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**ELEMENTS OF CONTROL OF COMPETITIVENESS
OF TELECOMMUNICATION COMPANIES**

Introduction. The importance of telecommunications in the socio-economic sphere is growing, providing support for the development of the national economy, since the priority development of telecommunications, compared with the overall pace of economic development, significantly increases the competitiveness of the Ukrainian economy. Therefore, the management of telecommunications companies is defined as one of the priority areas of government in the face of growing competition, which makes the problem of increasing the competitiveness of telecommunications services and the telecommunications operator as a whole urgent.

Aim and tasks. The aim of the article is to study the methodological issues of substantiating the elements of enterprise competitiveness in the telecommunications services market, as well as studying the gradation of the level of competitiveness and recommendations for their use in managing the competitiveness of an enterprise.

Results. The scientific and theoretical approaches to the essence of the concept of «competitiveness» are considered. The study made it possible to form its own scientific vision of the economic category “competitiveness of telecommunication companies”. It is noted that modern global trends in the development of the telecommunications market affect its new type in the conditions of the formation of the information society. The main forms of competition in the telecommunications services market are considered. The features of modern telecommunications are highlighted. Disclosed policy in the space of competition regulation in the market of telecommunication services.

Conclusions. Identified and analyzed the basics of managing the competitiveness of telecommunications companies operating in a competitive environment, which is characterized by constant technological innovation.. The main elements of the process of managing the competitiveness of telecommunications companies are substantiated as components of the internal and external environment that determine or can determine the future performance of the company in the international and domestic markets, which will help create the conditions for the implementation of a highly developed information and telecommunications infrastructure to provide telecommunications services to all segments of the population.

Keywords: competition, elements, competitiveness, services, telecommunication companies, competitiveness management.

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ЕЛЕМЕНТИ УПРАВЛІННЯ КОНКУРЕНТОСПРОМОЖНІСТЮ ТЕЛЕКОМУНІКАЦІЙНИХ КОМПАНІЙ

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Вступ. Важливість телекомунікації в соціально-економічній сфері зростає, забезпечуючи підтримку розвитку національної економіки, оскільки випереджувальний розвиток телекомунікації, порівняно із загальними темпами розвитку економіки, значно підвищує конкурентоспроможність економіки України. Тому управління телекомунікаційними компаніями визначається як один із пріоритетних напрямів державного управління в умовах зростаючої конкуренції, що актуалізує проблему підвищення конкурентоспроможності телекомунікаційних послуг та оператора телекомунікацій в цілому.

Метою статті є дослідження методичних питань щодо обґрунтування елементів конкурентоспроможності підприємства на ринку телекомунікаційних послуг, а також дослідження градації рівня конкурентоспроможності та рекомендації щодо їх використання в управлінні конкурентоспроможності підприємством.

Результати. Розглянуто науково-теоретичні підходи щодо сутності поняття «конкурентоспроможності». Проведене дослідження дозволило сформулювати власне наукове бачення економічної категорії «конкурентоспроможність телекомунікаційних компаній». Зазначено, які сучасні світові тенденції розвитку ринку телекомунікацій впливають на її новий тип в умовах становлення інформаційного суспільства. Розглянуто основні форми прояву конкуренції на ринку телекомунікаційних послуг. Виділено особливості сучасної сфери телекомунікацій. Висвітлено політику в сфері регулювання конкуренції на ринку телекомунікаційних послуг.

Висновки. Визначено та проаналізовано основи управління конкурентоспроможністю телекомунікаційних компаній. Обґрунтовано основні елементи процесу управління конкурентоспроможністю телекомунікаційних компаній, як складові внутрішнього та зовнішнього середовища, які визначають або можуть визначити в майбутньому результативність діяльності компанії на міжнародному та внутрішньому ринку, що сприятиме створенню умов для впровадження високорозвиненої інформаційно-телекомунікаційної інфраструктури забезпечення телекомунікаційними послугами усіх верст населення.

Ключові слова: конкуренція, елементи, конкурентоспроможність, послуги, телекомунікаційні компанії, управління конкурентоспроможністю.

Introduction. The importance of telecommunication in the socio-economic sphere is increasing, providing support for the development of the national economy, as the advance development of telecommunications, in comparison with the general rate of economic development, significantly increases the competitiveness of Ukraine's economy.

Therefore, the management of telecommunication companies is defined as one of the priority areas of government, as they play a significant role in the social and economic activities of the society, providing an efficient or interactive transmission of information. In turn, the quality of effective functioning of companies is determined by the following components: satisfaction of the needs of the population, the quality of services provided, the clear organization of the production process, the use of modern innovative technologies, competitiveness.

If we describe the current state of the telecommunication industry functioning, it should be noted that in the face of fierce competition, telecommunication operators are faced with the problem of increasing the competitiveness of their services and the company as a whole.

Competition under such conditions becomes the most crucial lever, exacerbates the struggle for the consumer and is an important stimulus to improve the company's material and technical base, to improve technology and production organization, to introduce advanced types of services, forms and methods of customer service, and to meet their needs to the fullest.

Analysis of recent researches and publications. The scientific and theoretical basis for researching the problems of managing the telecommunication company's competitiveness are the scientific works of such scientists, researchers as V. Granaturov [1], P. Vorobienko [2], Ye.Ivanov [3], O. Drahan [4], H. Gruber [5], V. Koval [6], J.Laffont & J. Tirole [7], B. Levy [8]. However, the research value of these scientific papers shows that the methodological principles and practical recommendations for identifying the main elements of the telecommunication companies' competitiveness management need further development.

