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INNOVATIVE STRATEGY OF THE TELECOMMUNICATION ENTERPRISE DEVELOPMENT

Urgency of the research. Integration and innovation processes of building a modern market environment in Ukraine create the objective conditions for the increased use of telecommunication in activity of economic entities.

Target setting. In these studies, priority is given to the formation of innovative strategy, which can ensure development of the company in the light of building an innovative economy and information society.

Actual scientific researches and issues analysis. The problem of telecommunication companies’ development is studied in the works of L. N. Berkman, L. E. Varakin, P. P. Vorobienko, V. M. Hranaturov, V. K. Steklov. The issue of innovation in the field of communication and informatization is developed in the works of O. A. Knyazeva, V. M. Orlov and others.

Uninvestigated parts of general matters defining. The issues of development of innovative strategies of telecommunication companies are not fully investigated because of significant changes taking place in the information and telecommunication sector and the scientific community.

The research objective. To develop the innovative strategy of telecommunication companies, that will enhance their competitiveness and socio-economic performance in modern conditions.

The statement of basic materials. The article provides a critical analysis of scientific views on the theory of innovation and strategic planning. The need for diversification of telecommunication companies is proved. The suggested approach to the implementation of innovative strategy of diversification is added and the choice of the most optimal strategy is made.

Conclusions. The communication and information sphere and telecommunication enterprises directly base their activities mainly on the implementation of technological and organizational innovation. The need for the implementation of diversification in the telecommunication enterprises’ activity is proved, the suggested approach to the implementation of innovative strategy of diversification is added and the criteria for assessing the effect of its implementation are defined in the article.

Keywords: telecommunication enterprise; innovative strategy; diversification; effect.

Актуальність теми дослідження. Інтеграційно-інноваційні процеси побудови сучасного ринкового середовища України створюють об'єктивні передумови для активізації використання телекомунікаційних технологій в діяльності суб'єктів господарювання.

Постановка проблеми. В цих дослідженнях пріоритет віддається формуванню стратегії інноваційного розвитку як такої, яка здатна забезпечити затрати підприємства із урахуванням потреби в інноваційній економіці та інформаційного суспільства.

Аналіз останніх досліджень і публікацій. Дослідження проблем розвитку телекомунікаційних підприємств присвячені науковці Л. Н. Беркман, Л. Е. Вараїна, П. П. Коробенко, В. М. Гранатуров, В. К. Стеклов.

Питання впровадження інновацій в сфері зв’язку та інформації досліджено у працях О. А. Князєвої, В. М. Орлова та інших.

Виділення недосліджених частин загальної проблеми. Недостатньо повно розглянуто питання розробки інноваційної стратегії розвитку телекомунікаційного підприємства в світловому освітленні змін, що відбуваються в інформаційно-телекомунікаційній сфері та науковому середовищі.

Постановка завдання. Розробка інноваційної стратегії розвитку телекомунікаційного підприємства, яка буде сприяти підвищенню його конкурентоспроможності та соціально-економічної ефективності діяльності в сучасних умовах.

Виклад основного матеріалу. У статті проведено критичний аналіз наукових поглядів на теорію інноваційного розвитку та стратегічного планування. Доведено необхідність диверсифікації діяльності телекомунікаційного підприємства. Наведено підхід до формування інноваційної стратегії диверсифікації та здійснено вибір найбільш оптимальної стратегії. Запропоновані критерії оцінки ефективності впровадження стратегії.

Висновки. Сфера зв’язку та інформації та безпосередньо телекомунікаційні підприємства базують свою діяльність переважно на реалізації технологічних та організаційних інновацій. Інноваційна стратегія розвитку телекомунікаційного підприємства, наведена запропонований підхід до впровадження інноваційної стратегії диверсифікації та визначено критерії оцінки її ефективності.
**Urgency of the research.** The economy of the XXI century is significantly altering the vectors of its development, going from technocratic to innovative basis of its operation. Integration and innovation processes of building a modern market environment in Ukraine create the objective conditions for the increased use of telecommunication in activity of economic entities. Therefore today telecommunication enterprises are considered as a lever that allow to transform a strategy of many companies, as a tool that can be used in almost all areas of economic activity as well as modern and powerful resource for economic growth of the state.

**Target setting.** Telecommunication companies are resorting to a number of scientific and applied mechanisms including not least the marketing and strategic planning for their further development. Priority in these studies is given to the formation of innovative strategy that can ensure development of the company, taking into account the existing realities of building an innovative economy and information society.

**Actual scientific researches and issues analysis.** The problem of telecommunication companies’ development is studied in the works of L. N. Berkman [13], L. E. Varakin [3], P. P. Vorobienko [4], V. M. Hranaturov [4], V. K. Steklov [13] and others. International experience of formation of the theory and practice of strategic planning is generalized in the studies of I. Ansoff [1], B. V. Burkinsky [2], F. Kotler [8], I. V. Novikova [10] and others. The issue of innovation in the field of communication and informatization is developed in the works of O. A. Knyazeva [7], V. M. Orlov [6] and others.

**The research objective.** The purpose of this work is determined by insufficient knowledge of the problem of the development of innovative strategy of telecommunications companies due to significant occurring in the information and telecommunication sector and the scientific community.

**The statement of basic materials.** The development of the leading countries is mainly based on the implementation of the various innovations (food, organizational, strategic, etc.). These processes are able to ensure sustainable development of the country, its innovative orientation for further development in today's highly competitive environment, thus forming a significant proportion of GDP.

The concept of innovation is defined differently in the scientific literature. By the analysis of existing scientific research the authors found that the most significant differences between the various definitions depend on the approach to the concept of innovation followed by the scholar. That is, scientists believe that innovation can be viewed either as a result of the creative process or as a process of introducing innovations. We are of the opinion that innovation - is a permanent process of formation and implementation of new ideas and technologies for improving production, economic, social and other public processes and relationships.

Nowadays more and more companies realize the huge role of innovation in the successful organization of the activity, the conquest of new markets, the strengthening of competitive advantages. This is evident by statistics that show the growth of innovative products and services on national and international markets.

Thus, the analysis of innovation activity in Ukraine for 2015 showed that 824 industrial enterprises (or 17.3% of total) were involved in such activity. The majority of innovations are focused on food (5.2%), process (7.2%), organizational (4.7%) and marketing (6.4%) innovation. The volume of innovative products is only 1.4% of total sales, of which 31.6% - a product which is new to the domestic market [9].

As for the areas of innovation activity of enterprises Ukraine, almost three-quarters of enterprises with technological innovation purchased machinery, equipment and software to produce new or significantly improved products and services. More than a quarter of them carried out activities to implement new or significantly improved products and processes, such as feasibility study, testing, software development for current needs, equipment, organization of production and so on. More than 20% of domestic enterprises conducted training or retraining of personnel for them to develop or implement innovative products and processes [9].

An increase in the overall innovation activity can be noted in recent years despite the difficult economic and socio-political situation in the country. Thus, since 2010 the share of innovation active en-
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Entreprises increased from 13.8% to 17.3%, or 3.5%. The total cost of implementation of innovation has increased by more than 70%. Herewith 98% of these costs - are business’s own funds, and only 0.4% - the state budget. This indicates a weak state support of innovation processes in enterprises. However, this does not deter entrepreneurs, because since 2010 the proportion of entrepreneurs implementing innovation increased from 11.5% to 15.2% [9].

The data show that the highest proportion of innovative enterprises accounts on the processing industry (20.3%), electricity, gas, steam and conditioned air (18.6%), as well as information and telecommunications (16.3%) [9]. That is the telecommunication is a leading sphere of economic activity that includes complex innovation processes resulting from active research and design activities, leading to the market launch of new mobile services, satellite, network communication and so on.

Innovative activity of telecommunication companies is not limited to science and technology policy based on development and implementation of new services. It covers such important management spheres of the company as marketing, organizational structure, personnel management, advertising and other areas. Under the conditions of enhancing innovation the shaping of the strategy for further development is needed. One option could be introducing diversification strategy, because under it the development of innovative techniques and technologies, the provision of new services, access to new markets has to be implemented by the enterprise. Active development of innovation in most cases provides the basis for effective adaptation to changes in the environment, judging from the experience of leading foreign companies. At the same time, diversification is the most effective tool for preserving and increasing the competitiveness of the company, its financial stability in an unstable and uncertain environment.

An innovative component of the enterprise’s development, according to the views of scholars [6, 7], shared by the authors, can be regarded not only as the development and introduction of innovative products and services, but also as innovation of strategic or organizational nature, namely diversification strategy, which can be seen as a strategic innovation.

The need for implementation of diversification strategy is related to the fact that some types of services recently have shown the reduction in the volume of output that can subsequently lead to the loss of financial benefits (Tab. 1).

JSC “Ukrtelecom” is one of the leaders of the telecommunication market. According to the official reports of the company [11], it holds a leading position in the market of fixed telephony services of Ukraine, has a stable customer base and a strong network that covers almost all settlements of the country. According to the existing legislation [5], the enterprise provides important social services across the country, what ensures stable demand in most rural regions where there are no or other forms of communication or they are poorly developed.

### Table 1

<table>
<thead>
<tr>
<th>Services</th>
<th>Revenues from communication services million UAH</th>
<th>Dynamics, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed phone connection</td>
<td>1724,9</td>
<td>1698,1</td>
</tr>
<tr>
<td>Mobile connection</td>
<td>8499,9</td>
<td>8463,3</td>
</tr>
<tr>
<td>Telegraph</td>
<td>4,4</td>
<td>3,3</td>
</tr>
<tr>
<td>Wire communication</td>
<td>44,5</td>
<td>46,0</td>
</tr>
<tr>
<td>Transmission and reception of TV and radio programs</td>
<td>566,8</td>
<td>659,8</td>
</tr>
<tr>
<td>Internet services</td>
<td>1690,6</td>
<td>1886,6</td>
</tr>
<tr>
<td>Postal and courier activities</td>
<td>1143,9</td>
<td>1050,3</td>
</tr>
</tbody>
</table>

Source: [9]

However, the structure of business income shows that mobile services account for about 3% and Internet access services - less than 20% of total revenues [11]. That does not meet modern requirements of customers to obtain the latest telecommunications services. A decline of business income from the provision of traditional services due to reduction in consumption is also observed. In these
conditions it is necessary to introduce innovative component into the strategy of further development and it is diversification that allows develop activities in different areas to prevent financial failures.

Studying the practice of modern enterprises’ innovative activity in the plane of implementation of strategic innovation reveals the following methods of diversification of their activity [12]: expansion of its own production base through internal development; expansion of its own production base by acquiring licenses for new technologies and products; creation of joint companies; acquisition of new companies (including greenfield capital); greenfield capital investments (participation in greenfield funds, partial funding of greenfield companies, participation in research alliances) and others.

None of the methods of diversification mentioned is perfect, as each is characterized by a number of problems. Therefore, the formation of own innovation strategy of diversification (ISD) is advisable while implementing the process of diversification of telecommunication company. Different applied scientific approaches may be used to form such strategy (production, system, target-oriented, process). As we consider diversification a permanent economic process, the process approach, based on selection of appropriate processes and control over these processes, is advisable to use while forming ISD.

The analysis of the literature on strategy formation [1; 7; 10; 12] and authors’ own theoretical and empirical research allowed to identify a number of formal stages that are basic in the formation of ISD, and to identify the main characteristics and objectives of each stage from the position of development of this strategy (Fig. 1).

Fig. 1. Process approach to the formation of ISD of telecommunication enterprise developed by the authors

Considering the basic stages of strategy formation.
1. Defining the mission of the telecommunication company that is providing telecommunication services to all segments of the population and businesses in all the country.
2. Forming strategic goals. In this case, the goal is the replacement of services and technologies life cycle of which is under recession (according to Table 1 these services can be telegraph and fixed...
communications), by innovative ones with the release of the latest on new markets to achieve sustainable profitability, social and economic efficiency and to reduce risks.

3. The analysis of the internal and external environment, the analysis of constraints. This analysis should be performed using existing and described in a number of scientific and educational works marketing tools (e.g., GAP-analysis, PEST-analysis, SWOT-analysis, etc.) [7; 8].

The results of marketing researches, statistical information on the status and dynamics of demand, analysis of competition in the telecommunications market and other markets can serve the informational base.

The research and evaluation of internal environment aims to estimate internal capacity of the telecommunication company, its strengths and weaknesses, as well as a quantitative assessment of the resource potential. In the course of this analysis the strategic areas of economic and strategic (or priority) targets for further development in accordance with a specific mission and goals are defined. The analysis of the external environment is a process in which all the external factors that affect or may affect the process of achieving the goal are studied.

4. Choosing the optimal strategy. Preliminary steps provide an actual picture of the telecommunication company in a particular market situation. Basing on a composite picture and within existing constraints one of the possible strategies is selected. The strategy chosen is being adapted to the specific requirements and conditions of telecommunication company. We consider it advisable to choose the strategy reasoning from applied-scientific foundations and tools of program and target planning as a tool for managing the development of entities [12], within which the strategy chosen should perform a set of programs that are based on the sequence of sections: the goal – tool to achieve the goal – resource provision required. The telecommunication company can resort to such types of diversification strategies: concentric diversification, horizontal diversification and conglomerate diversification. The components of these strategies for selected companies are as follows (Tab. 2).

Each possible strategy of diversification has been analyzed by the authors in previous works in order to choose the optimal ISD (considering current situation, existing business problems and demands of the society [14]. The analysis showed that today telecommunication company uses concentric diversification, which reduces demand and revenue, reduces competitiveness and deteriorate the image of the company. Thus, the need the need to move to a horizontal diversification strategy, which ensures the stabilization of demand and revenue growth through expansion of the provision of traditional and new services to customers existing, is grounded.

5. Optimization of organization structure of management and communication channels as tools of realization of the strategy. This stage involves the transformation of organizational structure in order to provide more effective implementation of ISD and avoid duplication of functional influence of the enterprise’s divisions. It is required to define key activities and key links in the chain of values that are paramount for a successful implementation of the strategy and to determine the optimal type of organizational structure that will prevent duplication of functions in order to lead management organizational structure in line with the strategy.

Also, the approaches to the implementation of the new forms of marketing communication channels that meet the information needs of consumers and existing means of communication (including Internet services, local and global social networks, etc.) are realized during this stage.

6. Implementing the strategy and valuating effects. In general, the results of implementation of the strategy of diversification should lead to the appearance of certain types of effect and the reduction of risks by allowing free movement of the company funds to the most dynamically developing areas of activity. Considering the social responsibility of business, the evaluation of the effect should determine social component, that take into account the customers’ needs and requirements for the level of the application of modern communication technologies.

The review and analysis of the literature on the topic of evaluation of the effect of diversification makes it possible to assert that today a number of criteria to evaluate the effect of economic activity of the enterprises diversified have been formed. The effect of diversification is being determined using empirical or expert evaluation, and the diversification is measured by end-categories in the foreign studies. It is determined by the modern scholars-researchers that the implementation of the strategy of
diversification leads to obtaining a synergistic effect and improvements of the competitiveness. Therefore, when assessing the effect of diversification in these works dominate strategic criteria such as sales, market share, etc [6; 12].

### Components of market diversification strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Concentric diversification</th>
<th>Horizontal diversification</th>
<th>Conglomerate diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>Expanding the geography of service, access to new markets without significant investments in technology development</td>
<td>Expanding the range of services based on the replacement of equipment</td>
<td>Qualitative innovative leap in enterprise development</td>
</tr>
<tr>
<td>Informational base</td>
<td>Data of market research on existing and new markets</td>
<td>Data on new technologies and services</td>
<td>Complex information about new technologies and markets</td>
</tr>
<tr>
<td>Period of application</td>
<td>Stage of maturity or slowing of services/technologies</td>
<td>Stage of decline of services or technologies</td>
<td>Stage of growth or slowing of services or technologies</td>
</tr>
<tr>
<td>Resource provision</td>
<td>The need to update the assortment base, to train the personnel, to spend costs on advertising in new markets</td>
<td>The need to invest in the acquisition of new technologies, licenses, to train the personnel</td>
<td>The need to invest technology, personnel, advertising, market research, transformation the management structure</td>
</tr>
<tr>
<td>Implementation tools</td>
<td>Mainly marketing</td>
<td>Mainly technological</td>
<td>Technological and marketing</td>
</tr>
<tr>
<td>Duration and payback</td>
<td>The project can be implemented in the short term</td>
<td>The project can be implemented in the short and medium term</td>
<td>The project may be different in terms of implementation depending on the degree of innovation of the product</td>
</tr>
</tbody>
</table>

### Table 2

The authors believe that diversification should lead to reduction in risk and occurrence of synergetic effect, especially in finance, by allowing free movement of funds of the company to the most dynamically developing areas of activity. Considering the presence of socially significant activities of telecommunication company, the assessment of the effect of implementation of ISD should include a social component. Therefore, the list of indicators should meet the following criteria:
- compliance with the requirements of sustainable, balanced development in all areas of the enterprise management and operation;
- taking into account the degree of utilization of market opportunities;
- acceptability of the level of risk associated with the implementation of diversification strategy;
- compliance with the real resources available to the telecommunication company;
- consideration of consumers' needs and requirements for the level of use of modern communication technologies.

According to these requirements, all the indicators which will be used to assess the effect are advisable to divide them into groups, each of which has its substance. We consider the following types of effect necessary to heed for the assessment of the ISD implementation effect:

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*Kaluhina N. A., Sakun A. A., Tardaska T. M.* Innovative strategy of the telecommunication enterprise development
1. Economical (reduction of the cost of production and sale of services, increase of amounts of revenue through increased demand due to the introduction of new services, increase in sales of services with the introduction of new channels and markets, etc.).

2. Social (increase of the level of customer satisfaction, reduction of the digital divide and turnover in the company, raise of employment).

3. Market (increase of market share and rates of entering new markets, raise of the effectiveness of advertisement, etc.).

4. Strategic (risk reduction for each of strategic areas of economy, consistency with the strategy of development of economic activity and vectors of the development of state, etc.).

5. Technological (reduction of energy intensity and material consumption of the equipment, accordance of the technologies to modern requirements, the possibility of convergence with other telecommunication services).

Considering the diversity of indicators, it is advisable to use points in assessment, basing on the method of expert evaluations. The interpretation of the resulting assessment can be done in different ways. In view of the purpose of the research and the application of the scoring system of assessment, we consider using a method that allows to set the scale of values, which is correlated to the quantity of gradations of the complex structure, that is with the number of groups of indicators and the number of indicators in a group, the most appropriate. In other words, the effect rating scale may be thresholds from zero to the maximum possible marks for all indicators.

Applying the approach mentioned provides the opportunity to obtain not only quantitative estimates of the effect of implementation of ISD, but also to show the necessary measures to improve efficiency in different areas of the effect emergence.

Conclusions. Modern economic processes are impossible without active implementation of innovation. This applies particularly to the sphere of communication and information and telecommunication companies directly, as they base their activities mainly on the implementation of technological and organizational innovation. The need for implementation of diversification to the activity of telecommunication enterprise is approved in the article, also the approach to the implementation of innovative organizational innovation. The need for implementing companies directly, as they base their activities mainly on the implementation of technological and innovation. This applies particularly to the sphere of communication and information and telecommunication services.

The implementation of applied scientific results in practice will optimize the processes of development of telecommunication enterprise on the basis of diversification, which will enhance its competitiveness and socio-economic efficiency of activity in modern conditions.

It is planned to develop scientific applied approaches to determination of probability of the synergetic effect appearance as a result of diversification and to form the approaches to its quantitative measurement in further research.

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