

Innovative trends for the alcohol enterprises of Ukraine

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Abstract

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Introduction. The theme of our exploration is devoted to the problem of the developing of Ukrainian enterprises of alcohol industry, which are in a very negative condition nowadays. One of the methods of improving the condition of the alcohol enterprises is the creation the mechanism to increase profitability by implementing innovations.

Materials and methods. To make a research we used methods of analysis. Using the method of statistics analysis, we can see the proportions of innovations in European industry and using method of comparison for further research. To analyze the concept of innovation and the need for innovation in the business, improving the profitability and competitive ability of the company theoretical method was used.

Results. The alcohol industry of Ukraine needs resuscitation and entering new markets for selling of alcohol. For Ukraine, it is necessary to invest in innovative retooling factories and convert part of the plant to produce other products.

For the purpose of successful and competitive development of enterprises of alcohol industry is suggested the mechanism to increase profitability by implementing of innovation activity. The mechanism consists of such constituents such as strategic planning, which included the pre-planning and strategic planning processes. The next constituent is to determine the methods of increasing the profit for enterprises of alcohol industry. To reach this the implementation of innovation in technological process to reduce the production costs of alcohol is necessary. This step makes it possible to reduce the price of alcohol for sale. In addition the enterprises of alcohol industry would have the possibility to enter new markets.

The next step is to create the fund of innovation. The next constituent is to reduce the risk for enterprises of alcohol industry to innovate. For example to use grants covering a percentage of business costs, which can be awarded for defined activities on either a first-come-first-serve or competitive bidding basis. The last step is to achieve the support of the government in providing innovation activity for enterprises of alcohol industry.

Conclusion. A complex approach to the study of innovation activity allowed not only to analyze precisely the materials but to reach specific conclusions, based on the analysis that we need to implement technical innovations, organizational innovations, economic innovations, it is necessary to improve the function of forecasting and planning, social innovations, legal innovations.

Introduction

The innovative development of companies is a part of the innovation economic development and is an important aspect reproduction of industrial relations which consists the updating of the composition and construction of capital assets and improving of their use as in its formative stages, and scientific technical preparation of production.

We can't underestimate the importance of innovation for the development of a modern economy of Ukraine. It is through innovation the economic growth can be achieved in the nearest future. The innovative development as a fundamental factor in economic recovery reflected in fundamental studies of foreign scholars such as R.Akoffa, P.Drukera, F.Portera, B.Santo, B.Tvissa.

There are many works in which the main subject is the problem of innovative development of companies, in which such questions are discussed: the content, factors, trends, strategies and methods of such development, its influence on the development of the state and the regions, some industries and enterprises. The leading The most famous Ukrainian researchers mentioned directions of innovative development companies: VP Aleksandrov, IV Alekseev, AI Amosha., SS Pharmacist, VM Heets, VM Goncharov, MI vale, VI Landik, MN Lepa, O. Savchuk, MG Chumatchenko, IB Shvets.

Perhaps the best known is the concept of creative destruction. Joseph Schumpeter was a renowned economist who first coined the term. He argued that innovative thinkers develop new products and technologies that over time make obsolete a product or process that had once dominated its market. The innovation often starts at the low end of the market (for example, with lower priced goods or components of higher end products) and slowly works up to the higher end, taking market share from the big players as processes and products improve. Schumpeter's relationships with the ideas of other economists were quite complex in his most important contributions to economic analysis – the theory of business cycles and development. Following neither Walras nor Keynes, Schumpeter starts in *The Theory of Economic Development* with a treatise of circular flow which, excluding any innovations and innovative activities, leads to a stationary state. The stationary state is, according to Schumpeter, described by Walrasian equilibrium [1].

Schumpeter was the most influential thinker to argue that long cycles are caused by innovation, and are an incident of it. His treatise on business cycles developed were based on Kondratiev's ideas which attributed the causes very differently. Schumpeter's treatise brought Kondratiev's ideas to the attention of English-speaking economists.

We often think of innovation today in terms of technology. While it's true that technological innovations in the recent past have been groundbreaking, innovation can come in many forms. It can be a creative new teaching method to enhance student engagement. It can be a unique incentive program to reward high performing employees. Or it can be a process, such as lean methodology, a model which streamlines workflows and eliminates waste to keep costs low while maintaining quality. Innovation can be incremental, such a slight variation on an existing product formulation (like adding a new color or fragrance), or a groundbreaking product that revolutionizes an industry. Innovation can respond to a clearly defined problem, or create a complete paradigm shift when the problem itself is undefined or the path to a solution is unclear.

The advantages of innovation are not limited to new product development. The models of innovation are just about as numerous as the objectives they are intended to serve. Innovation can improve almost every aspect of a product or service life cycle, from business model innovation to pricing strategies, marketing and service delivery. Think of how discount airlines, such as Southwest, transformed the airline industry with innovative

transformed e-commerce with its innovative distribution channels, making a huge array of products available nationwide virtually overnight [12].

Innovation is not always a new product. Sometimes innovation makes an existing product or service better. Small entrepreneurial businesses often develop new products that are components of products that larger, more established firms manufacture and sell under an established brand name. Cutting edge component parts or pioneering research and development were provided by smaller firms with innovative ideas. Some small firms have built their entire business models around developing and producing products that help larger, well-known companies be more efficient or effective, and ultimately more competitive.

During difficult economic periods, innovation is touted as a source of value creation in part because firms that implement innovations countercyclical are often more prepared to rebound when times get better.

However, the problems of innovation potential at the micro level which is represented companies are not resolved yet. The innovative development means for companies to ensure the production of certain goods and services to specific market segments. Implementation of such tasks require companies providing all kinds of resources and achieve the best way to use them.

Materials and methods

To make a research we used methods of analysis and synthesis, inductive method, axiomatic method, deductive method, theoretical analysis and graphic methods.

Using the method of statistics analysis, we found the proportions of innovations in European industry.

Using the methodology of complex analysis of economic activities, we investigated the enterprises of alcohol industry.

Using methods of grouping and organizing study status and the laws of development of the objects (distilleries), and determine the influence of factors on the performance of businesses and the counting of unused reserves and promising to improve production efficiency.

To analyze the concept of innovation and the need for innovation in the business, improving the profitability and competitive ability the company theoretical method is using.

Results and discussions

The innovative development of Ukraine can provide the basis for sustainable economic growth, which contributes to approximation of the living standards of Ukraine to the level of developed countries. So its role and place of the innovative development determined in the provision of strategic objectives and interests.

The development of innovation potential in macro-and microeconomic levels are becoming more relevant for Ukraine that is mainly due to the understanding of the positive role of innovation to overcome with difficult economic situation.

It is very important to develop the appropriate mechanism to increase the profitability of the enterprises of alcohol industry by implementation of innovative activity.

According to our opinion the mechanism for the enterprises of alcohol industry should include:

1. The creation a team of strategic managers;

2. The creation of strategy of development (strategic planning);
3. The methods of increasing of profit;
4. The creation of innovation fund;
5. The methods to reduce the risk for businesses to innovate;
6. The support of the government.

At first we need to discover the innovative potential of the enterprises of alcohol industry.

The innovative potential is a comprehensive description of the capacity of enterprises to innovation activities. This concept is conceptual reflection of the phenomenon of innovation. Recently, it was included among the terms of economics as an economic category, but in the modern economic literature, including Ukrainian, there is no unambiguous definition of it. In research works the term is used at solving other scientific and cognitive tasks. In many studies the authors focus their efforts on the study of individual innovative capacity, that's why there are a lot of specific definitions in the literature.

Analysis of the economic aspects of the concept of "innovation potential" reveals wide range of approaches to its study. Consider some of them:

1. "Innovation potential - is one of three components of innovation space, which includes a "personal and business leaders skills, professional and economic training, professional achievements (author's certificate inventions, etc.), logistical and financial support";
2. "Innovative potential - a set of different resources, including physical, financial, intellectual, informational and other resources needed to implement innovation";
3. "Innovation potential has unused hidden capabilities accumulated resources that could be used to achieve purposes of economic entities";
4. "Innovative potential of the region is a special category, which includes not only innovative resources and mechanisms for their use in organizational and economic system, but also the activity of innovation processes in regional economy"[1].

Innovation activities are all scientific, technological, organizational, financial and commercial steps which actually lead to the implementation of innovations. Some innovation activities are themselves innovative, others are not new activities but are necessary for the implementation of innovations. Innovation activities also include process of researching and development that is not directly related to the development of a specific innovation.

A common feature of an innovation is that it must have been implemented. A new or improved product is implemented when it is introduced on the market. New processes, marketing methods or organizational methods are implemented when they are brought into actual use in the firm's operations.

Innovation activities vary greatly in their nature from firm to firm. Some firms engage in well-defined innovation projects, such as the development and introduction of a new product, whereas others primarily make continuous improvements to their products, processes and operations. Both types of firms can be innovative: an innovation can consist of the implementation of a single significant change, or of a series of smaller incremental changes that together constitute a significant change.

To make your business profitable you need to create a strategic development plan. Strategic management goes beyond the development of a strategic plan, which included the pre-planning and strategic planning processes. Strategic management is the deployment and implementation of the strategic plan and measurement and evaluation of the results. Deployment involves completing the plan and communicating it to all employees. Implementation involves resourcing the plan, putting it into action, and managing those

actions. Measurement and evaluation consists not only of tracking implementation actions, but, more importantly, assessing how the organization is changing as a result of those actions and using that information to update the plan [11].

To be the most successful, leaders need to be facilitators, coaches, consultants, and consensus-builders. Transformational leadership is described by Bernard Bass as, superior leadership performance that occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self interest for the good of the group. Acquiring transformational leadership traits requires hard work and dedication, willingness to take some risks, and internalizing the organizations vision and guiding principles.

Indicators for assessing the outputs and outcomes of business innovation measures should permit an analysis of the quantitative impacts on business innovation activities and results and the verifiable changes in co-operation patterns within other actors in the innovation system. They should also facilitate a qualitative assessment of the extent to which the intervention has improved in-house capacities of firms to continue to invest effectively in innovation and to extend or strengthen knowledge acquisition and exchange [15].

Illustrative evaluation questions and indicators that may be used to focus an evaluation are set out below (Table 1).

Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment. It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future. Effective strategic planning articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful.

Alcohol industry is one of the most profitable industries in Ukraine. Alcohol is used in distillery and liquor industry, in perfumes and cosmetics and confectionery industry, in vitamin production, medicine and engineering. Baking and fodder yeast, liquid carbon dioxide, feed vitamins are produced in alcohol plants.

Table 1

Indicative evaluation questions & illustrative indicators for funding for business innovation

Indicative evaluation questions	Examples of possible indicators
<ul style="list-style-type: none"> - To what extent is the measure focused on firms or sectors of the regional economy facing specific difficulties to innovate or with a specific potential? - Is the measure reaching firms with a latent potential to innovate? 	<ul style="list-style-type: none"> - % of firms assisted which previously reported negligible R&D or innovation expenditure - Renewal rate (% of previously non-assisted enterprises supported)
<ul style="list-style-type: none"> - Is the public funding being disbursed using the least possible (human and financial) resources by the implementing agency? - Are the application, selection and funding procedures managed so as to minimise the cost to beneficiaries? 	<ul style="list-style-type: none"> - Managerial efficiency (e.g. management cost per euro disbursed compared to benchmark programme). - Stakeholders assessment of programme management (qualitative) Satisfaction of beneficiaries with programme procedures (survey/interview returns)
<ul style="list-style-type: none"> - Has the funding provided generated additional innovation activity in the beneficiary firms? - Have the projects outcomes improved competitiveness of the beneficiary firms? 	<ul style="list-style-type: none"> - Trend in R&D intensity (R&D expenditure as a share of turnover) compared to baseline (preintervention) - Trend in performance indicators such as sales from new products/services; growth in productivity, etc.
<ul style="list-style-type: none"> - Has the funding induced learning and/or built capacity in beneficiary firms enabling them to maintain their innovation intensity? - Have new co-operation linkages been developed between beneficiary firms (and/or with other innovation system actors: financial intermediaries, etc.)? 	<ul style="list-style-type: none"> - Post-project change in innovation expenditure, retention or additional hiring of qualified personnel to manage innovation; - Identification of new co-operation patterns (survey or monitoring data).

Alcohol industry in Ukraine requires the implementation of significant reforms in alcohol production. The main enterprise of alcohol industry in Ukraine is the State Enterprise of alcohol and liquor industry "Ukrspirt" (SE "Ukrspirt"). It was formed in 2010. It was formed by attaching of the 41 plants. SE "Ukrspirt" was created to control the volume of production and sale of alcohol in Ukraine.

The State Enterprise of alcohol and liquor industry "Ukrspirt" (SE "Ukrspirt") is the only authorized producer (a monopolist) of ethyl alcohol in Ukraine, which is mainly used for the production of alcoholic beverages.

The main products are:

1. Ethyl alcohol that is made by grain;
2. Ethyl alcohol technical;
3. Vodka;
4. Bioethanol;

5. Technical products and household chemicals;
6. Fraction of ethanol;
7. Fusel oil;
8. Concentrate of Esther – fusel;
9. Carbon dioxide;
10. Concentrates of kvass wort;
11. Brewer’s malt.

Alcohol industry in Ukraine is at 25 percent of its capacity for the production of ethyl alcohol, but fully satisfies the internal needs of the state in ethyl alcohol.

Permanent decline in production and sale of alcohol is shown in Table 2.

Unfortunately, during the last eight years management of a company did not spend money not only for renewal of fixed assets, but also of maintenance of equipment at the vast majority alcohol factories.

But State Enterprise ”Ukrspirt” has some problems and innovation activities can help to resolve this problems. The main problem of alcohol factories in Ukraine is old equipment that needs to be upgraded.

Also we need to notice a service innovation. Service innovation is defined as the introduction of novel ideas that focus on services that provide new ways of delivering a benefit, new service concepts, or new service business models through continuous operational improvement, technology, investment in employee performance, or management of the customer experience.

Table 2
Production and realization of SE ”Ukrspirt” (2011-2013)

Index	2011, thousand decaliters		2012, thousand decaliters		2013, thousand decaliters	
	production	realization	production	realization	production	realization
Alcohol:	15 620,39	15 233,09	13 516,79	14 227,94	14 616,42	12 311,17
ethyl alcohol	14 510,50	14 115,41	12 253,21	13 003,82	12 856,79	10 628,10
technical alcohol	1 109,89	1 117,68	1 263,58	1 224,12	1 759,63	1 683,07
Component of motor fuel alternative	1 208,86	1 215,83	2 107,23	2 153,06	5 061,89	4 938,50
Production	945,20	867,00	622,93	713,34	402,89	435,88
Bioethanol	793,72	767,40	1 240,65	1 321,43	4 393,26	4 389,09
Total	18 568,17	18 083,32	17 487,60	18 415,77	24 474,46	22 074,64

The nature of services may explain the limited research that has explored innovation and its implementation. Labor intensity, high variability of delivery, coproduction with the consumer, intangibility, and the perish ability or time sensitivity of services makes innovation in services substantially different in type and in adoption processes from the innovations in traditional manufacturing settings.

Given that focus on customers, and the critical role of the social system in the implementation of change, it is likely that the success of implementing service innovations relies on appropriate processes and administrative structures. Service innovation rests on

both creating something new, and on coproducing it. One clear feature of service innovation is that it is characterized as having a greater organizational dimension than innovations in manufacturing contexts. Indeed some researchers have argued that a firm's long-term success may rely more on an overall firm-level innovation orientation that produces the capabilities that spawn innovations and less on specific innovations.

A strong climate for the implementation of service innovations that takes into account how the innovation fits the company's value proposition and stresses employee motivation has also been given some conceptual and empirical attention.

Once an innovation has been selected, postadoption processes constitute the internal diffusion strategies directed toward members of a social system. Postadoption implementation approaches involve the ways in which information about the new idea are shared with those employees who must execute on the innovation. Even though this execution stage is most often identified with innovation failure, it receives the least attention from innovation researchers.

In the implementation process, the nature of the information exchange relationship determines the conditions under which an employee receives knowledge or has experience using the new idea. Several different information-exchange strategies can be used, including those focused on individuals, typically, individual counseling by managers or change agents, and those at the group level, such as staff meetings, cross-functional teams, and focus groups.

Most EU countries have a number of measures to support science and industry collaboration that fall into two broad types. The first type supports one-off, smaller scale projects, whereby researchers from a firm and research institute work together, with a clear division of labour, to achieve a scientific, technological or innovation objective. Such interventions (e.g. innovation vouchers) often focus on resolving a specific technological problem, or developing a prototype for a new product.

At the other end of the spectrum, a second type of measure supports research institutes and firms to engage in longer-term strategic collaboration. These interactions can range from looser networking on a key enabling technology for the regional economy to the establishing and joint governance of a formal legal entity with firms and research institutes as shareholders.

Direct financial support to enterprises to undertake product development, enhancing product design, prototyping, process innovation, technology acquisition, organisational change, improvements to product marketing, etc. is possibly the most prevalent innovation measure in industrialised countries. In the EU, State Aid rules limit the scope of subsidies to business R&D projects or equity financing, in early-stage financing of innovative firms, provided from Government funds. Whilst the forms of support vary, all aim to reduce the risk for businesses to innovate:

- grants covering a percentage of business R&D costs, which can be awarded for defined activities on either a first-come-first-serve or competitive bidding basis;
- soft loans provided either directly by a government agency or through commercial banks or other financial intermediaries. In some cases, such loans may be reimbursable only under specific conditions (e.g. in the event that a product development project is successful and the company generates new sales);
- government loan guarantees intended to facilitate the granting of business loans by commercial banks or other financial intermediaries reducing the need for businesses to provide collateral when applying for a loan.

- government support to seed capital, business angel networks and early stage venture capital funds, which may take one of several forms: creation of a fund-of-funds, co-investment, etc.

The classic argument for Government support to business innovation activity is the existence of a ‘market failure’: a company that invests in innovation is unable to capture the full returns as it cannot stop other firms from copying or further developing the technology. This leads to a socially non-optimal level of investment in R&D as well as non-technological forms of innovation. Public funding of innovation projects aims to assist firms to do materially more development work than would be the case otherwise, producing more innovation.

Evaluations of business innovation measures seek to elucidate the impact of one or more funding measures on the innovation activity of the target enterprises. Often funding measures are launched as a ‘suite’ of support with, at least on paper, an inter-linkage between say a small ‘innovation voucher’.

Conclusion

We have to implement novelties and innovations: technical innovations - new products, technology, construction, equipment, organizational innovations - new methods and forms of all types of activities of SE “Ukrspirt” and their institutional department, economic innovations – improving methods of economic management, it is necessary to improve the function of forecasting and planning on SE “Ukrspirt”, it is necessary to improve the methods of financing, pricing methods, methods of motivation and remuneration, social innovations - different forms of activation of human capital, including new forms of professional training, encouraging his creativity, promotion of his work, creating comfortable living and working conditions; legal innovations - we need new and transformed various laws and legal documents (laws) that define and regulate all activities of enterprises and organizations or certain groups or individuals.

References

1. Arora Ashish, Fosfuri Andrea, Gambardella Alfonso (2012), *Markets for Technology: The Economics of Innovation and Corporate Strategy*, MIT Press, Cambridge.
2. Barnett J., Vasileiou K., Fayika D., Brooks L., Young Y. (2013), «Understanding Innovators» Experiences of Barriers and Facilitators in Implementation and Diffusion of Healthcare Service Innovations: a Qualitative Study, *Health Services Research*, 11 (1), p. 342.
3. Brooks H., Pilgrim D., Rogers A. (2014), Innovation in Mental Health Services: What Are the Key Components of Success?, *Implementation Science*, 6 (1), p. 120.
4. Chen C.J., Huang J.W. (2012), Strategic human resource practices and innovation performance – the mediating role of knowledge management capacity. *Journal of Business Research*, 62(1), pp. 104–114.
5. Costa K. (2011), *Innovation for the Public Good: Financing Tools for Social Innovation. Three Financing Principles to Guide Social Innovation*, Center for American Progress.

6. Djellal F., Gallouj F. (2014), Social Innovation and Service Innovation, *Power point presentation at the Challenge Social Innovation Conference, Vienna, 19-21 September 2014*.
7. Herrera L., Muñoz-Doyague M.F., Nieto M. (2010), Mobility of public researchers, scientific knowledge transfer and the firm's innovation process, *Journal of Business Research*, 63, pp. 510–518.
8. Hurmelinna-Laukkanen P., Ritala P. (2014), Protection for profit from collaborative service innovation, *Journal of Service Management*, 21(1), pp. 6-24.
9. Murray A. (2011). Tapping university innovation, talent, *Business Economic Review*, 55(3), pp. 14–19.
10. Newman J.L. (2012), *Building a CREATIVE high-performance R&D culture*. *Research Technology Management*, New York.
11. Powell Walter W., Kenneth W. Koput, Laurel Smith-Doerr (2013), Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology, *Administrative Science Quarterly*, 41(1), pp. 116-145.
12. Salge T.O., Vera A. (2012), Benefiting from Public Sector Innovation: The Moderating Role of Customer and Learning Orientation, *Public Administration Review*, 72(4), pp. 550-560.
13. Schilling A., Werr A. (2014), *Managing and organizing for innovation in service firms. A literature review with annotated bibliography*, Vinnova Report.
14. Wamae W. (2010), Enhancing the role of knowledge and innovation for development, *International Journal of Technology, Management and Sustainable Development*, 8(3), pp. 199-220.
15. Available at: http://ec.europa.eu/regional_policy/sources/docgener/evaluation