K_{8a}=0.5$, $K_{8b}=0.35$, $K_{8c}=0.15$.

No less important an indicator is the stage where a process of innovative activity is right now. Several organizations can have the same innovative goods or technology available, but one of them hasn’t started the stage of industrial production yet and only finishes the working out, and another one is ready to enter the market with a product. It is not difficult to guess that the competitiveness of the second firm will be considerably higher.

9) Stages of life cycle of innovations with which innovative process for the given organization begins and with which it comes to an end.

a) researches;
b) workings out;
c) industrial production;  
d) marketing, logistics;  
e) diffusion;  
f) routinization;  
g) service support.

Each subsequent stage means that the previous one has been already passed. And graphical representation of stages of innovation life cycle (Figure 1) can be compared to representation of stages of life cycle for the business life (Figure 2).

Figure 1 – Stages of life cycle of an innovation

Figure 2 – Stages of life cycle of an organization
Values of variable $K_9$ have the following proportion: $K_{9a}=0.1$, $K_{9b}=0.15$, $K_{9c}=0.25$, $K_{9d}=0.2$, $K_{9e}=0.15$, $K_{9f}=0.1$, $K_{9g}=0.05$.

10) According to the depth of brought changes.

There are the following kinds of innovations:

a) radical or base;
b) improving;
c) modification or private.

Values of variable $K_{10}$ have the following proportion: $K_{10a}=0.5$, $K_{10b}=0.35$, $K_{10c}=0.15$.

One of the key and defining factors of success of any human activity is the ability for the further growth and development. Not without reason, both in enterprise life cycle, and in innovative activity there are points after which the rate of increase, the efficiency from the current activity start to decrease. And at these moments it is essential to find ways, means, technologies for maintenance of indicators of current activity. And for this purpose it is necessary, that the built system is flexible and forms a basis for modernisations in the future.

11) Succession.

Innovations in this respect can be classified as:

a) opening, after which the stream of new innovations, on which the animated effect is based, can follow;
b) closing, innovations closing a number of branches;
c) retrointroductions.

Values of variable $K_{11}$ have the following proportion: $K_{11a}=0.5$, $K_{11b}=0.35$, $K_{11c}=0.15$.

Let's consider the borders of total values of indicators:

1) From 3.55 to 3.7. If the final result gets to the given interval it means that a product with which the enterprise plans to enter the market has the status of world novelty and consequently the company can apply for the given market segment. All indicators of classification of innovative activity take the maximum value, the enterprise should concentrate on tactical planning of its activity for successful achievement of the strategic targets that were set.
2) From 3.2 till 3.55. The innovative product of the enterprise confidently takes a position of novelty of the domestic market. It can be the leader of branch. And with the possibility of increasing of some indicators it can apply for a share in a world market segment.

3) From 2.7 to 3.2. The innovative product, service, technology have the status of domestic novelty. It can be the leader of branch in the domestic market. The enterprise is hardly competitive on a world scale of activity. The probability of position loss in the domestic market is great, in case the company which has a product with world novelty characteristics enters the market. The enterprise should be in a greater degree ready to the possibility of fast modernisation, in case it wishes to take the same position in the market.

4) From 2.1 to 2.7. The innovative product has the status of regional novelty, but with the possibility of increase of some indicators it can apply for a share in a segment of the domestic market. For the time being strategy of enterprise activity most likely has such type as «following the leader».

5) From 1.45 to 2.1. Innovative activity has the status of local type. It is actual within the limits of associations, organisations or subdivisions. The market on which the enterprise can count does not exceed municipal borders. The enterprise will have very weak, depending on set of factors competitiveness.

The given block of indicators is not the only in estimation of both innovative activity as a whole and the organisation of successful innovative business in particular. But it is one of the key on the stage of planning. And thanks to the fact that values of each of variables are estimated in quantitative expression, the mathematical apparatus on the basis of expert system is put in a basis of the general analysis of efficiency and success of the innovative business organization.

Following such a classification one can indicate several groups of total values of all indicators. Depending on the indicators interval, which the result of the analyzed business belong to, one can give answers to the following questions. What segment can business expect to win, entering the market with the innovation product, service or technology? Do the classification results coincide with company strategic aims? And if there are contradictions, than a company can evaluate which indicators are responsible for that. Later the company management may assess the possibility of indicators improvement. The estimation of life cycle of an innovation product, that a company is planning to enter the market with or has already been on the market, is very important. In result, the analysis of this group may become the general assessment of the company competitiveness.
Further we shall investigate such group factors as marketing complex and marketing management in business, geographic factors of business organization, or infrastructure factors, legal, legislative regulations that stimulate innovation business development are examined in the continuation of the research. In particular, the tax factors of innovation business stimulation will be singled out.

Citation: