Juan Carlos Pomaquero Yuquilema
José Fernando Lopez Aguirre
Jose Luis Lopez Salazar

Business and Innovation
Sustainable innovation, business models and economic development

compAs
Grupo de capacitación e investigación pedagógica

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Summary

The increased intensity of globalization processes has significantly accelerated information and transport flows, increased the mobility of economic resources, unified economic legislation, generally characterized by the fairly rapid changes in the business environment. Thus, the economic system, not only at the macro level, but especially at the micro-level, should not only adequately respond to ongoing transformations, but also be prepared for future changes. This is possible only based on increasing competitiveness through innovative transformations. At the same time, the development of enterprises is largely related to the current production and financial activities, since they are opposite to each other in terms of the generation and consumption of resources. Considering the above, it is imperative for enterprises to develop procedures that will be able to solve the problem of ensuring the sustainability of their current functioning

Introduction

One of the modern definitions of innovation is as follows. Innovation is the use of the results of research and development aimed at improving the process of production, economic, legal and social relations in the field of science, culture, education and other areas of society (Ciborowski, 2016). This term can have different meanings in different contexts, and their choice depends on the specific goals of the measurement or analysis. The term "innovation" (innovation) was introduced into scientific circulation by Schumpeter in 1934 (Schumpeter, 1934). According to his definition, innovations are new and improved products and processes, new organizational forms, application of existing technology to new areas, opening new resources and opening new markets (Croitoru, 2012).

In 1988, Freeman suggested to include social innovations in the field of technological policy in this definition (Burns, 2007). That is, given the fact that stimulating innovation at the government level (subsidies for research and development and tax credits, a procurement policy, a system of scientific and technical education, patent policy, standardization

measures, etc.), plays an important role in determining the rhythm and direction of technical innovation within national borders (Freeman and Soete, 1997). Rothwell (1992), Nelson (1993), Mowery and Oxley (1995), Edquist (1997) and others substantiated this in their works the determining influence of state and national policy on industrial innovations.

The concept of innovation is broader than simply "new technology", since the latter is applied only to tools, new materials, reagents, etc., used mainly in production (Freeman, 2004). The concept of innovation extends to a new project or service, the way they are produced, an innovation in organizational, financial, research and other areas, any improvement that provides cost savings or creates the conditions for such savings (Lundvall, 2004). It should be noted that innovation is closely related to scientific and technological progress (TP), being its result (Maier, Keppler, and Maier, 2014). TP is an essential factor in the production of products, which, through the improvement of the means of production and technologies, provides, on the basis of the discovery by science of new laws of phenomena and properties of the surrounding world, an increase in labor productivity (Hobday, 2005).

In the literature there are several approaches to determining the essence of innovation (Galanakis, 2006). Two points of

view are most common when, in one case, an innovation is presented as the result of a creative process in the form of a new product (technique), technology, method, etc.; in another, as a process of introducing new products, elements, approaches, principles instead of existing ones (Galanakis, 2006). One ought to be more impressed with the definition of innovation as the result of the creative process in the form of created (or introduced) new consumer values, new management methods, the application of which requires that individuals or organizations using them change their usual patterns of activity, their skills (Roberts, 2007). Moreover, the most important sign of innovation in a market economy should be the novelty of its consumer properties. Technical novelty plays a secondary role.

The methodology for a systematic description of innovations in a market economy is based on international standards, the recommendations of which were adopted in Oslo in 1992 and are called the Oslo Manual (Roberts, 2007), last edited in 2018 (OECD/Eurostat, 2018). It is designed for technological innovation only and covers new products and processes, as well as their significant technological changes. An innovation is considered implemented if it is introduced on the market or in the production process (OECD/Eurostat, 2018). Accordingly, two types of technological innovations are

parameters of manufactured goods (services) and their production technologies.

In times of economic problems on a global scale, innovation is perceived as a way to overcome difficulties, ensure and maintain economic growth, and, as a result, solve social problems. Global issues such as climate change, food security, the availability of drinking water, and health are not overlooked by the global community. In this regard, innovation begins to play the role of the main factor in the process of improving the quality of life (Carlson & Wilmot, 2006).

The activities of the enterprise are carried out by consuming certain resources that are generated by current activities, therefore, the development process leads to an increase in current risks, to reduce which it is necessary to create a risk management system. Sustainable development of the enterprise is ensured by the management system, which represents the impact of the subject of management on the object to achieve the goal (Carlson & Wilmot, 2006).

In the process of management, an enterprise acts on one group of factors, including such as a) the volume and condition of assets; b) the volume and structure of capital; c) the technology used; d) capacity utilization; e) the rate of updating of products, etc. and takes into account the

influence of another, which include: a) the rate of inflation; b) the average market capitalization rate; c) market conditions; d) the level of solvency of demand, etc. (Johnson, 2010).

Based on this, it can be noted that there is the possibility of forming a development management mechanism based on the use of controlled factors, taking into account the impact of unmanaged (Johnson, 2011). At the same time, an analysis of various scientific views on the development of the enterprise allows us to conclude that there is a fairly large number of points of view on improving the efficiency of the reforms. However, many of them are based on the allocation and activation of one of a sufficiently large number of factors of the functioning of the enterprise, affecting efficiency (Johnson, 2011).

Chapter 1. Sustainable Production and Innovation

Efficiency and stability of an enterprise must be considered from the point of view of the property of the system ensuring its integrity, i.e. the ability of the system to create such connections between elements of the system that allow maintaining the necessary parameters at a given level to continue to exist (Rothwell, 1992). At the same time, in the research of several scholars, along with the concept of stability, one can often meet the term equilibrium (Nelson, 1993; Mowery and Oxley, 1995: Edquist, 1997). It is defined as the state of the system in which the sum of the action of external and internal factors is zero. In the works of the authors, it is also indicated that stability is ensured by overcoming the adverse factors generated by the environment and preserving its integrity of internal connections and functions. Also, in other studies, it is noted that the sustainability of socio-economic development is such a state of balance of external and internal factors of the development of the system, that ensures consistent growth and improvement of the quality level of an enterprise's development (Lundvall, 2004). The latter takes place together with the identification and prevention of the negative consequences of economic activity in the foreseeable future. All factors of influence are interconnected and do not always act unidirectionally. In this regard, a rather difficult problem is

the choice of the dominant (main) factor that determines the fundamental nature of the development of the enterprise, and the focus of all efforts on it will ensure the effectiveness of the predicted transformations, new directions and the level of functioning of the enterprise (Maier, Keppler, and Maier, 2014). The process of enterprise transformation involves its sustainable development, i.e. transition to a new quality level with maintaining one's functioning stability, under which it is necessary to determine the dominant development factor (Maier, Keppler, and Maier, 2014). The latter is inherent in the complex nature of the impact on the enterprise and is also required to develop an integrated system for managing the sustainable development process based on the use of this factor. At the same time, an integrated systematic approach to management based on a dominant factor suggests that it should affect all functional areas of the enterprise and concentrate the main actions on development processes (Maier, Keppler, and Maier, 2014).

The study of innovation as the basis for sustainable development of the enterprise was carried out by a sufficiently large number of scientists. Amongst them one can name Metta and Badurdeen (2011), Badurdeen et al. (2015), Linton, Klassen and Jayaraan (2007). Thus, many considered the economic development curves, substantiated significant

technological changes at the beginning of each large cycle and, moreover, concluded that the achievements of scientific and technical progress are realized only if the necessary economic conditions are available.

Schumpeter defined innovations as new combinations of resources and substantiated the possibility of reducing the level of decline in economic activity by creating and introducing innovations (Burns, 2007). The researcher also called innovation the main source of profit: "profit is the result of new combinations", "without development there is no profit, without profit, there is no development" (Schumpeter, 1934).

Schumpeter pointed out that economic development (the concept of "sustainable economic development" appeared later) is possible if entrepreneurs have high aperiodic ability to conduct organizational and/or technological innovations to maximize economic benefits, which later became known as Schumpeterian rents (Burns, 2007). It should be emphasized that in this case, entrepreneurship is understood not as a separate institutionalized segment of the economy, but as a whole economy (i.e., both the real and financial sectors). This means that society and the economy develop only when there is a constant accumulation of scientific, technical, fundamental knowledge potential, as well as its subsequent

transformation into high-tech market products, work, and services, including in the social sphere and the field of public administration (Schumpeter, 1934).

This indicates the focus of innovation on obtaining a specific economic effect, which can be expressed in reducing costs, increasing profits, which is a prerequisite for development. Innovation is the process of introducing fundamentally new methods and technologies, the results of scientific activities and design developments. The differences between these concepts are that innovation is the introduction of a fundamentally new, and innovation is the successful implementation of fundamentally new, bringing specific economic benefits (Burns, 2007). That is, any innovation is essentially an innovation, but not every innovation becomes an innovation. The process of turning innovation into innovation is called the "innovation process" as an activity aimed at its development, commercial implementation of scientific research into a new or improved product or service. In a study by Feng and Joung (2009), the scholars linked the rates of economic growth and cyclicality with the emergence of basic innovations. That is, the scholars noted that the development of industrial enterprises acts as a transition from one technological unit to another, i.e. the exhaustion of the potential of the main innovations leads to a

technological stalemate (Feng and Joung, 2009). In connection with this, investments are needed in the development of new basic innovations that cause the emergence of new enterprises and goods.

In the studies of Takeuchi and Nonaka (2008), it is shown that the creation of organizational knowledge, i.e. the company's ability as a whole to create new knowledge, disseminate it throughout the organization and translate it into products, services, systems. The concept of innovation can be considered from two points of view, i.e. as a result and as a process, in connection with which there are two approaches to their determination:

1) object, where the final or intermediate results of scientific and technical activity, including new types of products (services), new methods and methods of production, innovations in research, organizational, financial, trade and other fields act as innovations (Takeuchi and Nonaka, 2008);
2) process, i.e. innovation is defined as a complex process of creating and using new consumer values (goods, equipment, technology) (Takeuchi and Nonaka, 2008).

The most generalized definition of innovation, in our opinion, was given by this duo of scholars, who claim that innovation is the result (final or intermediate) of purposeful and organized

creative activity, which has received the final form in the form of new competitive types of products (services), technologies, forms and methods of production and management and used in public and (or) commercial purposes (Takeuchi and Nonaka, 2008). These scholars published several basic works on the theory of macroeconomic development and the dependence of this development on scientific, technical, as well as entrepreneurial and innovative potential. This allowed us to postulate that innovation is an indispensable attribute of balanced economic growth and sustainable socio-economic development (Takeuchi and Nonaka, 2008). Consequently, the evolution of socio-economic relations and the stability of the functioning of individual business entities on the market is possible only with the constant production of knowledge, the transformation of this knowledge into innovations and the practical introduction of innovations to maximize economic and non-economic benefits.

An analysis of the study of the above authors makes it possible to highlight the following characteristic features of innovative transformations (Takeuchi and Nonaka, 2008):

a) a feature of the modern development of the economy is the significant changes occurring in the external environment, therefore, enterprises must not only adequately respond to

strategic and is the basis for managing the development of the enterprise (Takeuchi and Nonaka, 2008).

Based on the foregoing, as a dominant factor in the development of the enterprise, one can distinguish innovative transformations carried out based on innovative potential. It should be noted that the level of innovative potential determines the ability of the enterprise to develop, implement and perceive innovations, in addition, on the one hand, it determines the need and the possibility of transition of the control system from the current state to a new one, and on the other hand, the prerequisites for rhythmic functioning and maintaining stability in the innovation process (Takeuchi and Nonaka, 2008).

Yet, the degree of stability violation leads to one of the following conditions of the enterprise:

- critical, i.e. partial loss of stability (overcoming of which is possible due to adaptation of the economic system to adaptation) (MIT, 2003);
- crisis, i.e. significant loss of sustainability (overcoming of which is possible through the implementation of modernization of strategic potential);
- catastrophic, i.e. complete loss of sustainability (which is overcome by changing the business paradigm).

Ensuring sustainability is carried out by developing a planning mechanism that allows preventing a critical imbalance between the allocation of resources to the current functioning and implementation of the innovation development strategy. It should be noted that, despite the diversity of types of innovations, in modern conditions, the most important of them are food products, which to a greater extent ensure the competitiveness of the enterprise (MIT, 2003).

The implementation of innovations, carried out through innovation, has the following sequence (Godin, 2006):

1). Development of a methodological approach to solving this problem.

2). Experimental research and model development.

3). Determination of technical characteristics of products, production of prototypes and bringing to mass production.

4). Preparation of production and bringing production to planned volumes.

5). Ensuring rhythmic and sustainable work, eliminating obsolete production and creating a new one.

The organization of innovation involves the use of appropriate principles, the main of which are dynamism, uncertainty, adaptability, and redundancy. (Godin, 2006)

Attempts to identify the features of business innovation within the competitive arsenal of large corporations inevitably lead the researcher to the task of determining the very concept of a business model. Despite the wide and already relatively long spread of this concept in economic and managerial literature, it remains the subject of lively discussion among numerous experts (Kamal, 2006; Katz, 2006; Kelley and Littman, 2004; Lilien et al., 2002).

Modern competition is not so much competition for the possession of basic resources and material wealth, but first of all, it is a struggle for the development and implementation of the most effective innovations of an organizational, commercial and technological nature (Lundvall, 2007). The ratio of sources of economic growth has changed. In modern conditions, the constant development of new equipment and technology is one of the main areas of development. A normal phenomenon is the implementation of a system of actions for the development, implementation, development, production, and commercial application of innovations. Here, the role of small innovative firms, acting as consolidating entities between large business structures and science, is great, since it is small firms that introduce a certain share of innovations that appear in research and development organizations into production (Lundvall, 2007).

Without going into the details of the discussion about the definitions of BM (it can be the subject of independent research), we note that, in our opinion, this concept cannot be reduced to some arbitrarily enlarged representation of the basic mechanism of economic activity of a particular enterprise (with such an overly broad interpretation of its meaning lost in many ways). It includes a number of specific and fundamental business characteristics for each company (Moore, 2005):

1. a method of creating use-value and delivering it to a target group of consumers;

2. a way to generate profit;

3. a method of using available resources and processes for sustainable interaction of mechanisms for creating use-value and generating profits, as well as ensuring sustainable competitive advantages (Moore, 2005).

The system of these fundamental characteristics, which, in essence, determine the entire "business logic", constitutes the business model from which other secondary elements of the enterprise architecture as a subject of market relations "grow" —competitive tools and possible models of market behavior, organization of interaction with suppliers (supply chain model), own organizational structure and organization

of business processes (operational model), etc. (Murray, Grice and Mulgan, 2010)

How do innovative business models BMs (which, in essence, are the systemic result of developing a set of business innovations) differ from traditional instruments of competition? If we turn to the set of tried and tested tools used by large corporations to increase sales in a competitive market, then it can be reduced to three main methods: lower prices, consistent improvement of existing products or launching new products on the market (Murray, Grice and Mulgan, 2010). All these levers can give (and still give) quite tangible results in terms of sales growth. However, when large corporations have been operating in their industries for years, the application of such approaches inevitably reaches the limit after which revenue begins to decline (Murray, Grice and Mulgan, 2010).

Especially quickly this limit is reached in the event of a reduction in prices (nowadays most often based on discounts or special promotions), which is considered the easiest method to increase sales. However, many companies that have used this method in the hope of quickly increasing revenues have seen from their own experience that a direct reduction in prices (or the massive use of various kinds of discounts) without making appropriate changes to other

elements of the business model can lead to a rapid decrease in profitabili ty (Nasierowski, and Arcelus, 2003). Most often, large department stores fell into this trap when they resorted to mass sales: at first, a sharp increase in sales intensity was observed, but very soon the trading margin fell rapidly.

The solution was found by the pioneers of the model of discount stores in the United States, which back in the mid - 1950s began to use the logic of trading in the supermarket concerning sales of clothing, household appliances, and other consumer goods (Nowo tny, 2008). A new business model for that time suggested a number of systemic changes compared to traditional department stores: a sharp reduction in the number of sellers and the provision of maximum freedom for customers in self -service; redevelopment of retail space for the efficient reception of large masses of customers and the transition to a purely functional design of sales areas (in order to save money by abandoning all excesses) (Nowotny, 2008); Changing the selection policy for suppliers and impo sing stringent procurement conditions on them. Only if all these elements of the discounter business model are effectively applied, as noted by Magretta, would a retail company Òbe able to offer low prices and still make moneyÓ (Magretta, 2002).

Currently, in the United States, about 90% of gross domestic product (GDP) is provided by small and medium-sized businesses, and the remaining 10% comes from large businesses and TNCs (Magretta, 2002). Small and medium-sized companies are also the authors of a huge number of inventions and progressive developments, however, as inventions are developed, costs grow very quickly, which becomes unbearable for them, although small business seems more dynamic, flexible, more efficient than large, it is considered as one of the main sources of innovation, new jobs, and economic growth (Magretta, 2002).

US experience shows that one of the advantages of small firms is the least amount of time for the entire process of introducing innovations. If small firms require an average of 2.3 years for this, then large companies need 3.1 years; therefore, inventions are much cheaper for small firms. Small business independently operates in 2 stages - development and pilot implementation of R&D results in production and serial production of high technology products (Magretta, 2002). The second stage is characterized by a high degree of risk of innovation, where large firms "give up" to small enterprises, using high innovative potentials and turning them into a science-generating sphere of production.

In most cases, the results of the activities of small firms are assigned by monopolies, which ultimately receive the exclusive right to use new technical knowledge and the opportunity to patent them abroad, thus forming a portfolio of patents due to this knowledge and the results of their research (Amit and Zott, 2012). This allows large corporations in the international market to most widely use patenting as a means of stimulating expansion.

In innovative entrepreneurship, the business models of small innovative companies are still not well understood, as are the features of the small innovative companies themselves (Amit and Zott, 2012). Each innovative company creates specific business models. To give the concept of an innovative business model, you need to understand the essence of a business model (Amit and Zott, 2012).

A business model is a schematic representation of a business that is aimed at designing, planning and forecasting the activities of the entire system of business processes of the organization (Afuah, 2014). A business model should have the following characteristics:

1. The ability to be determined by an accurate description using formal elements and indicators (possess measurability).

2. Be clear and clear to a wide range of researchers and should be reproducible (have transparency).

3. Applied only to a specific enterprise, other enterprises (firms) should be able to copy it, applying to the features of their own business (have generalization).

Therefore, the business model of the company can be considered as a set of basic characteristics of the company, such as the place occupied in the industry, ways of making a profit, value for consumers, innovation in the company, core resources, and production processes (Chesbrough, 2010).

An innovative business model is defined as the action of participants in the organization to make decisions at the stage of commercialization and diffusion of innovations in the distribution of risk and income to maximize profits from investments in innovations (Chesbrough, 2010). In other words, it is a tool that allows you to combine technical components with economic results.

The desire of companies to find their place in the market is explained by the need to ensure competitive advantage in conditions of economic instability. This task is complicated by the fact that new players appear on the market, changing the rules of doing business, applying completely new strategies and business models, using innovative technologies. In these conditions, companies have to look for new ways of protection that provide flexibility and stability to

their business models, which will allow them to quickly respond to innovations (EIU, 2005).

Examples of companies that successfully apply innovative business models are sufficient. These include companies such as Southwest, Amazon, FedEx, Wal-Mart, McDonald's, IKEA, Enterprise, eBay, Priceline, Dell Computers, Starbucks, Skype, Groupon, etc. These companies did not strive for superiority over competing firms in former markets but introduced innovative methods of offering similar goods and services (EIU, 2005). It was revealed that in the modern sense, the core of the business model is value, but it is inextricably linked with the process of creating a product, delivering it to a client and generating a company's profit.

Product competitiveness is a complex of consumer and cost characteristics that determine market success, which is achieved by a combination of quality and price. Accordingly, the higher the quality of the product, the higher its beneficial effect and the lower the price, the more likely that the product will be sold. However, this combination is controversial. Higher product quality requires high costs to ensure it, which negatively affects the profitability of production (Eyring, Johnson and Nair, 2011). A price increase is undesirable, as sales and market share of the enterprise will decrease. A decrease in profitability will reduce economic

interest in the production of new products. Professional management can provide high competitiveness with some increase in costs and will be compensated by product quality (Eyring, Johnson and Nair, 2011).

Innovative business models, innovative products and technological innovations are different concepts. They must not be confused. Various types of innovations contribute differently to the conquest of a new market niche or their appearance (Johnson, Christensen and Kageman, 2008). Examples include Apple products such as iPod, iPhone, and iPad. The well-known company Amazon has introduced technological innovations in online sales to create a new market niche, with emphasis on the breadth of choice, speed of ordering and low price of goods (Johnson, Christensen and Kageman, 2008).

The Southwest campaign, having segmented the air travel market, singled out the low-cost air travel segment and formed a new market. Dell Computers has improved the method of offering products, organizing sales bypassing intermediaries, bringing products directly to the consumer (Kaplan, 2012). Innovative business models involve the migration of values, which is understood as something specific that the organization owns or tries to achieve in the future (for example, ownership of innovation, technology,

etc.) (Kaplan, 2012). Companies strive to have a competitive advantage based on the creation and delivery of value to achieve an excellent level of work due to: price, financial resources required for the creation and delivery of products, etc.

Such business models make it possible to find new consumers who are not served by previously existing companies on the market since for them this market niche does not look very attractive. With the formation of a completely new offer of goods or services, the value chain is changing, and new values for the consumer appear (Lindgart, and Hendren, 2014).

Introducing a new technology (T), new offers in the form of new goods and services (A), the formation of new markets (M) and the introduction of new organizational forms (O), the total value for consumers increases. In a prosperous company, all noted factors are interconnected, which is explained through Figure 2.

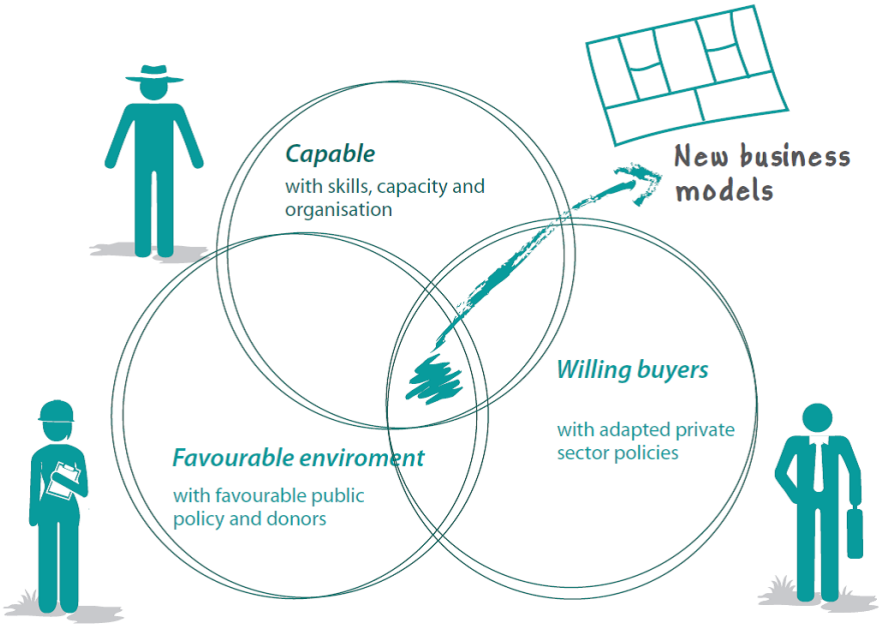

Figure 2. Business Model Development (CSA, 2019)

An example is the already mentioned low-cost carriers, which focus on the cost of the ticket, whereas before the airline focused on regular flights, the breadth of the route network and the creation of optimal connections (Matzler et al., 2013). An example is the emergence of online trading, which provides high-speed transactions at a lower cost, unlike traditional brokerage services through individual consultations with a specialist. Consequently, the costs of performing certain actions are reduced due to the very method of their implementation. Similarly, the value of one activity can be enhanced by other actions of the company, which creates a competitive advantage and profitability of high quality (Osterwalder, 2004). This makes it possible to

dump prices and increase traffic by several times, raising the rating of the airline, leaving resources for repair and maintenance work, creating the image of the company with low costs.

Based on the foregoing, we can talk about rethinking values in the field of supply of goods or services (Osterwalder, 2004). The use of such innovative methods enables new companies to form new markets and be competitive in them.

The company's innovative business model consists of 7 areas (Osterwalder and Pigneur, 2010):

- a fundamental idea of business, which implies new preferences of customers, new sources of profit;
- innovative services or goods;
- New customer segments;
- new company values;
- technological innovations, new methods of offering services;
- innovative organizational structure;
- The latest methods for the distribution of goods or services.

In our opinion, to identify the typification of business models of small innovative companies, it is necessary to develop a methodology that is based on a method of in-depth analysis and structuring of this area with further classification of innovative companies (Pedersen et al., 2013).

If one is talking about the consistent improvement of a product already known to the market, then the possibilities of this method of competition as a way to increase sales are exhausted the faster, the greater the use-value is generated not by the product as such, but by the results associated with its consumption (Pedersen et al., 2013). In such cases, companies that continue to focus on improving the product itself, largely limit their growth potential, invest in innovations that are unlikely to be adequately appreciated by customers, and are eventually squeezed out of the market by more visionary competitors (Pedersen et al., 2013). A vivid example here is the recent bankruptcy of the American company Kodak, which has been leading its history since the end of the 19th century. and became the founder and long-term leader in the global photographic industry (Pedersen et al., 2013).

Since the beginning of this century, the proliferation of digital photo and social networks has made mass printing of photographs virtually unnecessary, which led a huge business empire to financial disaster in 2013. At the same time, ironically, the technology of digital photography was invented by Kodak engineers (back in 1975 g.). But this invention did not fit into the business model of the company, which was based on sales of relatively cheap cameras that generated massive sales of film and services for its

development and printing of photographs based on an extensive network of branded "Photoshop" around the world (Pedersen et al., 2013).

The management of the company for many years was confident in the stability of this model and focused on improving its cameras and improving the quality of the film. It made a classic mistake - it focused on improving the properties of already manufactured goods and services and ignored new BMs due to radical industry shifts (Pedersen et al., 2013). Locked in its traditional business model, Kodak actually lost touch with the end consumer, who mostly needed not film or even printed photos, but the ability to capture memorable moments of her life and share them with friends and family (who in our digital age provide the Internet and social networks on an unprecedented scale) (Pedersen et al., 2013). According to Forbes, the Kodak business model suggested that the company would make money selling the film, and that was how it made money. Digital photography was in no way consistent with this model, and Kodak buried its head in the sand and seemed to not notice the impending tsunami of new technology (Pedersen et al., 2013). And when the film from the category of the "key" product moved into the

was not the first company to launch a digital music player on the market. Diamond Multimedia started selling a similar Rio product back in 1998, and in 2000 the Cabo 64 digital player released by Best Data appeared on the market. Both competing devices worked perfectly and were considered very stylish among the target youth audience (Schafer, Smith and Linder, 2005). But the iPod won, and the main reason was not the unique characteristics of this product, but the innovative business model that Apple was able to develop and implement in record time.

The main achievement of Apple was the creation of a unique combination of software, the device itself and a set of related services, which provided a convenient, inexpensive and easy way for the mass consumer to legally download digital music from the Internet in digital format (Schafer, Smith and Linder, 2005). At the same time, sales of cheap (almost non-profitable) iTunes software were combined with the implementation of a high-margin device (iPod), which ensured excellent profitability of the entire business model3.

Apple's success story highlights the key benefits of innovative BM over traditional competition tools. Unlike classical methods involving innovations in one or two areas of the corporation's economic mechanism (for example, in pricing or technological policies), the introduction of new BMs

inevitably introduces significant changes to most of its elements, including the choice of the target needs of a potential buyer, the mechanism for generating profit and the way they are sustainable connection (Schafer, Smith and Linder, 2005). These numerous innovations act as multiple "degrees of protection" from competitors' attempts to copy successful BMs.

Moreover, since such innovations fit into a single business model, they are, by definition, coordinated in nature, which ensures the formation of an echelon defense system from rivals, significantly increasing the competitive stability of innovative BMs and expanding the time horizon for "skimming" in the form of increased profit. It is no coincidence that an analysis of the database created on the basis of rating surveys of the most innovative companies of the year, regularly conducted by the international consulting firm BCG, showed that companies implementing innovative BMs showed higher rates of return for shareholders compared to competitors in rating, limiting their innovative activity by the introduction of new products or technologies (EIU, 2005). Besides, the successes of innovative companies in the field of BM turned out to be more stable: even after ten years, they continued to outperform their rivals in terms of the corresponding indicators.

Since each successful business model is unique, it is difficult to determine common standard algorithms that can provide the "correct" vector for developing business innovations for the future. At the same time, several main directions can be distinguished, in line with which changes developed that have already led modern creators of innovative BM to success in the market (Schafer, Smith and Linder, 2005).

The first of these areas is a rethinking of approaches to meeting the target need, which was initially laid the foundation of the traditional BM that dominates the industry (including a possible reassessment of the need itself, the target group of consumers, etc.). A reassessment can result, for example, by reorienting a company's business model from manufacturing products to providing services or achieving certain results that are important for the target consumer audience (Vom Brocke et al., 2017). Thus, the recognized world leader in the market of professional construction power tools Hilti (based in Liechtenstein), in the face of sharply increased competitive pressure from Asian rivals (primarily from China), has radically changed its business model, switching from regular sales of products to selling tool management services customer park (Vom Brocke et al., 2017).

For a long time working with construction companies in different countries, Hilti realized the most acute problems of its consumers related to the use of power tools. Firstly, the purchase of a wide range of such a tool, necessary at each construction site, is very expensive and requires serious upfront costs. Secondly, the entire fleet of electrical equipment needs constant supervision and management to maintain it in working condition and ensure proper safety and quick accessibility (Vom Brocke et al., 2017). Finally, thirdly, builders are often forced to purchase particularly expensive tools that are necessary but rarely used.

Following the new business model, Hilti more effectively meets the needs of construction clients in high-quality power tools. Now the company does not sell its power tool but leases it. At the same time, it guarantees customers that they will receive the right tools in the right quantity and at the right time, and also takes care of timely updating of the entire fleet of equipment (Vom Brocke et al., 2017). The new model, of course, presupposed a complete restructuring of the work of Hilti itself, including the formation of new competencies in the field of managing huge storage facilities, complex transport logistics, maintaining customer fleet management systems for power tools, etc. However, the costs of this restructuring

completely paid off (Vom Brocke et al., 2017): the client base expanded significantly and income has grown.

Sometimes, due to the accumulation of knowledge about customers, problems and needs are revealed that they did not even think about. For example, the American company ServiceSource, specializing in the development of "cloud" technologies for large manufacturers of software and computer equipment, has revealed a potentially huge but often ignored source of income from its main customers - the recovery of revenue from renewable contracts (Vom Brocke et al., 2017). The company estimates that in the US IT sector alone, software manufacturers lose up to $ 30 billion annually due to the fact that about 50% of their customers do not receive service renewal contracts from sales teams focused on finding new customers (Vom Brocke et al., 2017).

ServiceSource not only identified this source of additional income but also developed an attractive payment scheme for its services that convinced customers to share income with it (ServiceSource, 2019). The company offered to pay for its services not by a standard fee, taking into account the time spent (as consulting firms usually practice) but based on the result, based on a certain percentage of the corresponding cash receipts (ServiceSource, 2019). At the same time, the innovations in the ServiceSource business model go far

beyond the original payment system. It is actually about outsourcing the problems of clients in a very sensitive area for them and about sharing risks with them when generating income (ServiceSource, 2019).

As the executive vice president of the company Eckert noted, "we offer our clients a whole range of management services aimed at solving their problems. We can give them everything we need to outsource these problems to us. We take them upon ourselves and then give back the result" (Lindgardt and Hendren, 2014). ServiceSource's innovative business model quickly gained market success. In 2007-2012 the total average annual growth rate of the company amounted to almost 30%, and by the end of 2013 the total amount of client income given to it for management reached approximately $ 14.5 billion (Lindgardt and Hendren, 2014).

Other areas of business innovation, which have already demonstrated their importance in creating successful BM in many markets, have been a change in the method of delivering value to the target customer and a general restructuring of the mechanism for interacting with him. An interesting example here is the business model of Nespresso, a fast-growing international company from the Swiss food giant Nestle (Matzler et al., 2013).

From the very beginning, the activities of this company, created in 1986 for the retail sale of high-quality portioned coffee, were based on an innovative concept that combines seemingly incompatible things: an individual approach to each customer and mass sales (Matzler et al., 2013). A large role in this "personalization" was played by the sales format and the way of packaging products invented by the company - along with portioned coffee packaged in special capsules, Nespresso branded automatic coffee makers are offered (very convenient and simple for the user and providing excellent quality of the drink), and a huge variety the offered varieties of encapsulated coffee allows each customer to achieve a unique mixture to their taste (Matzler et al., 2013).

But the main thing is different: Nespresso abandoned the traditional way of selling such products through an impersonal network of external distributors and created its own two-level sales system, which includes, firstly, a network of branded boutiques around the world (by May 2014 there were 327) and, secondly, online sales through the so-called Nespresso club (Matzler et al., 2013). An important role is also played by the global network of customer support call centers: the company's specialists are ready to advise customers around

the clock on the secrets of making espresso (Matzler et al., 2013).

This whole system was initially aimed at providing an individual approach based on direct contacts with all customers (about 70% of the company's staff, or more than 5.8 thousand people, work directly with customers), as well as the inclusion of all customers in Nespresso club members, with whom regular contacts by e-mail are supported (Matzler et al., 2013). By the end of 2012, its members were already more than 7 million people around the world, and the average sales growth rate of the company since 2000 was approximately 30% per year. Such high growth rates and stable positions of the world leader in the encapsulated coffee market (its share in 2013 exceeded 31% of the total global market of $ 10.8 billion) testify to the success of the chosen business model (Matzler et al., 2013).

A recent example of a radical transformation of the business model based on the restructuring of the mechanism of interaction with consumers was the recent reform undertaken by the leadership of Note Depot, one of the leaders in the US retail market for construction materials (Pedersen et al., 2013). At the beginning of its takeoff in the United States in the 1980s, the Depot Note business model was a revolution that created a new segment of the Do-It-Yourself repair market.

This model, which relied on the creation of huge construction supermarkets and won huge popularity primarily among young consumers with relatively modest incomes, was designed for their desire to equip their homes on their own, without resorting to the services of expensive designers and craftsmen (Pedersen et al., 2013). However, the crisis of 2008-2009, when the demand for materials for the repair of apartments and houses fell sharply, forced Note Depot to seriously revise their business model, and the mechanism of interaction with customers became the main focus of the changes (Pedersen et al., 2013).

The implemented program assumed: 1) an increase in the period of direct contact with the buyer from sales consultants up to about 60% of their working time (Pedersen et al., 2013); 2) a sharp increase in the use of advanced communication technologies to provide greater convenience and positive customer experience (the use of special software applications for the iPhone, allowing customers to virtually "see" the proposed repair project in the interior of their own home, instantly and accurately calculate the need for materials and compare them at a cost with competing for shopping centers, without queuing to make payment and order transportation of purchases through your mobile

device, etc.) (Pedersen et al., 2013); 3) the continuation of "emotional" contact with customers outside the trading area (including the collection and use in the work of comments from dissatisfied customers from social networks, the holding of special seminars with the participation of famous interior designers and repair professionals, etc. (Pedersen et al., 2013). A new model that enhanced relations with target consumer audience to a new level, allowed the company not only to significantly improve the customer satisfaction index but also confidently overtake its closest competitor in 2009-2012, Lowe's annual revenue growth and EBITDA (Pedersen et al., 2013).

An important area of innovation, which has formed many successful BMs, is the restructuring of the profit generation mechanism based on the introduction of new cost models, new ways of monetizing use-value, etc. (Teece, 2010) For the leader of the Australian airline market Qantas, urgent restructuring of the profit generation mechanism based on the introduction of a new cost model It turned out to be the only solution with the arrival in 2001 of the so-called low-cost companies led by Virgin Blue (part of the British Virgin Group), which quickly captured more than 30% of this market (Teece, 2010). The business model of low-cost airlines, which ideally

reproduces the concept of retail discounters in the passenger air transportation industry, relied on a significant increase in flight occupancy by drastically reducing airfare due to a full-scale cost reduction for a wide range of operations performed by the air carrier. As the practice of many airlines in the world has shown, attempts to combine individual elements of this model with the traditional scheme of work most often failed (Teece, 2010).

Qantas went the other way. In 2004, she founded the new company Jetstar Airways, which from the very beginning was based on the principles of organizing a low-cost airline and in many respects began to apply this approach more rigidly and uncompromisingly than global competitors (Teece, 2010). The new company was not limited to half measures, such as a compacted cabin layout with additional seats or a reduction in the volume of free-on-board services. She chose the model of an ultra-low-coster that uses all the possibilities for cost reduction without exception: savings on airport services (use of secondary airports, night time of departure); minimizing the downtime of airliners on the ground (strict planning and adherence to flight schedules, optimizing the time for cleaning and refueling aircraft); manning the fleet only with new and the same type of aircraft (saving on fuel, spare parts and full interchangeability of staff and crews);

introduction of a flexible tariff policy (basic tariff plus paid options for all types of flight services, including baggage, on-board meals and drinks, access to audio and video entertainment programs, etc.); refusal of connecting flights (savings due to the absence of reimbursable risks of being late for them); transition to obligatory electronic booking and registration (saving on pre-flight maintenance); Ticket sales without fixed seats to expedite boarding (Teece, 2010).

The consistent use of the new model has made Jetstar a complete success. Foreign low-cost airlines lost this war and turned into niche players in the Australian air transportation market (Teece, 2010). Jetstar's annual revenue has exceeded $ 3 billion, and in terms of profitability, it outperforms the parent company, which focuses on more expensive segments of demand. Moreover, Jetstar was the first airline in the world to successfully use the low-cost airline business model for long-distance transcontinental flights (Teece, 2010).

In recent years, the importance of innovative BMs for achieving competitive success has become increasingly apparent to executives of large corporations. According to the calculations of American economists, more than half of the most successful newcomers who managed to break through the list of the largest corporations whose shares are listed on US stock exchanges (regularly published by Fortune

company's work. Accordingly, the risks of such large-scale changes increase many times, and the "price of error" can become critical for the entire business (Johnson, Christensen and Kagerman, 2008). In such circumstances, to initiate the development and, especially, introduce new BM, not just the routine decisions of one of the departments of the corporate center are required (as is the case with innovative products or technologies), but decisive and coordinated actions of the company's top management. Today, many large corporations with their very complex managerial structure, overgrown with bureaucracy and difficult relations between internal divisions and services, find it extremely difficult to turn their inertial "corporate vessel" in the other direction (Johnson, Christensen and Kagerman, 2008).

As shown by numerous studies, the internal organization of modern large corporations, even adapted for the development and implementation of product and technological innovations, is often not ready for the perception and implementation of new BM. When considering innovative projects for investment, as a rule, those who fit into the current business model are chosen, sometimes ignoring even the most promising developments (Lindgardt et al., 2009). This practice became, in particular, one of the main

reasons for the bankruptcy of Kodak, and did not give the American company Xerox the opportunity to take advantage of several interesting technical innovations (including the first personal computer) developed by its engineers and subsequently implemented with great success by others9.

At the same time, because of the inflexible decision-making mechanism, large corporations often encounter insurmountable barriers to conducting experiments and testing new BM, which is necessary for their successful implementation. "Large companies," according to Girotra and Netessine (2013), "have unique resources and opportunities to create and apply innovative ideas embedded in innovative business models. Nevertheless, the frequency of their failures in this area is unacceptably high, because so far too many of them do not demonstrate sufficient decisiveness and flexibility in the development and implementation of such models." That is why companies that manage to overcome the "built-in" intra-corporate barriers and deploy their innovative potential towards the creation and, no less important, the introduction of innovative business models, can very quickly become leaders in their industries (Girotra and Netessine, 2013).

The current trend in the development of society is the transition from an industrial, raw material economy to an economy based on intellectual resources and innovative technology. The innovative global environment requires a system of relations between science, industry and society, in which innovation will become the basis for their development. Consequently, the construction of a mechanism for managing the country's innovative development is possible only through the joint efforts of the whole society: the state, the entrepreneurial and scientific environment. The emerging system of interaction of innovative entities consists of four hierarchical levels, each of which is a managerial link in relation to the lower level: innovation activity on a national scale (macro - level); innovative activity within the region (meso - level); innovative activity of the organization (micro - level); innovation activity of a specific person (nano - level). The main obstacle in this direction is the destruction of the country's national economic complex, the break in the relationship between science and enterprises, and the loss of controllability of the innovative technical complex. Accordingly, integration and harmonization of the innovative development of all areas of society, the direction of innovative and sustainable development of the country. The activation of all processes

of national development is possible by means of restructuring the scientific potential, the rise of the high-tech sector of the economy using the reserves of integration and globalization. The resources necessary to ensure an innovative breakthrough include the process of providing innovation to investments, the effective use of rental income, the innovative partnership of entrepreneurs, the state, creative individuals and society, as depicted in Fig. 3.

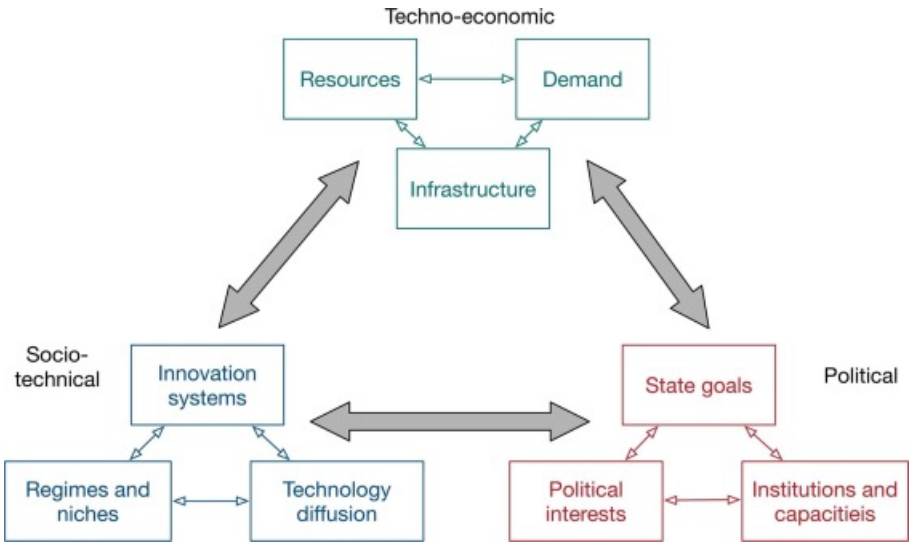

Fig. 3. Integration of all elements (Cherp et al., 2018)

The social and technical system includes man and machine as equal elements. But this equality means only the fulfillment by each of his own role, their close interaction, taking into account the capabilities of each side. The social and technical system is created by man and works for man; in the

process of work, not a person adjusts to the machine, but the machine approaches the person, taking into account his capabilities, desires, habits, and vagaries. In order for a person's creative potential to be realized, it is necessary to maximize compliance of the employee's ability structure with the requirements of the workplace: at the workplace, a person should feel comfortable, use technical equipment effectively, take the initiative, and make decisions independently.

Social-technical systems (STS) are called complex production, technical, managerial and social systems, which include hardware and software, the physical environment, employees, sets of internal and external rules in relation to the system, as well as the data and data structures used. The purpose of the socio-technical system is that it establishes a connection, orients in a single direction the interests and expectations of those people who perceive the organization from the inside, and those who perceive the organization from the outside. Defining the tasks of creation and existence, the socio-technical system gives focus to the actions of its active elements. It should be noted that on the one hand, a harmoniously developed personality means solid, but not very deep knowledge in all areas and deep knowledge in the field of the chosen profession. On the other hand, science raises

the technological level of production systems, while there is an increase in unemployment, since the technical means of labor perform a large number of operations of the technological process. Consequently, modern technology is in urgent need of sociological engineers, psychological engineers, organizing engineers, training engineers, etc.

The modern scientific community has little coverage (studied) of the impact of the integration of science, industry and business on the level of innovative development. Although most of the works devoted to the research of innovative potential address the problem of developing an innovative system related to the human factor, as the main component of economic growth. In a number of works, it is noted that increasing the intellectual potential and susceptibility of an individual to innovation is the driving force behind the innovative development of enterprises in the region. The process of increasing the qualification potential of an individual, its relation to self-development and intellectual work can be considered as a combination of motives of innovation subjects that are formed under the influence of interaction in the innovation process.

As world practice shows, an effective mechanism for managing the innovation sphere of the economy should be based on an audit of the innovative potential of the territories,

the turnover of intellectual property and the level of innovative activity in the region. In this case, it is necessary to take into account the attractiveness of industries, the investment climate and the innovative susceptibility of society at the regional level, as well as inter-regional cluster policy. Managing the region's innovative development is distinguished by the fact that in the process of creating the necessary conditions for the growth of the regional economy, based on the production of high-tech products and the use of the accumulated innovative potential, it is necessary to use a comprehensive approach and a combination of motives of the subjects of the region's innovative environment. Since the innovative development of the region is based on the management of intellectual potential and innovative culture of the subjects of the innovation environment.

Since innovative development is one of the areas of the integrated development of regions, which also includes the development of all spheres of material production, non-production and social spheres. Therefore, regional governments are interested in creating the necessary conditions for economic growth based on the production of high-tech products, in using the intellectual potential accumulated in the regions, to increase the competitiveness of the regional economy in the inter-regional and

international markets. Of particular importance are the polarization of scientific and innovative potential in the regions and its impact on the growth rate of the level of innovative development. Today, there is no analytical apparatus and practical recommendations for regional governments aimed at improving the management of innovative development of the region, which is to increase the level of organization of the regional innovation sphere through organizational transformations that contribute to the implementation of innovative processes in the region.

Modern scientific literature presents a number of methods for assessing innovative potential, most of which relate to the results of the activities of a particular enterprise, based on expert assessments and are of a qualitative nature, taking into account only individual indicators. However, the innovative potential is a necessary but not sufficient criterion for the effectiveness of the innovative development of the region, since the innovative potential of the region is part of the total regional potential, characterized by the possibility of economic growth in the region due to the introduction of new technologies for using existing resources. Therefore, the integration of the innovative and resource potential of the territories, the turnover of intellectual property and the level of innovative activity of the region, in conjunction with the pace

economy of the region at enterprises. In this regard, it is necessary to develop and implement effective forms of integration of science, production and business in order to realize the potential of the region and expand the opportunities for its participation in promising areas of scientific, technical, economic and social development. In particular, a mechanism for the integration of science, industry and business is needed, which, in contrast to the generally accepted ones, is based on the model of the region's innovative development management system and the model of the formation of an innovative society. One of the possible ways to increase the efficiency of managing the resource and innovative potential of the territories is to analyze the conditions of integration and forms of cooperation between institutions, organizations and enterprises, the result of which is to provide interested bodies with suggestions and methodological recommendations to improve the effectiveness of innovative, scientific, technical and socio-economic policies, educational technology, through the conclusion of a social contract. For the first time, a comprehensive model of innovative development of the region will be proposed, based on the analysis of social surveys and statistical indicators of the innovation sphere, including: the creation of infrastructure links of innovative

activity; organization of a system for training innovative managers in collaboration with regional universities; formation of a consulting center for the provision of innovative management implementation services at the enterprises of the region.

Taking into account the importance of assessing the state of the innovation sphere in the region, when making managerial decisions to enhance innovation in the framework of research, it is necessary to develop a balanced system for diagnosing an innovative culture and key factors of the region's total innovative potential. Such a system, including both content and structure, will determine the impact of each combination of resources on the effectiveness of innovative transformations. The level of development of the organizational component of innovative potential is reflected in the degree of effectiveness of innovative transformations in the region, and therefore, at the level of development of innovative infrastructure. This will ensure the transformation of the resource potential of the region in the innovation sphere.

The special significance of innovative BMs as a means of competition for large corporations is most clearly manifested when they become the main drivers of radical industry shifts. This unique role of the converter, changing the "rules of the game" in a particular industry, cannot be called a completely new, inherent in innovative business models only in recent years (Tumbas et al., 2015). On the contrary, it was an important characteristic of the most famous BM practically throughout the development of capitalism.

Back in the 1870s, a business model that was invented and implemented by the American Swift & Co, focused on a new system for storing and transporting frozen meat, led to a complete overhaul of the meat processing industry in the USA. The so-called "razor-blade" model (or Gillette model), which has long been included in business school textbooks, involves the sale of one product (razor) at a low price in the expectation of ensuring a steady cash flow by selling related products (replaceable blades) but an increased price, revolutionized the shaving industry in the early 20th century (Tushman and O'Reilly, 1996). Moreover, this model, first implemented by the famous American entrepreneur Gillette in 1903, not only "forever changed the face of the shaving world", but also became a classic profit-making mechanism widely used in many, including modern, business models, for

example, manufacturers of jet engines ("engines — spare parts"), copy machines ("copiers - cartridges"), etc. In the 1930s, the then-new supermarket business model completely changed the US retail landscape, and from 1950- x years it started to prevail through Western Europe (Plattner, Meinel and Leifer, 2010). In the 1970s, the spread of the low-cost airline business model laid the foundation for fundamental changes in the global passenger airline industry, and in the 1980s, Swedish IKEA, with its innovative "collect it yourself" model, conquered almost all of the major national low-cost furniture markets (Leonardi, 2011).

In recent decades, the global economic environment has changed, becoming more favorable for the emergence of innovative BM and many times increasing their potential impact on the fate of certain industries. This is facilitated by a number of its features - high dynamism and variability (Kaplan, 2012). Firstly, we are talking about the widespread dissemination of a range of new revolutionary technologies, including information and telecommunication, which create unprecedented opportunities for both the development and implementation of innovative BMs, and to enhance their industry (and often intersectoral) effect. Secondly, the deepening of globalization processes that pervade almost all branches of the modern economy today, at the same time

reinforcing the factors of interdependence and instability of the world and national markets and forcing in many cases to develop new BMs already calculated on a global industry scale, plays a huge role (Kaplan, 2012). Thirdly, the increasingly intensive involvement in the global economy of the so-called emerging markets, the specificity of which forces large corporations to transform BMs developed over the years, setting them up to work in very different conditions, is becoming of great importance (Kaplan, 2012).

As for information and telecommunication technologies, from the beginning of this century, it is difficult to find new BMs that would not use the opportunities they provide. Attempts to ignore them, as a rule, end very poorly. For example, Blockbuster, a leader in the video rental industry in the USA in the mid-2000s, as if did not notice the appearance of the Internet and very soon was ousted from the market by its competitor Netflix, which implemented a more efficient and consumer-friendly model for ordering DVDs for subscription online with their subsequent mailing (Kaplan, 2012). As a result, a company with billions of dollars in revenue and a huge network of salons (more than 9 thousand) of video rental throughout the country in September 2010 was forced to start bankruptcy proceedings, and Netflix, on the contrary, quickly expanded its customer base of subscribers, which by

April 2011 had reached over 26 million people in the United States and abroad. As Kaplan wrote about this, "Netflix has not invented any new technology. But she managed to invent a new business model that provided the buyer with the opportunity not to go to the video showroom, but to rely on mailing DVDs" (Kaplan, 2012).

Of course, the role of information and telecommunication technologies bursting into the modern economic life is not limited to reformatting business models that have become industry standards. They led to the creation of fundamentally new industries, in which the process of formation of even the first generation of BM is not completed and in itself serves as a field of fierce competition for new industry leaders (Kaplan, 2012). A good example in this regard is the Internet business sector, which, after the dot-com boom of the 1990s and the ensuing financial collapse of most participants, gradually acquired a relatively stable industry structure with clear business models of the remaining leading players (Kaplan, 2012). Most of the largest Internet companies sought first to create a massive user base based on their involvement in social networks (Facebook, Twitter) or search engines (Google), games, etc., and then "monetize" this base through online advertising. Others immediately tried to use e-

commerce mechanisms, although, as Amazon's experience shows, it did not bring them much profit.

Recently, analysts have noted the phenomenal growth of the Chinese Tencent, which managed to squeeze the western global leaders in Internet business, introducing a completely new model of monetization of the accumulated user base (The Economist, 2014). This company started, like many others in the Chinese market, copying Western experience in the field of social networks and the spread of electronic games, but, unlike the global giants (Google and Twitter), for a long time it was in the shadows, gaining weight on it protected from external competition home network space. However, when in September 2013 Tencent's market value exceeded $ 100 billion, overtaking even Facebook (and not only in this indicator but also in terms of income and profits), the company was in the center of attention of investment experts. It turned out that the Tencent monetization model is fundamentally different from the model of its western competitors (The Economist, 2014).

Tencent has actively developed its social network (WeChat) and instant messaging (QQ) service, which has reached hundreds of millions of Chinese users, but has introduced a fundamentally different way to generate revenue based on electronic games (The Economist, 2014). As soon as users are

addicted to a new game, the company offers them to pay for additional services that "add value", for example, for more spectacular clothes or more stylish weapons for their avatar characters, for staying in virtual VIP rooms, etc. If Western leaders of the world's Internet industry earn about 80% of its revenue from advertising, then Tencent revenues by 80% formed at the expense of paid services to users. It was the new business model, which, according to The Economist, turned out to be "better than that of its Western rivals", which allowed Tencent to provide in 2008-2012 (The Economist, 2014). The best aggregate return on shareholders in the world, even surpassing a champion like Apple.

The deepening globalization processes have an ambiguous effect on the formation of new BM. On the one hand, a qualitatively higher level of interpenetration and interdependence of national economies creates new opportunities for combining the best resources from different countries to create more resilient BMs based on global networks of partner corporations. On the other hand, in the context of globalization, the life cycle of business models has declined due to the aggravation of rivalry of the sharply increased number of participants in global competition (including network ones), as well as the accelerated spread of destructive effects during periods of economic upheaval

that quickly become global (Pedersen et al., 2013). A vivid example of a business model built on the principles of a global network and claiming to become an industry standard can serve as a project for the creation of the Dreamliner (wide-body passenger aircraft model 787) by the American aircraft manufacturer Boeing (Pedersen et al., 2013). The design and development of this innovative aircraft for commercial operation required bringing international cooperation (usual for civilian aircraft manufacturing) to a fundamentally different level, with the participation of 44 companies around the world only within the framework of first-wave suppliers. According to experts, such a network model has become a "shift in the industry paradigm". As the employees of Aalborg University rightly write about the consequences of globalization, "the new environment requires new parameters of competition, in which there is not enough focus on internal optimization. The center of gravity is now moving from competition between business models of individual companies to competition between business models of network structures" (Pedersen et al., 2013).

Due to the sharp increase in the expansion of major Western corporations in emerging markets, the demand for the formation of new BMs has significantly increased since the beginning of this century, since direct transplantation of

models operating in developed economies often led to failures. The reasons for failure usually come down to underestimating the two significant features of these markets, which cause rejection of imported BM (Pedersen et al., 2013). First, here the key characteristics of the target group of consumers are changing, on which Western corporations are forced to focus. We are not talking about the specifics of newly developed markets in countries where the adaptation of products and methods of promoting goods is limited mainly to cosmetic settings that take into account local tastes and consumption characteristics (Pedersen et al., 2013).

If one does not take into account the very narrow upper stratum of the population, whose income and consumption standards are usually not very different from Western ones, then fundamentally different approaches are required in order to truly "reach out" to the modern mass consumer in emerging markets (these consumers have become the goal of modern expansion of Western corporations). "Many multinational companies," claim experts at Innosight, an international consulting firm, "simply import their home models into emerging markets." They can somehow adjust, lowering prices ... But the fundamental way of generating profit and the operating model remains unchanged, condemning these companies to sales in the most expensive

segments of demand, the capacity of which in most developing markets does not allow counting on providing sufficient income" (Eyring, Johnson, and Nair, 2014). At the same time, new business models are often necessary for Western corporations to find a solution to such problems as the lack of reliable suppliers of high-quality semi-finished products and services, adequate transport, trade and financial infrastructure in developing markets, etc. (Eyring, Johnson, and Nair, 2014).

Thus, the American giant of the fast-food industry McDonalds', when entering the East European market in 1990, faced a completely unfamiliar situation. Unlike in Western countries, where the company was engaged exclusively in the operation of its restaurants, switching the entire supply chain to outsourcing, in Eastern Europe at that time, there were no suppliers at all able to provide the necessary level of product quality and a given supply rhythm (Eyring, Johnson, and Nair, 2014). Attempts to attract traditional suppliers from European countries to related investments in the Eastern European market failed. However, McDonalds' showed firmness and, not departing from the strategic decision made, decided to seriously change her tried and tested business model, taking on the creation of a new, essentially vertically integrated structure. These efforts and investments totaling about $ 250

million ensured absolute success in a huge market where McDonalds 'became the undisputed leader for many years in the re-established fast food industry (15 years after the opening of the first restaurant, McDonalds' accounted for approximately 80% of sales entire industry) (Eyring, Johnson, and Nair, 2014).

The largest Norwegian mobile operator Telenor, when entering the Pakistani market, was faced with the fact that most of the country's population did not use banking services at all. This made it impossible to receive payments as part of the company's traditional business model. However, after several years of preparation, Telenor succeeded in turning this serious problem into its competitive advantage and gaining dominant market positions on its basis (Eyring, Johnson, and Nair, 2014) In 2009, the Norwegian company launched the so-called EasyPaisa project, within the framework of which a widely accessible mobile banking system was deployed for the population, allowing participants to make payments, withdraw cash and even open savings accounts using only their mobile phone (Eyring, Johnson, and Nair, 2014). To ensure the legality of such operations, the company even had to purchase a small local bank to obtain a full banking license. By 2010, EasyPaisa network already covered more than 20 thousand retail outlets providing financial services

throughout Pakistan (the entire banking network of the country consisted of 8.5 thousand branches). At the same time, 89% of the country's adult population did not resort to the services of banks, but 62% used mobile communications (Eyring, Johnson, and Nair, 2014). Because of the project, the number of Telenor service users in Pakistan exceeded 22 million. The Norwegian mobile operator made up for a significant part of the banking sector that was absent at that time in the country on a new technological basis and thereby ensured an unprecedented increase in the coverage of the local population based on a non-standard business model (Eyring, Johnson, and Nair, 2014).

In conditions of increasing instability and variability of the economic environment, the importance of innovative BM as one of the most powerful tools of competition among large corporations increases significantly. Today's realities of this struggle unequivocally show that even such an acknowledged driver of market successes as technological innovations is effective if they can be successfully "integrated" into I nnovative BMs. As the experts of the European Commission emphasize, "technologies as such have no specific value.

Their value is determined by business models that bring them to market" (Eyring, Johnson, and Nair, 2014). In such

circumstances, only corporations that have adopted a business innovation strategy and have mastered the practice of updating business models taking into account dynamically changing market needs and ever-growing technologies can win the global competition.

The development and implementation of new BMs are becoming a strategic imperative for most modern large corporations (Eyring, Johnson, and Nair, 2014). All of the above companies followed the scheme depicted in Figure 4. The development and introduction of new products into production is of great importance for companies as a means of increasing competitiveness and eliminating the dependence of the company on the mismatch of product life cycles. In modern conditions, product innovations are proceeding quite rapidly (Pearce, 2012).

Today, the development of the global economy directly depends on competition and the impact of innovation on the scale of economic growth. The increasing use of innovations on a large scale is associated with an increase in the level of economic development. At the moment, any intellectual labor is paid more than other types of labor (Ram, Cui, and Wu, 2010).

Fig. 4. Growth Strategy Elements

The modern market sets its conditions in connection with increased competition in order to use innovations, and increase innovative activity. It is important for any enterprise to have market stability and to have advantages over its competitors, and that is why it is forced to look for new systems for organizing its business. One of the factors that can increase the competitiveness of a business is the active use of innovative production technologies, which will entail the establishment of scientific, technical, industrial, financial, and social activities in the new institutional environment (Ram, Cui, and Wu, 2010).

The focus of innovation is determined primarily by the creation of the production of new goods and services. An enterprise will be considered successful if it engages in innovative activities. Indeed, innovations require high costs, but at the same time they are a source of income. Planning and managing innovation is an important and complex process, as the individuality of the business environment and the dynamics of its changes are constantly growing (Stewart and Hyysalo, 2008). Innovations that affect the competitiveness of enterprises are classified as follows:

- the nature of the relationship: socio-economic, organizational, technological innovation (Stewart and Hyysalo, 2008);
- in the field of distribution: industrial, managerial, technical and social innovations;
- according to the substantive structure: product, process and allocation innovations (Suurs, 2009).

Thanks to this classification, one can single out the main directions of the impact of innovation on competitiveness (Suurs, 2009).

Table 1. Innovation Types Explained

Innovation types	Competitiveness influence
Socio-economic	Optimization of the use of resources, for example financial, to increase comparative and competitive advantages
Managerial	Realization of creative ideas in order to develop and create new methods and forms of management. In this regard, there is a reorganization of the management system, which leads to profit and competitiveness
Technical	Using new technology to reduce costs
Social	Improving working conditions, conducting trainings and various events to increase employee motivation. The quality of the workforce determines the ability of the economic entity to carry out its own research and development (R&D) or copy new products from other companies
Goods	Improving consumer properties of goods and increasing competitive advantages

Process	The transformations introduced into the processes taking place at the enterprise will lead to lower costs, costs, higher quality, comparative and competitive advantages
Allocational	Enterprise reorganization aimed at increasing competitiveness

The impact of socio-economic innovation is to optimize the use of resources. For example, financial resources - in order to increase comparative and competitive advantages; Organizational resources to use economies of scale. This allows to reduce production costs in the long term, Technological resources for the implementation of measures for resource and energy conservation. This allows you to reduce costs and improve product quality (Suurs, 2009).

Management innovation is that new knowledge that is embodied in new management technologies, new administrative processes and organizational structures. These innovations consist in the implementation of creative activities aimed at the development, creation of new management methods and forms. This will lead to the reorganization of the management system, contributing to the growth of profits, and, consequently, strengthening its competitiveness. Technical innovations are associated with the use of new

technology (Tijsen and Hollanders, 2006). This will reduce costs, social - with improving working conditions, conducting trainings and events aimed at increasing the motivation of employees, which increases comparative and competitive advantages. Higher quality of labor, characterized by a higher level of education, qualifications of workers, leads to a more efficient use of production resources (Tijsen and Hollanders, 2006). It is the educational level that reflects the creative ability of workers to perceive new ideas that have appeared on the market. The quality of the workforce determines the ability of the economic entity to carry out its own research and development (R&D) or copy new products from other companies (Tijsen and Hollanders, 2006).

In terms of the substantive structure, product innovations will lead to improved consumer properties of the product and increased competitive advantages; transformations introduced into the processes taking place at the enterprise - to reduce costs, costs, improve quality, comparative and competitive advantages, which will happen under the influence of process innovations (Verganti, 2008). The reorganization of the enterprise, aimed at increasing competitiveness, is associated with the introduction of allocation innovations. It cannot be said that product innovations are the most common type of activity of

enterprises during their restructuring (Verganti, 2008). A significant difference between innovations in general and product innovations, in particular, relates to the source of innovation activity: whether they are carried out through imitation, borrowing of existing technologies or products of other companies, or through their own research and development. In one case we are talking about imitation, in the second - directly about innovation (Verganti, 2008).

Let us note that the objective factors that are caused by long-term trends and are not related to the volitional decisions of a particular subject should include economic laws that actively influence innovative activity, and subjective factors include those factors whose action is a direct consequence of conscious decisions (Wang and Kafouros, 2009). External include factors that determine the interaction of the enterprise with the economic and social environments. And internal factors can be defined as the essential features of the enterprise that distinguish it from competitors and determine its innovative solvency (Wang and Kafouros, 2009). Thus, the socio-economic innovations act through factors such as production efficiency, the comparative cost of raw materials and capital on costs, comparative and competitive advantages and consist in optimizing the use of financial resources.

Organizational innovations have an impact on comparative and competitive advantages through all organizational factors, as well as through some internal factors - the level and dynamics of the price of the product's offer, the flexibility of the pricing policy at the enterprise (Wang and Kafouros, 2009).

Technological innovations influence through technological factors the elements of competitiveness (costs and price) in such a way that the competitiveness of the subject and the object increases by an order of magnitude (Zawislak, 2011). The technology used by the manufacturer affects the quality of the product and its cost. If the technology of manufacturing products is new, useful and effective, it is also subject to legal protection (for example, by a patent on a manufacturing method), which, of course, increases the competitiveness of products manufactured using this technology (Zawislak, 2011). The choice of production technology affects, first of all, its cost, and here economic parameters and its assessment of competitiveness are already decisive.

Managerial innovation, through organizational factors, affects costs, quality and price. They create strong competitive advantages of modern business and change the usual principles, processes, structure and practice of

management, improve the ways and tools that operate managers and affect, first of all, management processes (Zawislak, 2011).

Productive innovation affects all elements of competitiveness through economic and domestic factors. This type of innovation, acting through resource and human resources, the level of management and service increases the competitiveness of the business (Carillo-Hermosilla, 2010).

Technical innovations act through technological factors and externally on comparative advantages, quality and costs. Social innovation, through internal factors, affects quality, price and costs. Competition and innovation are interconnected. Manufacturers and consumers in the process of using obsolete equipment and technology receive a differential loss, as a result of which they are forced to reduce production costs through innovation (Carillo-Hermosilla, 2010). Enterprises that have first mastered innovation have the opportunity to reduce production costs and, accordingly, the cost of goods sold, which results in the strengthening of their positions in the competition with market entities offering similar products.

Thus, the survival of market entities in competition is facilitated by innovation. Competition and innovation are dialectically

interconnected and complement each other, as (Medeiros, 2014):

1) competition is the main factor in the susceptibility of a market entity to technical innovations.

2) competition forces the entrepreneur to constantly seek and find new types of products and services that consumers need and can satisfy their needs.

3) competition contributes to the fact that entrepreneurs try to master high quality products at market prices in order to retain consumers.

4) competition stimulates the use of the most efficient production methods.

5) competition forces entrepreneurs to respond quickly to consumer wishes.

6) competition provides a high income to those who work hard and productively.

An indicator of the applicability of innovation in an enterprise is the so-called innovative activity (Medeiros, 2014). Under the innovative activity should be understood the creative activity (creative energy) of producers of goods or services, expressed in the achievement of demand-driven increments in novelty of technological, economic, organizational, managerial, social, psychological and other indicators of the

processes, goods or services offered by the market competitive time (Medeiros, 2014).

The most important factor in modernizing the national economy, developing and strengthening its position in the world market, increasing the level of competitiveness is the intensification of innovation. Demand for technological innovations from enterprises remains extremely low and does not correspond to the expected changes in the country's economic life.

Outdated infrastructure, inability to ensure the development and creation of new factors of production, the imbalance between the availability of innovative capabilities and their actual implementation in practice makes it necessary to analyze the trends in the development of the innovation sphere as a factor in achieving competitiveness. Realization of the competitive advantages of the economy on the basis of innovative approaches implies the need to improve existing and introduce completely new organizational, managerial, financial, economic, and production technologies (Rennings, 2000).

Modern economic development is characterized by the leading importance of scientific and technological progress and the intellectualization of the main factors of production. The share of new knowledge embodied in technology,

equipment, training, organization of production in developed countries accounts for 80 to 95% of GDP growth (Hirooka, 2006). The introduction of new technologies has become a key success factor in market competition, the main means of increasing production efficiency and improving the quality of goods and services (Rozkrut, 2014). State support of the real sector of the economy, reduction of the negative impact of economic changes leading to a decrease in economic growth, increased costs for the creation and development of innovative industries will allow the economy to shift from a supplier of factors of production to a producer of high-quality and competitive products (Rozkrut, 2014).

The formation and retention of competitive advantage affects the mechanism of functioning of the enterprise associated with the design, production and sale of products. At the same time, in conditions of intensified competition in both the domestic and foreign markets, innovative competitive advantages are most stable, i.e. competitive advantage based on the use of innovation (Hirooka, 2006).

Innovation creates a competitive advantage with a medium and high degree of sustainability. Accordingly, the innovative provision of competitiveness of an enterprise means the creation and implementation of innovative competitive advantages in the field of improving product quality,

Thus, the role of innovation in achieving competitiveness lies in the fact that they provide enterprises with opportunities to achieve technological dominance in the market and ensure victory in the competition. However, the key problem remains the problem of intensifying investment activity, primarily in material production, which determines the development of the entire economy (Aguado, Alvarez, and Domingo, 2013). When attracting investment in production, it is necessary to consider what sectors of the economy they are heading to. The greatest advantages are obtained by business entities who invest in the development of technology, and in those whose returns will not take long (Johansson-Skoldberg, Woodilla, and Cetinkaya, 2013). Traditionally, innovations are associated primarily with the sphere of material production; nevertheless, innovations arise and are embodied in the non-productive sphere: in medicine, education and a number of other industries that do not produce a material product.

Thus, innovation is any activity encompassing research, development and implementation of new or improved products and technological processes, regardless of their industry purpose. In order to get additional profit or keep it at the same level, investments are needed in the development and implementation of innovations (Johansson-Skoldberg, Woodilla, and Cetinkaya, 2013). Moreover, there is a direct

correlation between the success of the enterprise in the future and its costs in the present.

The attraction of information resources in the current economic conditions is one of the most important factors in the competitiveness of an economic entity. From the unique information expressed either in the new technology, the secret of production (various know-hows), or in the original rational construction of enterprise management, costs, resources, or in an interesting program for promoting products to the consumer, the most important thing arises - innovation, innovation, which allows raising consumer qualities and reduce prices, that is, increase competitiveness (Safrudin et al., 2015). In the cost structure of the "innovative" company, a significant place is occupied by the costs of searching and acquiring valuable information. As practice shows, over time, such costs are successfully justified by the economic benefits attained.

Modern society is developing at a fairly rapid pace, as a result of which the innovative susceptibility of a person and the readiness for innovative activity in all parts of human resources and relations become necessary. The development of modern society is impossible without innovation. In an era of change, the success of an individual, as well as of the whole society, depends on their ability to perceive and use various innovations (Zhao et al., 2002).

The innovative economy posed the problem of identifying innovative factors in the formation of innovative ways of thinking and acting, psychological and functional readiness for innovative activity for graduates of educational institutions with the modern education system (Zhao et al., 2002). This question is highly relevant as modern research shows that a comprehensive school does not form skills that go beyond the mental activity defined by the curriculum (Zhao et al., 2002).

An innovative strategy of the state requires a scientific search for the system of psychological foundations of students' innovative activity, building a system of principles for the formation and development of readiness for innovative activity of modern school graduates (Schaltegger, Ludeke-Freund, and Hansen, 2012). Considering the issues of pedagogical innovation, scientists come to the conclusion that fundamental education should provide for self-

development and innovative behavior of a person based on the moral and intellectual potential that determines his innovative behavior. All this requires a substantial restructuring and submission to the logic of innovative development from the educational system (Schaltegger, Ludeke-Freund, and Hansen, 2012). At present, innovative activity is one of the main components of the educational activity of any educational institution, since it creates the basis for creating the competitiveness of a graduate who can effectively exist in the innovation space (Schaltegger, 2011).

Modern man lives in an ever-changing world and must be able to quickly adapt to it. More successful will be the one who can quickly learn how to respond to new circumstances. The formation of students' readiness for innovative activity is of particular relevance in solving the problems of modernization of education (OECD, 2016). The education system, focused on the formation of innovative behavior of students should initiate the innovative nature of the processes taking place in his inner world. The program documents that determine the prospects for the development of the country's school system establish the requirements for personal, meta-subject, subject results of students who have mastered the main educational program of secondary (complete) general education (OECD, 2016).

In education, innovative changes today are aimed at the formation of a new educational content; development and implementation of new training technologies; creation of conditions for the development and self-determination of personality in the learning process; a change in the way of thinking and thinking of both teachers and students, a change in the relationship between them, the development of creative innovative teams and individuals (Kwek, 2011). An analysis of modern research on the problem of pedagogical innovations shows that the question of their implementation and implementation in the modern scientific community remains quite relevant and widely discussed.

The urgent issue today is that the modern education system requires students of schools and graduates to carry out innovative activities, but there are no special methods and techniques (specialized programs) for preparing for innovative activities, for personal preparation of students for innovative activity and innovative behavior (Kelly, McCain, and Jukes, 2009). Thus, a contradiction arises between the lack of a systematic program for the formation of readiness for innovative activity of students already at the stage of school education and the increasing demands of society for its improvement already at the stage of education at the university. There is a growing need for a new theoretical

understanding of the essence of innovative activity of students in an educational institution, the development of conditions that ensure the formation of the ability of students to readiness for new types and forms of activity that is innovative in nature (McWilliam, 2009).

In modern education, there is no definite and generally accepted concept of innovative activity. In addition, pedagogical innovations are considered more often from an applied point of view, as a result of educational practice (McWilliam, 2009). However, despite the lack of a unified concept, most educational institutions set themselves the task of introducing innovations. As a subject area of innovative activity in education, design and research activity is advocated.

Thus, innovative activity in all cases is considered as activity aimed at creating innovation, as a creative process aimed at achieving an individual's goal, realized by an active, independent, purposeful and creative person (McWilliam, 2009).

In relation to students, innovative activity can be defined as an independent productive, creative, purposeful activity in which a student, using new means to achieve the goal of activity, develops as a subject of innovation, as an innovative person (Fig. 5).

The result of innovation is the creation of a new educational product, new knowledge in the subject (McWilliam, 2009). It is always accompanied by the presence of a specific goal, which is recognized by students and actions aimed at achieving it. Moreover, such activity can be both individual and collective. It is indisputable that the formation of the ability to innovate requires the special, purposeful work of a whole circle of experts from within the educational organization to create special conditions that ensure the development of relevant personal qualities that ensure innovative activity.

In our opinion, the conditions that ensure effective preparation of students for innovative activities include (McWilliam, 2009):

1. The development of internal (personal potential) with such a set of qualities and abilities that will ensure success in innovation. Among such qualities may be: independence, faith in one's own strength, vitality, initiative, tolerance for the unknown, willingness to engage in innovative activities; promoting awareness among young people of their role and place in solving the problems facing society, the value of interacting with other people, the knowledge of their uniqueness through the development of their innovative potential, due to the presence of intellectual and natural

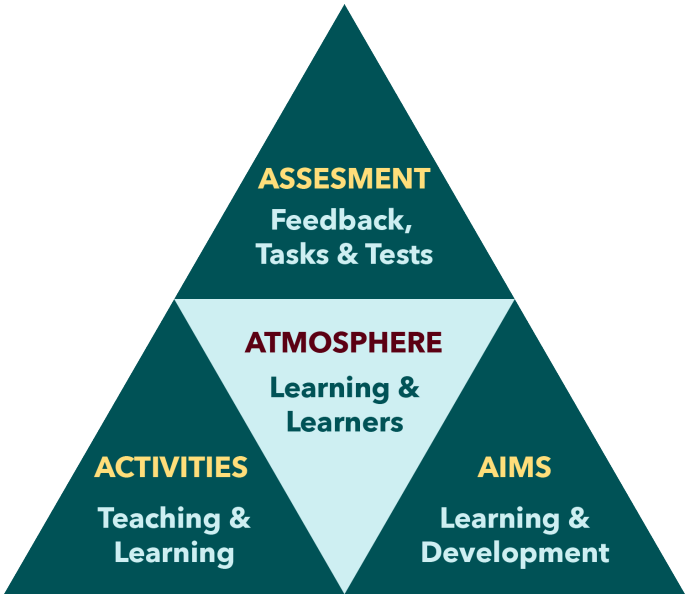

Fig. 5. Innovative Education Structure

One of the methods for developing students' creative potential is the use of divergent maps, text models based on key concepts, thematic support schemes based on a given structure, the method of "clusters", creative methods for solving problems and "brainstorming" in a teacher's work (Rauth, Koppen, and Meinel, 2010).

3. As an important condition stimulating innovative activity, in addition to training and education strategies, we see the style of relations between the teacher and students, which encourages any initiative and perseverance, self-reliance, tolerance in students' desire to express their opinion, cooperation with students (McWilliams, 2009). Also important in the work of the teacher is the search for methodological tools that allow students to show their interests, stimulating

achievement motivation and search activity (Hardiman, 2010).

Each of the three variables is capable of influencing another variable. In different situations and for different students, the strength of the influence of a particular variable will be different. Sometimes the influences of the external environment are most powerful, sometimes internal forces dominate, and for someone, the nature of the relationship with the mentor for innovative activities will greatly help (Dweck, 2006).

Thus, the observance of the above conditions, purposeful work aimed at involving students in the creative, research activities on issues relevant to them will contribute to the development of independence, determination, positively directed motivation, creative abilities, and innovative thinking (Eisner, 2006). The result of such an activity is a creative product that has an original, individual character, students will accept the values of creativity, self-realization, the disclosure of the personal potential of students who are ready to create new, receptive to innovations in modern society, their own activities (Eisner, 2006).

The main problems that were identified in the organizations of small producers constitute a generic weakness in this type of organizations such as limited access to the financial system, because the requirements to access productive credits are quite complex, another factor that is decisive it is the ignorance of allies or strategic partners that allow them to access prices that are more in line with their investment, accounting and tax informality that becomes a barrier when requesting access to financial support, in general terms there is ignorance of the administrative process and element that despite the training processes undertaken by different institutions it is not possible to create a culture of generating enterprises with a market approach, since the main concern of the producers is precisely the poor access to the national market and intrinsically to the international one because thanksto the technology transfer processes promoted by public, private institutions and non-governmental entities, they have achieved that in many groups the technical aspects related to the agricultural or artisanal activity are so advanced that they comply with international standards and that through intermediary companies their products They are exported to North America and Europe, however their objective is to be able to access that market on their own.

Over the years, a global wave has developed that seeks to establish mechanisms that transform society, seeking productive and commercial alternatives that distribute the revenues of economic activity in a fair way, showing the capitalist system as a generator of social problems, From this theory, a series of statements and theories have emerged that demonstrate how we can transform society so that we all benefit and achieve sustainable development. (Petit Primera, 2014), argues that as early as 1954 some theorists such as Tinbergen relate "international economic integration with world free trade, in both industrial and agricultural products." This is because it favors the elimination of obstacles such as tariffs and tax measures, which involve cooperation mechanisms such as macroeconomic policies.

The methodology for the investigation of the social and solidary economy of science has several approaches. The subjectivist approach is considered by the managing subject, which influences the external environment. In this case, researchers study the choice made by this economic entity. The rationalistic approach is based on the rational behavior of the subjects of the social and solidary economy, each of which seeks to benefit (for example, firms seek to maximize their profits; consumers tend to dispose of their income in such a way as to extract the maximum utility from it.) In this case,

researchers study not the behavior of economic agents themselves, but the laws governing this behavior.

There are different contributions in which it is sustained that the productive models need a change, among which we can mention (Porter & Kramer, 2011) that indicate that the capitalist system is under siege. In recent years, companies have been increasingly seen as an important cause of social, environmental and economic problems. There is a very broad perception that companies thrive at the expense of the rest of the community. On the other hand (Coscione, 2012) mentions that as soon as it was necessary to begin to establish norms and standards or to set prices, the first discrepancies began to occur. And in his opinion, a new form of colonialism was generated from the North.

The dialectical-materialist approach proceeds from the premise that all economic processes in the social and solidary economy are in motion; hence the research solves the problems arising from it, relying on empirical positivism (experience.) The economic processes of the social and solidary economy are carefully studied under the neo-positivist-empirical approach. In this case, economic science widely uses technical research tools. The purpose of this investigation is to determine methodologies for the

investigation of the social and solidarity economy and to study the conditions for the implementation of projects of a social and solidary economy in the transition to stream development, taking into account the experience of the EU (Social and solidarity economy: the Ukrainian choice, 2017.) Methodology for the investigation of the social and solidarity economy includes the SNA method, because SSE is a complex investigation object. SNA methodology concentrates research attention on in-house relationships, taking separate attributes and characteristics of the object as a secondary. Therefore, the methodology for the investigation of the social and solidary economy is a set of methods for studying such a specific phenomenon as a social and solidary economy.

The aggravation of environmental and social problems has posed the task of changing the "growth policy" to many countries, which, although it includes elements of social protection and environmental protection, but does not eliminate the structural preconditions for unsustainable and unstable development, "therefore the previously proposed socio-economic development paradigm is not managed to ensure a stable and safe growth. In this regard, many authoritative international organizations offer new global development strategies. Developing a new global

development strategy for the period after 2015, in particular, UN experts come to the conclusion that the "old" formula, namely economic growth plus social protection, does not fully meet the goals of the sessional development (Utting, & Laville, 2015.)

The investigation area

The investigation examines the processes of ensuring the social and solidary economy (SSE) in the context of the transition to soybean development. Paper also substantiates the concept of soybean nature as a state of a triad of three interconnected and interdependent systems: socio-economic, biological human nature, ecological. The investigation reveals the significance and content of the SSE, analyzes the principles underlying the functioning of the SSE structures, the experience of ensuring the SSE in the EU countries, the experience of the internal European network initiatives on morality and solidarity of the national territorial networks of Europe included in the Intercontinental Network of Encouragement.

History and the development

For a long time, the social and solidarity economy existed as a kind of poor relative: people knew little about it, and there

was a caricature of it, according to which it was nothing more than a generous and naive utopia. And today this idea takes a second wind (Dacheux, & Goujon, 2011.) The reason for such wide recognition should be sought in the scale of a social and solidary economy, which can no longer be completely ignored. In other words, utopia is embodied in reality, and this happens infrequently.

The social and solidarity economy was considered old-fashioned, and yet it is confidently moving along the path of innovation (Garber, 2003.) As an example, there is the cooperative "Repic" in Montpellier, where first a particular project is developed and only then the leaders are selected who will be entrusted with its implementation.

One of the alternatives that has been developed is fair trade, which begins between the 40s and 50s in the United States of North America, where a series of activities began that tried to establish a rational price for the sale of handicrafts in the international market, simultaneously in England a trading system for the inclusion of refugees in local markets was initiated. Fair trade developed strongly in 1964 following the call of impoverished countries at the UNCTAD Conference where they demanded "Trade, not help." From that moment on, a chain of "Solidarias" stores began, in Holland and then

Germany, Switzerland, Austria, France, Sweden, Great Britain and Belgium. (The Solidarity Economy Portal, 2019).

The social and solidarity economy is considered to be devoid of any ambitions, but in this sector there are also such large structures as the Vitamine T association in Lille (3 thousand employees,) GROUPE SOS (10,000 employees) Crédit coopératif (2 thousand employees,) the Sud-Archer cluster in the department of Drôme (1200 employees,) etc. 200 thousand enterprises operate in the French social and solidarity economy, more than 2 million employees, and this is every eighth a job in the private sector is employed there. 10% of GDP falls to the share of the social and solidary economy. Over the past 10 years, 440,000 new jobs have been created in the social and solidarity economy; this corresponds to an increase of 23%, whereas in the traditional economy, a similar increase over the same period was 7% (Wallimann, 2014.)

The rise of the social and solidarity economy is observed all over the world; from 5 to 10% of world GDP falls to this sector (ILO, 2017.) More recently, the fifth congress of the intercontinental network for the development of social and solidarity economy was held in Manila. In France there was a rally called "Meetings of Mont Blanc;" there were representatives of more than 40 countries (Boosting social

enterprise development: good practice compendium, 2017.)

A forum for the development and international solidarity, convened at the initiative of the Minister for Development Affairs in the subordination of the Minister of Foreign Affairs has become a platform for a broad dialogue between all participants in this sector and government structures.

The World Fair Trade Organization (WFTO), for its acronym in English, is a network made up of 60 member countries in which the agency reports that 12 of the partners are Latin American states that have joined the fight for a world with opportunities for all, under this framework, policies have been established in which they enable their actions to promote dialogue, transparency, respect and equity. (World Fair Trade Organization, 2019).

The social and solidary economy is not accidentally aroused so much interest. The ideas on which this sector is based are finding wide response among the population. It gives concrete answers to the urgent problems of our time: the desire for social justice, the fight against inequality, the protection of the environment, a complete consideration of resources. There is growing recognition that a social and solidarity economy can help meet the needs of both the population and the territorial entities.

Subject

The implementation of projects of a social and solidary economy in the transition to soybean development requires a deep understanding of its essence and key principles. Sestein development is the development that ensures the satisfaction of the needs of the present, without jeopardizing the interests (satisfaction of needs) of future generations. Sestina is the state of the triad of three interrelated and interdependent systems. It includes the socio-economic, biological nature of man and the ecological system. It provides a conditionally infinite in time and balanced in space reproduction of its key components. The key principles of the system development (SD) are the non-raising of the carrying capacity of the biosphere and its ecosystems, the preservation of the biological nature of man (including his reproductive ability,) the progressive development of a person's personality, environmental justice within the living generations, environmental justice between different generations (Eom, 2014.)

Only two possible ways to preserve the stability of natural conditions on the planet (and, hence, itself) remained in the human arsenal in conditions when the processes of human impact on nature have reached global proportions. The first

is to limit the growth of the Earth's population. The second is to learn how to change the processes of social production and consumption of products, reducing their negative impact on nature (Azzellini, n.d.) It can be done only by sharply reducing the environmental (material consumption, energy) of human life support systems; and the rate of this decline should overtake the growth rates of the population or at least correspond to them. They can be implemented in a social and solidary economy.

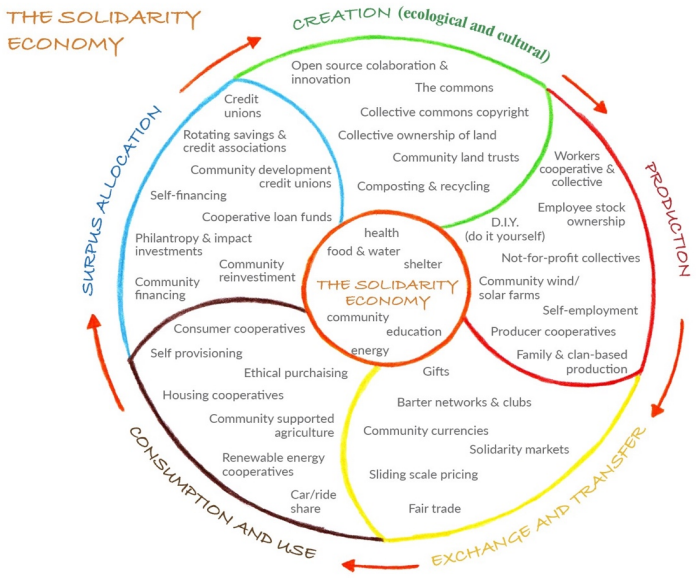

Figure 6: The Solidarity Economy — Redrawn with original content with permission of Ethan Miller (Jackson, 2009)

The social and solidarity economy is an alternative to the capitalist system of economic relations. In the formation of economic relations in the conditions of the SSE, the leading role is played by ordinary people (Social economy: Meps

Highlight benefits of third sector, 2009.) In contrast to the concepts of economic growth, the SSE is the economy of ethical principles and value approaches to economic development, which in accordance with the soybean development of socio-economic and ecological systems is provided. In a broad sense, the social and solidarity economy are such forms of social organization of labor in which the economic and social goals and interests (including environmental ones, perceived as socially necessary) are harmonized among the subjects of the economy.

In the narrow sense, the SSE is a form of social organization of labor that relies on solidarity between the members of the economic system to a large extent and where economic results are viewed as a means of achieving social goals. According to its principles, the CCS differs significantly from the public sector (command economy) and the sector formed on the private property. It is no coincidence that the SSE is often referred to as the "third sector." Unlike the public sector, where the organizational impact (setting goals, accepting tasks and often selecting funds) is formed from the top to the bottom, in the SSE the organizational principle is implemented in reverse-bottom-up. Unlike entrepreneurship organized on the basis of private property (including the same co-operatives,) maximizing profits is not a priority in the

SSE (Schelkle, 2017.) Additionally, all participants of the economic process have a much greater equality of rights in decision-making and responsibility for possible risks, as well as a much greater degree of freedom and level of self-organization.

The analysis of the literature on the subject of the SSE makes it possible to systematize its basic principles (Roberts, 2015.) These principles include the harmonization of economic and social development goals (including environmental ones,) voluntary participation, self-organization and self-management, collective economic and social responsibility for performance, initiative in addressing any social goals, autonomy (each association is built on own principles of organization and independent from the state,) development orientation (as a rule, profit in the organizations of the SSE is not distributed among the participants, but is reinvested in the far its development in contrast to cooperatives,) the differentiation and specialization of individuals in the implementation of various social functions; interaction of individual participants is complementary and enhances synergies, diversity of forms and economic pluralism, differ in their forms, management principles, activities and scope, democratism of organizations, the organization is built from the bottom up, the spirit of community and trust, the priority

of protecting the most vulnerable segments of the population (not casually in various publications of the SSE is called the "national economy",) reciprocity.

The main principles and features

The principles of ethics, altruism, acceptance of differences and interdependence are replacing the "class subtext solidarity in the SSE. In the modern Social-Democratic concept of solidarity, the emphasis is on creating a sense of community, social integration and the division of social risks, instead of building socialism in a revolutionary way (Fonteneau, Neamtan, Wanyama, Morais, & Poorter, 2011.) Recognition of the primacy of individual freedom over collective solidarity is declared instead of absolutizing the principle of collectivism. The main motive of the activity in the SSE is not the maximization and redistribution of profits, but the satisfaction of the needs of the collective, the creation of jobs, the improvement of working conditions, the implementation of civic initiatives, the protection of the natural environment, the improvement of health, the realization of a healthy lifestyle and so on. As a rule profits in the OSSE are not redistributed among the participants and reinvested in their development and implementation of new projects.

Forms and methods

Forms and methods of the SSE are a kind of alternative to competitiveness. If the latter allows the effectiveness of economic systems to be achieved by selecting the perfect forms of these systems; in the SSE a similar increase in efficiency is achieved through the implementation of synergetic effects when integrating the efforts of their individual participants. Examples of such areas of the SSE include green production and green tourism, which are only gaining momentum. The development of green tourism not only helps preserve the natural territories, provides jobs to the local population, but also contributes to the filling of the budgets of countries and regions. In France, the income from it to the national budget is over 1 billion euros, and to the regions' budgets - 2 billion euros; in the Serbian budget, it exceeds 100 million euros or 15% of the proceeds from all types of tourism developing in the country (Calvo, Pachón, & Zikidis, 2017.)

It should not be considered that only small-scale activities (for example, agrarian or housing cooperatives) are the destiny of the SSE. The largest international projects can be implemented following the principles of the SSE. In particular,

the formation of the all-European energy information system for the receipt and consumption of "green energy" - EnerNet is planned exactly in this way (Matsui, & Ikemoto, 2015.) EnerNet is an information and energy active system that provides the collection (from separate sources) of transmission, storage, conversion and use of electrical energy in the most efficient mode. In fact, EnerNet is a giant international intellectual enterprise. Euronet functions include energy generation; collection, transfer, storage, leave, control, tariffication, sale, optimization of operations; protection, maintenance of quality of the electric power; stability of power systems.

Agro-industrial networks producing green products and organizing green tourism can be formed in this way. Such networks can solve the goals and tasks of the sisters of the new development, which is especially important in modern conditions (Lepage, 2012.) The SSE is a movement that embraces cooperatives, community initiatives, agro-environmental projects, community development banks and fair trade programs, promotes economic activity that creates decent jobs and at the same time aims to achieve social and environmental goals. In general terms, it covers the democratic management of the economy at the level of enterprises and communities, as well as reinvestment in job

creation and community projects, taking into account that profit is not the main motive.

The solid model of the economy (T-model) is a socio-economic system based on the new principles of creation and distribution of material wealth in society on the basis of generally accepted concepts of justice, uniting the interests, goals and actions of the whole society (government, business, all citizens) to achieve the highest the quality of life of people (for improving human well-being, while respecting the dignity, freedom and equality of all people.) The T-model includes a number of mechanisms that establish simple, logical rules for mutual Wearing in most areas of human activity (Hayward, 2012.) They are the formation and distribution of budgets, optimal taxes, objective prices, the quality of goods and services, feedback in management, a national staff of management, remuneration for work on final results, a scale of social justice, pensions, social payments, employment, reducing corruption, reducing the stratification of society by income, the end result (a new unit of the economy,) environmental security, etc.

The Intercontinental Network for the Promotion of the Social and Solidarity Economy (INPSSE) deals with the provision of SSE on a global scale. It was first registered as a non-profit

framework of socio-associative traditions (UNRISD, 2012.) Then, in the seventies, it underwent a certain evolution, and its terms of reference expanded. Henceforth, such tasks as combating inequality, protecting the environment, protecting the most vulnerable categories of citizens, caring for certain territorial entities that were on the sidelines of nationwide development began to enter the sphere of social and solidary economy.

Social and economic solidarity relates to various spheres of activity and is "overcrowded" with synergies (Ikemoto, & Matsui, 2015.) The main institutional role of social and economic solidarity, adequate legislation, rules and regulations, tools for assessing the impact of the SSE, more effective integration of the new policy at different levels of government, and intensive dialogue between civil society organizations are essential in order to create a political and legal framework for the effective introduction of the principles of the SSE. The assessment of potential and real effects is possible on the basis of comparison with already existing achievements in this area, as one of the main engines of the SSE.

Thus, the methodology for the investigation of the social and solidary economy is a set of methods for studying such a

specific phenomenon as a social and solidary economy. It includes several approaches; they are: subjectivist, rationalistic, dialectical-materialist and others. Economic processes must serve the individual and the collective, not capital; the structure of the SSE should be autonomous from the state, built on the democratic principles of collective solidarity initiatives and responsibility. All above dictates the methodology for the investigation of the social and solidarity economy. Therefore, the methodologies for the investigation of the social and solidarity economy should contain network analysis methodology SNA and study social and solidary economy on interactions within the network.

Westhead and Wright (2013) define entrepreneurship as an act of creating and running a business or business, as well as scaling them to generate profits. On the other hand, Ferreira (2018) provides a more modernized definition of entrepreneurship, which is about transforming the entire world through solving big problems including the creation of innovative products and systems, social changes, and presentation of the new life-changing solution. One of the entrepreneurship's concepts is the application of tools, principles, and talents of business in order to seek solutions to both environmental and social challenges. The individual or group of individuals behind any entrepreneurship, the entrepreneurs, take the risks in the name of an idea or innovation in which they spend much of their time and money on an uncertain venture. However, the success of the entrepreneurs can turn their concepts into new products and services which create several job opportunities, as well as convenience to humanity. In line with this, technological advancements and social innovation play an integral role in improving the quality of life. One of the social innovations that improve the quality of life is the assistive technological solutions for disabled individuals.

The individual or group of individuals who operate and organize in any form of business should possess set of many traits in order to have successful business including business focus, confidence, creativity, delegator, determination, independent, knowledge-seeker, relationship-builder, risk-taker, and much more. Every decision of the entrepreneur should be made according to the impact of the profit, whether anticipated or observed. Entrepreneurs should be confident with their own knowledge that will lead to their business' success. They do not ask questions about whether they really worth to succeed or whether they can succeed. In addition, creativity plays an integral role in the success of the entrepreneurs and their business in which they make connections between seemingly not related situations and come up with new solutions for specific issue or problem (Whitmore, 2016).

Also, successful entrepreneurs allow assistance from other people since they are aware that they cannot do everything on themselves. They need to have determination in persevering through difficulties. Moreover, entrepreneurs are independent in the sense that they have the ability to do whatever is needed to be done. Successful entrepreneurs do not stop on the knowledge they have since they are always seeking and eager to relevant knowledge. Furthermore,

entrepreneurs also have the ability to clearly convey the business, itself, and convince other people about its value. On the one hand, entrepreneurs create harmonious relationship around the people around them since they know that these people help them the most in regard to the business growth and survival. Lastly, entrepreneurs need to become a risk-taker in order to succeed in their business since any growth and new venture involves risk. They must have an instinctive knowledge of how to manage and mitigate high-risk situations in order to achieve success in their businesses (2016).

According to Laabidi, Jemni, Jemni Ben Ayed, Ben Brahim, & Ben Jemaa (2014), the world report in regard to disability affirms that more than one billion people throughout the world are living with some disabilities. In line with this, according to the UNESCO Global Report (2013), people with disabilities are facing a wide range of barriers such as the access to education, information, and the lack of job opportunities. The Disabled World (2018) described disability as a consequence of a particular impairment that may be cognitive, physical, mental, emotional, sensory, developmental, or even some combination of these. In addition, it refers to the lack of ability in comparison to a person's or group of person's norm or standard. It may be present since birth or takes place during an individual's

lifetime. The fact that technology and innovations greatly affect humanity enable people with disabilities to be welcomed and accepted open arms into the able communities. Furthermore, technology always lends a helping hand to individuals with disability especially for those who have a visual impairment, speech impairment, and motion disabilities or disorders. For this reason, entrepreneurship plays an integral role in innovating and producing products and services that can enhance the humanity's quality of life, especially those living with a disability.

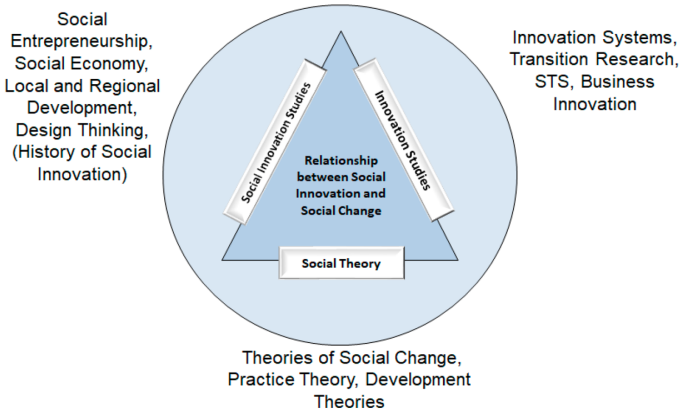

Figure 7: Social Entrepreneurship and Innovation (Schröder et al, 2014)

Technology Solution for Disability

Technology provides solutions for individuals living with disabilities from personal lived experiences to community achievements. Today, there is a wide range of products and services that greatly help people with disabilities to live almost the same quality of life with the normal ones. According to Zielinski (2014), there is a huge percentage of people who need for disability assistance in different ways and these needs arise from a variety of ways. In addition, the author points out that companies are not creating and developing technologies, products, and services for persons with disabilities simply because out of the desire to help. It is clear that there are social responsibility reasons behind the innovations of different businesses, but they also look at it as a business opportunity. Today, there is a growing market and increasing demand for accessible technology for individuals with disabilities.

DynaVox EyeMax System (Tobii DynaVox)

One of the major problems of individuals who are paralyzed have cerebral palsy, and stroke victims are their ability to communicate and participate in their spoken communication. One of the businesses that focus on speech

generating devices is the Tobii Dynavox, formerly known as the DynaVox Mayer-Johnson. The company provides products with the ability to participate in spoken communication through the utilization of the eyes. The product utilizes sophisticated eye tracking system wherein every user can interact with the keyboard on the screen that allows them to enter the words and phrases which are then translated to spoken text through the device's text-to-speech mechanism. Moreover, the company's products are offering language software wherein hundreds of pre-defined words and phrases can be selected from their lists or can be chosen through scenes and pictures. In addition, the products are instantly accessible to young individuals, as well as with mentally disabled who may not be able to grasp written the language (Tobii, 2017).

This product evidently contributes to improving the people's quality of life, especially the people with disabilities in regard to communication. It assists individuals who cannot communicate efficiently and reliably with their own voices due to language, physical, and cognitive impairments. Also, the creation of the product provides an equal opportunity for disabled individuals to participate in every aspect of life since communication is an integral part of it. According to Rytterström, Borgegstig, & Hemmingsson (2016), products and

innovations from Tobii Dynavox help people, especially teachers and students in the inclusive education processes, as well as to the implementation of educational practices in the best and easiest way possible.

Kapten Plus (Kapsys)

Today's society is best characterized by the increasing mobility of people across different regions in the world. However, there are individuals who are visually impaired who are unable to travel alone. However, the company Kapsys provided a solution for visually impaired individuals, which is the Kapten. It is an innovative mobile navigation system, which is technically based on the satellite geolocation, commonly known as GPS, and vocal interaction. The device speaks location and direction for the users to know and is aware of their location and when they are heading. Moreover, the product can find the best route, despite the mode of transport. It also has the ability to store and play music, as well as to make and receive calls in any given time. It can also use the community platform in order to share the addresses and experiences of great spots. Lastly, the Kapten plus can geotag the best museums, parks, restaurants, bars,

and much more of places where the users come across (Eaton, 2008).

The Kapten plus is barely bigger than a credit card, but contains an impressive and huge range of advanced technologies including USB connection, Bluetooth interface, GPS navigation system, voice-recognition system, speech synthesis system, mp3 player, and FM radio receiver. This product greatly enhances the quality of life for individuals who are visually impaired since it offers an incredible amount of security and a wealth of useful information which allow blind individuals to travel independently without the fear of being lost or wandering in the wrong directions. In support, O'Dell (2011) Kapsys made it possible for visually impaired individuals to regain confidence on traveling without any hesitation on themselves.

DEKA Robotic Arm (DARPA)

In 2007, the Defense Advanced Research Projects Agency (DARPA) funded individuals to create a prosthetic arm, commonly known as DEKA arm, which makes it possible for the users to control through their thoughts in order to perform complex functions. The DEKA arm is the same weight and size as a natural human arm and can detect an estimated ten

movements including holding and grasping some objects. The product works through its detection of electrical activity created by the contraction of muscles closely located to where it attached (Guizzo, 2014). Moreover, the product has a sensory feedback system. For instance, it enables the user to learn what level of strength is appropriate for a specific task.

The main objective of the 100 million US Dollar project is to create an advanced prosthetic arm, which is closely the same as with the natural control in order to improve the quality of life for the amputees. In fact, the DEKA robotic arm allows some people to conduct more complex tasks than they can with their current prostheses tool since the DEKA robotic arm is more closely resembles the natural characteristic and motions of the human arm (2014). Today, there is, still, no available information on the price and availability of the product. In addition, the DEKA is planning to pursue commercial and manufacturing opportunities to bring the product to the market. For this reason, entrepreneurs are doing their best in order to grab the opportunity to manufacture and commercialize the product since they know that there is a bigger possibility for it to create a lot of profits.

iBot Stair-Climbing Wheelchair (Toyota)

The iBot stair-climbing wheelchair makes it possible and more convenient for a physically-disabled individual to climb stairs. The product utilizes a self-balancing technology that provides the wheelchair-bound individuals the freedom to navigate on any terrain, especially stairs. The product seems to be considered an ATV wheelchair. The iBot was first introduced in the market in 2001, but the product's too expensive price, $25,000, made it difficult to sell out in the market. However, the Toyota Company considered it an opportunity to help on making a comeback for the product since it is really beneficial for physically-disabled people (Vincent, 2016).

The Toyota motor company enhances the iBot in which it adds some unique characteristics such as the upwardly movement and Segway segue. Now, the iBot can stand on two wheels which give the users some extra height to reach an object in higher areas. It also allows the users to feel a less chair-bound wheelchair through providing an eye-level of interaction. The company is planning to sell the product at a much lower price - $3,500. The company is not aiming for a huge profit on every product, but focusing on small profits in the fastest way possible. The iBot stair-climbing wheelchair

improves the quality of life of physically disabled individuals wherein it allows the users to travel on any terrain without the assistance of other people. In line with this, the product enhances the safety and confidence of every user when moving from one place to another.

Entrepreneurs, with the help of internet and ICT, can facilitate the economic, social, and civic participation of individuals with disabilities. Social innovations including DynaVox Eyemax System, Kapten Plus, DEKA robotic arm, and iBot stair-climbing wheelchair improves the lives of people with disabilities. The DynaVox Eyemax system allows individuals who are not able to communicate efficiently, due to some reasons, to create spoken communications through their eyes. On the other hand, the Kapten Plus allows the visually impaired individuals to know their current locations, as well as the appropriate and fastest route for them. Lastly, the Deka robotic arm and iBot stair-climbing wheelchair help physically disabled individuals to conduct some physical actions such as holding, grasping, and traveling from any terrain. These social innovations improve the lives of people with disabilities. However, the main goal of the entrepreneurs is to earn a profit and expand their businesses, not to help the people in need.

Chapter 9. Management of Innovation in Organizations

An innovation involves having the tools to enhance the capacity of the organization to achieve the strategic goals. Thus, the organizations that can manage their changes effectively must demonstrate a given set of characteristics. Leading innovations in the organizations enable the businesses to position against the competition in the market besides the constant review of the needs of the market. The definition implies that no organization can survive in the distinct markets if it lacks the capacity to manage innovations effectively. Management of the changes in the markets is informed by the fact the businesses are dynamic and only the companies that respond appropriately to the needs of the market survive. Changes in the organizations are not confined to just one sector but rather all the aspects of the operation of the business. Companies must have the unique strategies to distinguish from other players in the different areas.

Approaches applied by the various companies must also be relevant to keep addressing the changes in the market. In the current arrangements the different criteria used by Apple, Facebook and Google have captured the imagination of the market due to their dynamism. Such companies have distinct approaches which they relentless apply in each of their

operations. Innovation determines how the business interacts with the stakeholders in coping with the forces of the market. In fact, most of the successful leaders such as Steve Jobs and Mark Zuckerburg are known to be great innovators. The investigation also explains how the organizations promote innovations by adopting management approaches for research, development, and innovations. This investigation will analyze innovation as a means by which the organizations increase their competitiveness, survive and thrive. The investigation makes use of several headings to improve clarity and understanding throughout.

Management of the innovations in the businesses involves implementing ideas from the creative employees to fulfill the needs of the companies. The significant difference between the innovators and the pretenders is that former implement their plans and get the chance to learn from their experiences. On the other hand, the less innovating businesses talk about the plans but fail to apply them. Managing the innovations also implies giving the employees and other stakeholders the option to abandon as they implement the concepts in various departments of the business. Employees, who have the freedom to consider failure as an option, engage in the constant review of the projects and improving the possibilities of success.

Managing innovations in the organizations involve creating an environment of trust. Therefore the employees are aware of the fact that there is no risk involved in the change. Management recognizes the fact that initial ideas may sound stupid only to turn out to be transformative. On the other hand, an administration that creates an environment of fear has employees who fear to reprimand and thus are unlikely to engage in any innovations. Managing of the changes involves the team's reasonable level of autonomy so that they have clear goals and chart their paths in achieving the objectives.

Managing modifications implies that individuals make the mistakes but clear from such errors to improve in the future projects. From the errors, members of the innovating teams learn better methods of accomplishing the projects. Managing innovations start with hiring the right talents, giving them the resources and the freedom to resolve issues in the organizations.

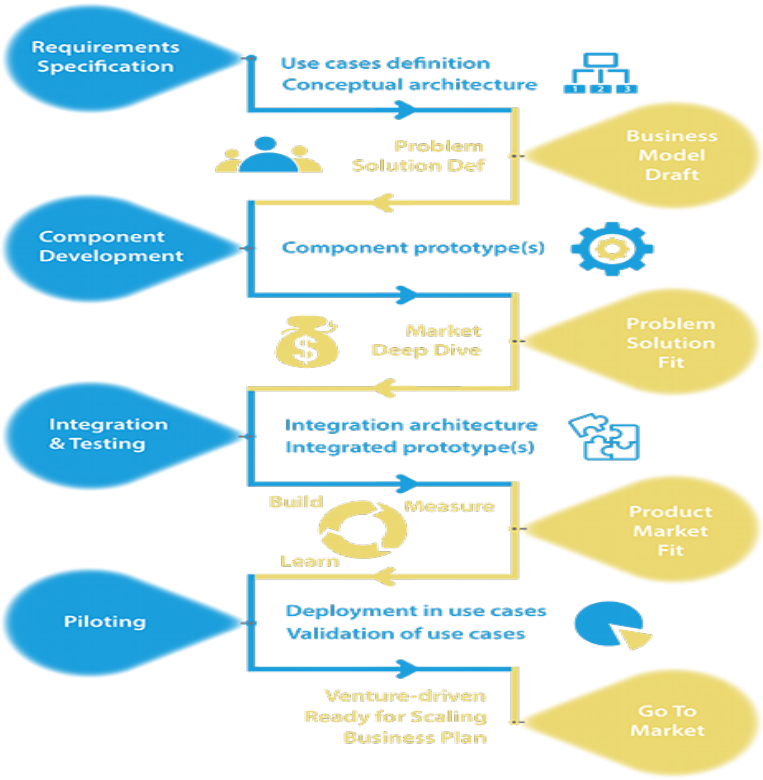

Figure 8: Innovation Management (Nissatech Innovation Centre, 2018)

Innovation as a means by which organizations improve their competitiveness, survive and thrive

Organizations operate under very competitive environments, and thus there is a need for the businesses to employ the innovations in the efforts to get ahead of the competition (Anderson, & West, 1998). Hence, the organizations always strive to gain competitive advantage. The business management acknowledges the fact that a failure to innovate will see them lose vast sections of the market. It is paramount to state that innovations do not necessarily imply inventing but slightly about adapting to the changes in the

business environment by altering the business models to offer improved services.

Innovations create unique opportunities

One of the ways that an innovation leads to a competitive advantage of a business is through the creation of new opportunities (Abeysekera & Dawson, 2015). Innovation involves identifying opportunities that are different from those of the competitors in the particular environment. Hence the innovations ensure that business leverage on unique opportunities from those of the competitors by exploring areas that have previously not been exploited. An example is the ability of the organizational management to create distinct customer niche or the ability of the business to penetrate new markets (Johnston & Marshall, 2013). Organizations could exploit both the internal and the external systems to create opportunities that are unique to the operations of the company. Internal approaches could include finding unique marketing opportunities while external methods could involve adding new products into the business.

Thus the creation of new opportunities involves adding something new and fresh to differentiate the business from

the rest of the competitors (Gemser & Perks, 2015). Businesses that do things in the same manner for elongated periods eventually face imminent collapse. Apple Inc. is known for a high level of product innovation and thus has been able to distinguish from the competitors in the electronic markets (Love & Roper, 2015). The company also employs unique approaches in penetrating new markets globally. An introduction of the iPhone into the market changed the way people communicated. The revolutionary model phone was received with a lot of skepticism as it did not have the physical keyboards like other phones on the market. Apple Inc. has been found to take the lead in the innovations of the cellphone market. For example, face of ID offers the phone unique features in a market that is congested by all manner of the products.

Another approach employed by the company is that the strategy their products long before they release the items in the market. Thus the products such as the iPhones, Ipad, and Apple watch were initiated long before they were introduced to the market (Love & Roper, 2015). The strategy worked effectively implying that the company introduced a unique product in the market and thus differentiating from the rest of the competition. The implication is that Apple created an opportunity that did not exist previously. The introduction of

the Ginger Coke in the Australian market by Coca Cola was based on the need to create an opportunity that could take the business ahead of the competition in the market.

Increasing the speed of innovation

Innovations increase the capacity of the organizations to move quickly in the effort to transform their company. Slow organizations often get overtaken by the businesses that are quick in implementing the change processes. Innovations ensure effective and speedy changes giving the companies the competitive advantages required to cope in the market. Organizations that are unable to introduce the rapid modifications lag behind and lose substantial segments of the market to the competitors. In managing the concept of change in the innovation, Apple Inc. management has always been concerned with the speed in which it delivers the expectations to the consumers (Johnston & Marshall, 2013). Since the company has a large group of innovators, the administration has been at the forefront in prioritizing the areas of innovations. Thus, the company focuses on things that matter to increase the speed of the innovations thus delivering the customer expectations. Apple Inc.is guided by the realization that the technology sector is changing fast

and hence the importance of speeding in coping with the changes.

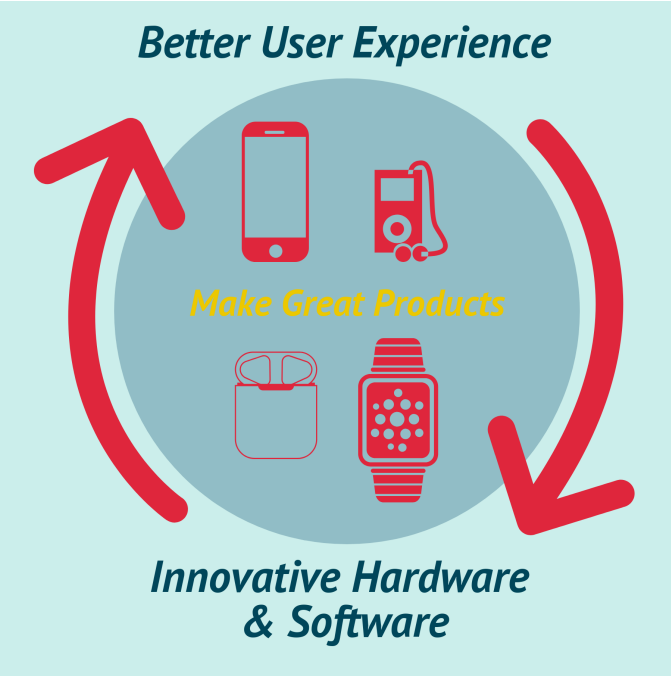

Figure 9: Apple mission statement and vision statement (FourweekMBA.com, 2019)

Enhancing the creative environment

Companies have always realized that it is not easy to apply innovation to gain a competitive advantage. Therefore the business employs approaches that ensure it is easier to get the desired innovations. One of the measures that organizations employ ensures that the internal business structures are designed in a manner that supports changes. Structures that

support innovations are characterized by effective communication and free flow of the ideas, thus eliminating the barriers (Johnston & Marshall, 2013). Such approaches create the necessary spark necessary for innovations. Innovations become successful when members of teams in the organizations start thinking from the perspectives of the consumers. Changes must consider the issues that will be solved on implementing of the ideas. Thus, the organizations should avoid inventing new products or engaging in the business process for the sake of it.

Innovations also become more comfortable if all the members of the organization are involved. Hence the innovations should not be left to the product developers, markets researchers, and scientist. Innovations are likely to succeed if everyone has a role to play as it makes it easier for the implementation of the innovations. Thus all the business requires the approaches necessary to keep the companies ahead of the rest of the competitors. The internal structure of the industry is paramount in supporting all manner of innovations in the company to create the appropriate competitive advantage to overcome the forces of the market. Organizations must adopt the proper cultures for the innovations to succeed in the different environments.

Innovations as a means to ensure the survival of organizations

Innovations enable the companies to overcome the stressful situations and cope with the turbulence in the specific sectors. Due to the high levels of the innovations, the companies achieve the necessary insulation to deal with the pressure of operating in congested markets. For example, in the high tech sector, Apple Inc. is not the only player. However, the company has been able to cultivate an almost religious following among the customers who are swayed by the story and the history of the products. The company employs various tactics in ensuring that it copes with the forces of the market. One of the approaches to ensure the survival of the company is applying the internal and the external strengths of a company. For example, Apple Inc. employs the domestic tactic where the engineers are locked away to explore the ideas while basing all the concepts in inspirational moments.

The company also combines the plans with the concepts from outside the company and concluding with the stylish designs and elegant software. Thus, some of the innovative ideas at the company such as the creation of iPhone were

informed by external consultants who had been momentarily hired by the company. A combination of the approaches is crucial for the survival of the company. On the other hand, Coca Cola employs innovations to survive in the competitive soft drinks market by developing, testing, packaging and creating distribution models that keeps refreshing the business. Coca-Cola also produces programs that update the concerns of the local communities. Thus, the use of the unique employment of the individual strategies keeps the business moving in the midst of the competition in the sector (Gemser & Perks, 2015).

Coca-Cola has been employing the favorite themes in each market to explore approaches for the penetration of the particular market segments. For example, the "Coke Chills Out with 'Ice Bottle' Tour" summer theme was targeting the college students and the end year parties in the entire southeastern sides of the US (Love & Roper, 2015). Use of the ice-cool concept augured well with the students keen on coping with the hot season (Gemser & Perks, 2015). In the application of the unique themes, the company employs marketing innovations to survive in the beverage market where new products keep coming up. The management acknowledges that only changes could offer the necessary momentum to keep pushing for increased sales and profitability.

Innovation as a means to ensure the thriving of an organization

Organizations use the innovations for the growth of the organization. Hence organizations apply the innovation to advance the goals of a business. Most of the organizations apply innovations as a business discipline while managing and executing it systematically. Implications are that the organizations use the innovations as end-to-end procedures, whereby idea generation leads to product launch in the marketplace. The business ensures that the innovations are complete processes (Love & Roper, 2015). In the approach the business craft the role of the innovation in the corporate strategy depending on the business sector and the competitive situation of the business.

The organizations specify the kind of innovation to create the competitive advantage and the value that the creativity is likely to generate. Everyone in the company must be included in the definition and the scope of innovation. Interpretations that leave out some of the members in the description of the changes make it hard to achieve the desired purpose (Love & Roper, 2015). Companies use the innovations to find new sources of value in the business

continuously. Hence the industry identifies the specific areas where innovations are necessary to improve the business. On detecting the new values for the innovations, the executives set up teams to explore how the innovations could be applied for the benefit of the industry.

For innovation to contribute to the thriving of a business, it is crucial to direct most of the time and resources to the long-term and breakthrough innovations. Spending a lot of time and resources on the incremental procedures is counterproductive and could lead to wastage of time. Thus the innovations only contribute to the growth of the business if they do not target the short-term benefits. Most of the innovative companies achieve the breakthrough innovations depending on applications on the long-term initiatives.

Innovations involve taking risks by encouraging continuous improvements and rewarding failures. Hence the innovations do not discourage failures as real innovations are characterized by a lot of challenges (Love & Roper, 2015). The most important aspect is that the innovators learn from experiences to improve in the subsequent activities. Members of the innovating teams are encouraged to act and think big. Members engage in bold decisions and actions. Organizations can only achieve growths if there is a culture

that tolerates risks as well as rewards the initiatives. The employees are rewarded for taking the significant risks. Developing the culture that does not encourages failure leads to consistent breakthrough and growths of all the aspects of the organization.

For the organizations to thrive through innovations, they must measure the creativity performance and outcomes as in all other business functions. Hence the organization creates the metrics similar to the parameters operations, marketing and the strategies applied in the management. Some of the organizations keep unusable and inconsistent records of business innovations making it impossible for the organizations to leverage in the innovation tendencies. Inaccurate records of the innovations also make it hard to evaluate innovations performance. The business engages in the tackling detailed, consistent, and disciplined metrics about innovation performance leading to an increased contribution to the growth of the organization. The parameters of the innovations apply from the beginning to the end innovation process.

Innovations that focus on the customer experiences and gives attention to the technology has a high chance of contributing to the growth of business growth (Johnston & Marshall, 2013). Most of the best-performing companies focus

on the communications with the customers. Innovations related to the customer experiences do not dwell much on the technology as it is not easy for the customers to understand all the aspects of the technology. On the other hand, it is not essential to develop a technique for the sake of it, but instead, it is essential to understand the aspects of the technology that benefits the people. A vital element of the innovation is the understanding of how well the organizational management meets the expectations of the customers.

The organizations embrace open innovations and accept open innovation vehicles to deliver the inventions. An implication of the approach is tapping the external resources such as the research institutions and new businesses. The business adopts only the most appropriate aspects of the innovations to ensure business growth. Another aspect of business innovations that leads to the thriving of an industry is encouraging the concept generation from all directions and dimensions implying both internally and externally. Hence the business management realizes that innovations could only lead to growth if all the levels of the employees are involved in the innovations.

Due to significance in the businesses the companies appoint the chief innovation officers and uniform center of command

to guide all the corporate innovations. Such approaches indicate the commitment of the business in encouraging the innovations for business growth. Most business designates a senior executive to be in charge of the innovations as an acknowledgment of the role that it plays in the business growth (Love & Roper, 2015). Assigning the executive to the department enhances the level of accountability and improves all the dimensions of the innovations performance. Such a business would ordinarily have a substantial budget for innovation in recognition of the fact that innovations cannot occur in the environment of cash strain.

How organizations promote innovation through the adoption of management systems for Research, Development, and Innovation.

Promoting innovations through research

Organizations acknowledge the importance of management systems in the changes for business growth. Therefore, businesses use practical tools in management systems to enhance the performance of the employees (Lu, Tsang & Peng 2008). The organizations promote the innovations by allowing the employees to explore the methods so that they find the areas of the possible improvements. Explorations of the specific aspects of the

techniques enable the members of various departments to engage in research to find out how they could improve the operations. Organizations use the management systems to improve the employee's performance while ensuring that the employees have the freedom to explore how they could enhance their productivity.

Application of the management system increases the performance feedback improving the interaction between the employees and the management. A high communication between the parties is paramount in conversations on the necessary areas of research for creating new ideas. Use of the management systems enables the supervisors has sufficient documentation of the performance further providing the basis for analysis (Nambisan et al 2017). Documentation of the production allows the necessary evaluations are indicating the areas that require research innovations. A management system has various components such as performance evaluation, information gathering and performance feedback which are crucial in the determination of the dimensions where research is required.

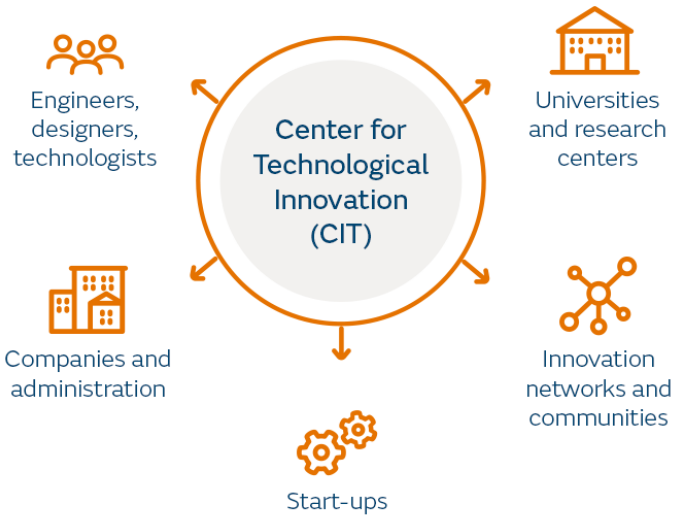

Figure 10: Promoting an open innovation system (Naturgy, 2019)

Management systems allow the business to have multiple data on the employee performance hence tracking the productivity in all the aspects. The supervisors increase the capacity to analyze the information and hence advice the management appropriately in the areas that require research for innovations. On the other hand, the performance is communicated to the employees for self-evaluation and improvement. Use of the management systems allows the organizations to rely on multiple sources of information and hence prioritizing the research areas for innovations to improve the business (Marek, Schaufeli & Maslach, 2017). The organizational management systems maximize the amount of information about each employee. The information is then

applied to determine the aspects of skills and the competencies that require to be improved.

Some of the information about the workers includes the relationship between them and the peers. Research is then applied in determining how the relationship with the peers and the supervisors affects the performance. The information is critical in determining the nature of the innovations necessary to enhance the performance (Bisbe & Otley, 2004). The organizations identify the essential dimensions of performance. Organizations use the management systems to interpret the employee job behaviors and the performance results. The implications are that the future innovations are based on the employee's job behaviors and performance outcomes. Organizational management uses the research in the business to simplify the interpretations by observing the performance from apparent dimensions which are connected with the values and the goals of the organization.

Results of the research are then applied to create the necessary innovations that address the specific challenges. The use of the study is crucial in developing structures procedures and reliable parameters in all the aspects of the operations of the organization (Van de Vrande et al 2009). An application of the business development system

enhances the profits through information gathering and evaluating the results as well as making the critical decisions on operations the in information is applying effectively in engaging in the innovations to meet the distinct requirements and thus promote the goals of the organization. Use of research enables the organizations to quantify the job behaviors and the outcomes to form the basis for innovations.

Research requires an application of the knowledge and technology to achieve the desired outcomes (Johnston & Marshall, 2013). The organizations that invest heavily in research and development produce massive amounts of knowledge across all the sectors. Such knowledge and the skills offer the basis for innovations which in turn improves the fortunes of the organization. It is important to note that it is not just about the generation of the knowledge but somewhat useful skills and the competencies which could accelerate the ability of the organizations to achieve reasonable levels of innovations. Research only becomes useful when it leads to the generation of knowledge in the businesses (Steinberg & Darling, 2017). Thus the component of research is never considered as an entity on its own .Rather, it is a tool applied in positioning the organization in the appropriate direction.

Organizations use the component of research as the basis for decision making thus being able to prioritize the critical areas in which the innovations could be based (Bhatnagar, 2012). Continued research in sectors such as marketing, promotion and human resources practices enables the company management to make critical decisions allowing the management to prioritize areas where innovations should be directed.

Research empowers the businesses and the organizations to create a technological approach vital for innovations (Johnston & Marshall, 2013). By having a clear technology strategy, the organizations increase the capacity to engage in the different types of innovations essential for the improvement of the business operations. Some of the most successful organizations spend a considerable amount of their revenue on research and development with the aim to reach the goals of their businesses. For example, in 2013 Apple Inc. invested more than 32% of the income in research and development to reach $4.5 billion in 12 months (Gemser & Perks, 2015).

The amount was one of the highest by any organization anywhere around the globe (Joachims, et al 2017). However such investments are recovered due to the top benefits that

result. The same company spent 35% of the spending in 2014 reaching $6billion as an indication of the determination of the company management to apply research in achieving the desired innovations (Gemser & Perks, 2015). In the same year the company opened a research center in Cambridge, UK, employing more than 40 people for the engagement solely on research and development (Hamel, 2008). The efforts of the company are in recognition of the pivotal role that research plays in promoting the innovations at the company.

Increased use of the research ensures that the companies achieve the project's strategy. The business gain the necessary focus on identifying the various challenges in each project. Gaining such insights not only enables the organizations to engage in innovations but also to position the organization against competitions (Du Plessis, 2007). Research increases the capacity of the organizations to improve the quality of the decisions. Enhanced decisions imply that the organizations have a clear understanding of where the teams should explore innovations for efficiency. As much as the organizations endeavor to engage in the innovations, such efforts cannot be haphazard. Instead, the endeavors are directed to specific areas of operation with the intention to increase the support for other sectors of the organizations.

Management systems for research improve the efficiency in the research projects so that the amounts of wastage are reduced while the productivity improves (Baregheh, Rowley & Sambrook, 2009). The implication is that there are increased funds for innovations increasing the capacity of business in various ways. Allocations in the research reduce due to reduced number of employees required in carrying out the activities (Gemser & Perks, 2015). Industry often allocates the saving achieved to other areas of the operations further accelerating the objectives of the organization. Savings made are assigned to other departments such as marketing, human resources and financial activities and other aspects of the innovations.

A performance management system at general electric applies a unique approach to promote research in the human resources (Thai Hoang, Igel & Laosirihongthong, 2006). At GE performance management involves enhanced feedback approaches while laying a greater emphasis on the development of the business. In the past, the managers would meet with the employees once a year for what was referred to as fate-determining evaluations.

The system would determine the performance of each employee enabling the organization to engage in research

to assess the state of affairs on the issues under consideration (Bon & Mustafa, 2013). The move would also assist in determining the areas where innovations were required. The managers would also help and guide the employees archiving the set targets. The performance system would also be applied in prioritizing the areas of research allowing the employees to engage in the innovations vital in improving the performance of the organizations. Since then GE has developed an app that the employees can actively employ in participating in research.

Due to the use of the performance management in a study, the employees have an increased capacity to explore the different areas of the organization operations to employ innovations for improvement. At Cargill Inc., there was a need to engage the employees as well as motivate them around the globe. The management acknowledges that dealing with the 155,000 employees was a herculean task, but the efforts of the company became a trendsetter in 2012. The introduction of the standard management system aimed at motivating the employees through continuous conversations (Thompson, 2017). The impact was instant with the results of the accompanying research contributing massively in innovations on various aspects of the production.

According to Cargill management, there have been massive implements from the efforts (McAdam, 2000). Supervisors have been giving positive feedback and not dwelling on the past as it used to be the case. Eli Lilly, which is one of the largest pharmaceutical companies in the world, transformative practices have been employed in the past to manage the performance. The company management has been in the frontline in using the HR best practices. In the subsequent years, the company engaged in the redesigning of the performance management systems with the aim to assess how the resulting features will influence the research and the innovations.

In the new processes the employees engage in own initiatives express their opinions on various issues affecting the performance which promotes the production in the organization. The implications are that the multiple businesses employ different management systems in recognition of the fact that research and innovations move together. Increased allocations in the study and the development lead to enhance changes in the business. Companies such as Apple Inc. have in the past demonstrated that increased assignments in the research and development lead to innovations that have tremendous impacts in promoting the brand and retaining customer loyalty.

Innovations are major components of the operations of businesses.Thus, no organization can survive in the distinct markets if it lacks the capacity to manage innovations effectively. Management of the innovations in the markets is informed by the fact that businesses are dynamic and only the companies that respond appropriately to the needs of the market survive. Structures that support innovations are characterized by effective communication, leading to free flow of the ideas and eliminating the barriers.

Such approaches create the necessary spark vital for new changes. Innovations become active when the members of teams in the organizations start thinking from the perspectives of the consumers. Other businesses such as Apple Inc. engage in high product innovations to remain ahead of the competitors. Apple Inc. is known for a high level of product innovation and thus has been able to distinguish from the competitors in the electronic markets. The company also employs unique approaches in penetrating new markets globally. An introduction of the iPhone into the market changed the way people communicated. On the other hand, Apple Inc. engages in innovations to impact the feelings of the customers, thus sustaining its relevance in the market. The company continually demonstrates its ability to do things differently and keep ahead of the competitors. This

investigation has addressed the need for the innovations in the business. The report also has discussed the promotion of the innovation efforts through the application of management systems in research development and innovations.

Discussion

The economic transformations taking place in the world create the conditions for the formation of a new structure of social production, which provides new opportunities for implementation, primarily in areas related to innovative activity. Under the influence of increasing internal and external competition, innovation is becoming an essential element of enterprise management.

Never before have enterprises faced such an urgent need for new technological solutions that simultaneously require a completely new organization for their use. Each enterprise today has been drawn into a new technological competition (Adhikari, 2011). New ideas and products, advanced technologies and organizational solutions increasingly determine the success of entrepreneurial activity, ensure the survival and financial stabilization of enterprises (Adhikari, 2011).

In its turn, the innovative orientation of the strategy and tactics of development of production presents new requirements for the content, organization and methods of managerial activity, necessitating the formation and improvement of specific forms of innovative management at enterprises (Hana, 2013). In the short and long term, maximization of the innovative factor is becoming a decisive

condition for the creation of competitive advantages of the enterprise, ensuring the sustainability of its development. Nevertheless, at present, these problems in domestic science are not sufficiently resolved, which is manifested in a shortage of the real mechanism for managing innovations, stimulating the use of innovations in production; insufficiently studied criteria, factors and methods for assessing the effectiveness of innovations (Hana, 2013).

The question of how innovation ensures the competitiveness of an enterprise, which is a decisive condition for its sustainable development, remains insufficiently resolved. The indicated insufficiency of theoretical and methodological developments of innovation management tools leads to a decrease in the economic efficiency of enterprise functioning in a market economy (Evers, Cunningham and Hoholm, 2014). At the present stage of production development, the study of these problems and the development of methodological recommendations for enterprises where the use of innovation is a determining factor in their competitiveness are especially relevant.

For any modern organization operating in conditions of risk and uncertainty (and risk, as we know, is one of the main indicators of economic activity), there is such a problem as

survival, the implementation of continuous growth and development (Evers, Cunningham and Hoholm, 2014). Different organizations try to solve this problem in different ways, and the ways to solve this problem depend on existing circumstances and conditions, but the basis for solving this problem is the organization's activity to create and realize competitive advantages (Evers, Cunningham and Hoholm, 2014).

In order to obtain sustainable competitive advantages, organizations need to find new ways and methods of conducting their activities. One of the important factors that can affect the competitiveness of a business is considered to be the use of various kinds of innovations in production, which significantly improves the production, scientific, technical, social and financial spheres of activity in the new institutional environment (Fitzgerald, Wankerl, & Schramm, 2011).

Innovation is one of the factors of increasing competitiveness, namely the final result of innovation activity, which manifests itself in the implementation of an improved or new product (service) at a fundamental level, which is used in further practical activities (Miller and Morris, 1999). On the other hand, innovation can be seen as the end result of introducing a new product (service) on the market, brought to the stage

of commercial use and starting to give an economic effect (Goldenberg, & Mazursky, 2002).

Based on the above definition, we can consider the following classification of innovations, each of which affects the competitiveness of organizations:

1. Entrepreneurial - thanks to this type of innovation, organizations can diversify into unrelated and related industries, which helps to strengthen the overall competitiveness of organizations through the competent redistribution of various risks across different geographical territories and markets (Nicholls & Murdock, 2012)

2. Technical - thanks to this type of innovation, organizations are able to improve the technical characteristics of the created goods (services), which increases their competitiveness in comparison with similar products (Nicholls & Murdock, 2012).

3. Production (technological) - this type of innovation allows organizations to make the transition from the old energy-intensive technology to the new energy-saving, while increasing its efficiency. Due to this type of innovation, such competitive advantages of a product (service) appear as non-price and price. In turn, organizations can gain a competitive advantage (disadvantage) while interacting

with counterparties due to a change in the value chains of production services (Nicholls & Murdock, 2012).

4. Market - this type of innovation opens the door to new markets, increases the flow of new customers, and, as a result, there is an increase in the sales of organizations, so that the organization is able to use price competitive methods to a greater extent. Along with this, the organization also has the ability to exert competitive pressure on suppliers by increasing the supply in new markets for a similar type of service (Nicholls & Murdock, 2012).

5. Information - this type of innovation enables organizations to change their internal environment in order to increase the efficiency of their internal processes (Nicholls & Murdock, 2012). This procedure allows you to more quickly respond to changes in the external environment, thereby ahead of the competition.

6. Management - this type of innovation allows organizations to make management decisions more quickly and accurately (compared to competitors) (Nicholls & Murdock, 2012).

7. Economic (financial) - this type of innovation allows organizations to use their financial resources more efficiently, thereby increasing the competitiveness of organizations by increasing their financial independence (Nicholls & Murdock,

2012). Along with this, it becomes possible to finance measures to strengthen or create competitive positions.

Due to the innovations described above, organizations can produce competitive goods (services), and thanks to innovative activity, they can increase their own competitiveness. One of the main tasks of the management of any organization is, having a huge number of hypothetical innovations, to determine the possibility of introducing these innovations into production based on the scale of innovations, the degree of their novelty, and the interaction of these innovations in the structure of organizations (Ries, 2011). Many economists point out that the most important effect of innovation on competitiveness is to increase the duration of retention of competitive advantages.

The relevance of the innovative behavior of organizations in order to strengthen their competitiveness is especially pronounced in two cases: firstly, when the income of organizations simply does not cover their costs (for example, due to lower market prices for products manufactured by organizations). This leads organizations to the need to conduct product or process innovation. Secondly, it is imperative for organizations to implement innovative technologies if unsatisfied market needs are identified during market research on demand (Tidd & Bessant, 2018).

Based on the above data, we can make the following classification of the main causes of innovative competitive behavior of organizations.

1. Change in the level of competition of organizations. The structure of the industry has a significant impact on the level of innovation activity. The lower the level of competition, the less the desire for innovation, and vice versa (Tidd & Bessant, 2018).

2. The desire of organizations to obtain economic profit is another reason for innovative activity. Thanks to innovations, organizations get a chance to temporarily become dominants in the market, that is, they have the opportunity to dictate their prices to customers and, as a result, receive temporary economic profits in excess of the usual (Tidd & Bessant, 2018). Moreover, the less radical innovation is, the shorter the longer period it brings more profit, and vice versa.

3. The introduction of innovations enables organizations to expand the scale of their activities, since successfully introduced innovations open new doors for organizations in unoccupied markets (Tidd & Bessant, 2018).

4. New state regulations, forcing organizations to carry out unplanned changes, are also the reason for innovative activity (Tidd & Bessant, 2018). For example, toughening environmental standards entails corresponding changes in

technical systems in particular, and in the structure of production as a whole.

In order to implement an innovative type of competitive behavior, it is necessary to choose the right innovative strategy. Below are two types of strategies that describe how organizations are able to increase their competitiveness by changing the characteristics of goods (services) offered to the market (Tidd & Bessant, 2018).

Summing up, it is important to note that such a type of competitive behavior as innovative is a competition between organizations for the opportunity to get the most profit by creating and introducing new goods and services to the market for the consumer and manufacturing sectors, for more favorable conditions for the sale and production of products (Tidd & Bessant, 2018). Actually, the goal of organizations in conducting competition is to catch up and overtake all their competitors-manufacturers of goods (services) already familiar to the market.

To improve their competitive position in the market, organizations introduce innovations, due to which the following effects can be obtained:

1. Improving the competitiveness of goods, which creates new competitive advantages in the near and medium term.

2. The inculcation of new needs that create new competitive advantages in the long term.

3. Improving the efficiency of production, which transforms the competitiveness of the commodity mass into the competitiveness of organizations

However, in modern conditions, innovation is more or less inherent in any manufacturing enterprise. Even if an enterprise is not a leader in the innovation market, sooner or later it will certainly face the need to replace obsolete technologies and products. Over the past few decades, the entire system of the world economy and the world economy have undergone significant transformations. Important processes such as globalization, urbanization, climate change and the distribution of forces on the world stage have had a significant impact on the activities of many countries, governments, and, as a result, companies (Tucker, 2008). The processes changing the world economic space were accompanied by the formation of new trends and toughening competition. This factor put the company before the need to ensure sustainable future development, namely the search for new ways to attract capital and increase the level of competitiveness in the market (Tucker, 2008).

At the moment, there are a large number of strategies that help companies to develop and expand their business, but in

this work, the object of the research will be novelty as the main factor contributing to increasing the competitive advantages of the company. Since such an activity is very complex, combining a variety of scientific, technical, economic, social, psychological problems. Innovation is virtually the only means of ensuring the competitiveness of any economic system. Innovations are of great importance for the enterprise, because it is they that determine its long-term development potential.

If we consider innovation as the final result, then it must have somewhere its beginning, source, and this beginning is some kind of idea, plan, invention. There is a long way from this idea to its implementation, containing many stages and actions. This path is called the innovation process.

An innovation process is an activity in which an invention or an entrepreneurial idea receives economic content.

It is necessary to highlight the characteristic properties of innovation that distinguish it from simple innovation:

- scientific and technical novelty;
- production applicability;
- commercial feasibility.

The commercial aspect defines innovation as an economic need, realized through the needs of the market. From this point of view, there are two points:

• "materialization" of innovation - from an idea to its embodiment in a product, service, technology;

• "commercialization" of innovation - turning it into a source of income.

The innovative activity of firms is a much more effective means of competition than all traditional methods. With her, other methods can no longer play a significant role. In the second half of the 20th century. a boom of innovation has begun in all spheres of society (Evers, Cunningham, & Hoholm, 2014). In 1979, the US Congress passed the National Science and Technology Innovation Act, which stated that innovation was a central issue in the US's economic, environmental, and social prosperity. The innovative strategy was designed to reduce the trade deficit, win competition in the world market, and stabilize the dollar. In Germany, it was also confirmed at the state level that innovation is the main means of combating all social diseases. Thus, the fact that in 40-50 years. was the strategy of individual firms in the 70-80's (Evers, Cunningham, & Hoholm, 2014). becomes the strategy of entire nations, the state policy of developed countries.

At the same time, the science of innovation was developing. It meant a departure from understanding the market as a free play of supply and demand. Now it was supposed to seize the initiative from the market, manage the market, provoke the emergence of the needs of a mass buyer, offer him something that he had not had time to think about. Such a strategy created a "consumer society" firms striving for superiority in the competition should constantly seek and introduce novelty (Evers, Cunningham, & Hoholm, 2014).

In the Korean market, two car manufacturers are competing - Hyundai and Kia. “Kia” has chosen a competitive strategy - price and quality. “Hyundai” is a novelty. Over the past few years, it has released more than 10 new models with the introduction of the latest technologies, such as: the latest technical solutions in the field of automobile control and environmental safety, has gained the image of a progressive, knowledge-based company and as a result has exceeded the sales volume of goods by 2 times, significantly ahead of competitors .

The path that firms and their managers are embarking on, having adopted novelty as a competitive advantage, is full of many difficulties, risks and barriers; it requires special knowledge and skills.

Therefore, there is a need to obtain such knowledge and skills that are concentrated in the science of "Innovation Management (Innovative Analysis)".

Innovation management (innovation analysis) is the management of the scientific, scientific, technical, industrial activity and intellectual potential of the company's personnel with the aim of improving the production or development of a new product (service), as well as the ways, organization and culture of its production and based on this, meeting the needs of society in competitive products and services (Evers, Cunningham, & Hoholm, 2014).

Thus, novelty for the company is the main factor in the competitive advantages of the company, but in order to minimize the risk of introducing innovation into production, a lot of skills and knowledge are necessary, which in turn are concentrated in innovative management.

Conclusion

The motive for the development of innovative activities of the enterprise is, first of all, market competition. However, many enterprises want not only to maintain their market position, but also to consolidate them, which is impossible without the introduction of innovative approaches in all areas of production and economic activity.

In the 30s of the last century, the Austrian economist Schumpeter, who was the founder of the theory of innovation, defined innovation as any possible change that occurs as a result of the use of new or improved technical, technological, organizational solutions in the processes of production, supply, marketing of products, after-sales services and other areas the activities of the enterprise.

Since then, a large number of definitions have appeared that interpret the concept of "innovation" from various points of view. But they are all united in the fact that innovation is associated with progressive changes aimed at increasing production efficiency and better meeting social needs.

The priority role among innovations is given to the so-called technological innovations directly related to increasing the intensity of development of production and ensuring scientific and technological progress. Recently, along with technological innovations, non-technological innovations

have become increasingly important, which include innovations of an organizational, managerial, legal, social, environmental and other nature that reflect changes in the environment serving the main production processes.

Ultimately, both technological and non-technological innovations lead to lower costs and increase the efficiency of the enterprise as a whole, create a better and more competitive product, and improve the company's reputation in the market. Enterprises that are the first to master effective innovations clearly gain a competitive advantage over other market participants. Ultimately, their actions lead to increased profits, strengthened competitive positions in the market and increase the level of economic security.

However, it should be remembered that any competitive advantage provided by innovation has its own “life cycle” and is such until it becomes the property of competitors. From this position, we can distinguish the following stages in the development of innovative competitive advantage:

1) the introduction of innovation and the beginning of the formation of a competitive advantage;

2) the effective use of the competitive advantage provided by the introduced innovation;

3) the destruction of the competitive advantage of competing also mastered this innovation.

Thus, at the end of its life cycle, an innovation loses its attractiveness, and an enterprise has a need to gain access to the next innovation, which can again provide it with superiority over its competitors, and the need for the next innovation appears even before the previous one is "worked out". Therefore, it is very important for the enterprise to forecast the period of the competitive advantage and the economic justification of the level of costs for its maintenance.

The competitive advantage period is determined by the degree of its stability with respect to the actions of competitors.

A competitive advantage with a low degree of sustainability is easily accessible to competitors (for example, approaching production to sources of raw materials, cheaper labor).

A competitive advantage with an average degree of stability allows a longer period of time to maintain a leading position in the market due to the existing reputation of the enterprise, the use of patented innovative technologies, and the production of unique products.

A competitive advantage with a high degree of sustainability is ensured by large investments in innovative projects, accompanied by high quality implementation.

We emphasize that a long period of development of an innovation can lead to a decrease in its value in connection with the emergence of new innovations, and this can affect the formation of a competitive advantage of an enterprise.

Considering the impact of innovation on the competitive position of the enterprise, it is necessary to distinguish:

- real competitive advantage - the advantage obtained by the enterprise in the current conditions for the application of innovations;
- potential competitive advantage - an advantage that an enterprise could gain if it makes more efficient use of implemented innovations;
- strategic competitive advantage - the advantage that the enterprise is aimed at obtaining in the future, subject to continuous improvement and constant introduction of innovations.

The innovative activity of an enterprise largely determines its current and strategic competitive positions, and, consequently, the fact of its existence on the market.

Today, the development and implementation of innovations is carried out by less than 10% of the total number of enterprises; the share of enterprises investing in the acquisition of new knowledge and technologies is also insufficient

(11.8%). In addition, many enterprises are focused, first of all, on borrowing ready-made technologies, and not on creating new ones.

One of the indicators of the country's economic security is its share in the export of high-tech products. In world practice, this indicator is 10-15%. Therefore, the formation of favorable conditions for the development of innovative activities of enterprises that contribute to enhancing the competitiveness and economic security of both the enterprises themselves and the economic system as a whole is not called into question.

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Juan Carlos Pomaquero Yuquilema - Master's Degree in Public and Social Policies. Teacher ESPOCH - Ecuador. Researcher in Ideas Factory Research Group. jpomaquero@espoch.edu.ec

José Fernando Lopez Aguirre - Master's in business administration and Management. Teacher ESPOCH - Ecuador. Researcher in Ideas Factory Research Group josef.lopez@espoch.edu.ec

Jose Luis Lopez Salazar - Master's in research in business administration and economics. Teacher ESPOCH - Ecuador. Researcher in Ideas Factory Research Group. josel.lopez@espoch.edu.ec

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