Aim and tasks. The aim of the article is to study the methodological issues of substantiation of the elements of enterprise competitiveness in the telecommunications services market, as well as the study of the gradation of competitiveness and recommendations for their use in managing enterprise competitiveness.

Previously unsettled problem constituent. The urgency of the choice of the topic is due to the fact that the telecommunication sphere in Ukraine is characterized by an intensified competitive environment, inherent in constant technological innovations, the emergence of new operators and providers.

Proceeding from the relevance of the target setting, the following tasks should be resolved:

- 1) to investigate the nature of the category «competitiveness»;
- 2) to form own scientific vision of the economic category «competitiveness of telecommunication companies»;
- 3) to identify the necessary elements of the telecommunications companies' competitiveness management process.

Research results. For a systematic approach to the study of the concept of «telecommunication company's competitiveness» and «management of the telecommunication company's competitiveness» let's consider the content and essence of the category «competitiveness».

In economic literature, the term «competitiveness» is interpreted, analyzed and based on economic targets in question. So, for example and analysis, we give a few definitions:

According to the well-established definition, «competitiveness - is the property of an object, characterized by the possibility of real or potential satisfaction of specific needs of a particular market; Competitiveness level is a quantitative characteristic of competitiveness that characterizes the degree of conformity of an object of real or potential satisfaction with the specific needs of a particular market in comparison with similar objects presented in this market» [1-3].

On the basis of studying, systematizing and analyzing the interpretation of the economic category «competitiveness», we propose our own concept of «telecommunication company's competitiveness» - this is the real and potential ability of the telecommunication company to conduct an active competitive struggle, to withstand the external influences of the living environment, to provide qualitative, innovative services, carrying out activities under the conditions of the telecommunications services market liberalization. It should be noted that the modern world trends in the development of the telecommunication services market are influenced by the modification of competition in its new type in the context of the information society formation. At present they should include: strengthening the process of liberalization and exacerbation of international competition; deepening of integration processes; scientific and technical and technological changes; development of new methods of non-price competitive struggle and access to an innovative way of development.

In research [7-10; 14-15] defined the following basic forms of competition in the telecommunication services market in the modern conditions:

- competition in the conditions of oligopoly under the influence of the development of communication systems and technologies, the implementation of the principle of «technological neutrality» by regulators and the increase of players in the market for the provision of certain telecommunication services becomes monopolistic competition;

- in the conditions of monopolistic competition, the nature of imperfect competition is undermined by combining competition with the elements of partnership;

- competition, which is developing in the direction of complementation, transforms the conditions of telecommunication operators functioning from the market of imperfect competition into the business network of partners, which requires the search for new sources of competitive advantages and the creation / implementation of an adequate mechanism for their management.

In entrepreneurial activity, the use of telecommunications is important in addition to the information support of managerial decisions making and information exchange, the increase of the competitiveness of economic entities of various forms of ownership and the scope of their functioning and increase of profitability through the use of telecommunications. These key benefits are backed by opportunities for faster response to consumer expectations and demand management in the goods and services market, new product offerings and access to global markets through the integration of the national economy into the world's information space.

In order to achieve optimal results of competition state regulation in the market of telecommunication services, it is necessary not only to adhere to the harmonization of sectoral regulation with antimonopoly principles, but to establish regulation on an independent economic concept related to the objectives of regulation and improvement of the powers of the regulatory body (NCCRI) regarding (table 1).

Table 1. Policy in the sphere of competition regulation in the telecommunication services market

Institutional powers	Instruments for regulation in telecommunications
Regulation of conditions for entry into the telecommunication services market	Licensing service providers
	Spectrum distribution policy for mobile telephony
	Regulation of interconnection of networks and interconnection rates
Clarification of the rules relating to violations of competitive (antitrust) legislation	Restrictions on mergers and acquisitions
	Limit of foreign capital participation in the authorized capital of operators
Regulation of the operator activity at the market in order to detect unjustified price fixing and quality control of services	Price control
	Quality control
	Adjusting unfair (deceptive) advertising

Source: own elaboration.

Under the criterion of competitiveness is the qualitative or quantitative characteristic of products, which serves as the basis for assessing its competitiveness. Taking into account the peculiarities of the formation of the telecommunication services competitiveness, in research [1-2] set up the following composition of the competitiveness' criteria: quality, price and consumer novelty of the service; quality of service; availability of additional services; image [12].

The following features of the modern telecommunication sphere are:

1. In the context of the development of services in the telecommunication market:

- a gradual decrease in the share of services in the fixed telephony market in Ukraine, even with the emergence of alternative telecommunication operators, which contributed to a partial increase in competition and, accordingly, industry modernization;

- saturation of the mobile telephony market (table 2) with the offer of services using the technology of the third generation with the possibility of high-speed mobile Internet access and radio communication technology;

- increase of the market for broadband access to the Internet, which creates competitive advantages for telecommunication market actors.

2. In terms of telecommunication infrastructure financing:

- lack of investment in the development of modern communication technologies and infrastructure;

- high costs for upgrading telecommunication networks and equipment;

- wear and tear increase of the operating equipment.

3. In the context of state policy in the field of telecommunications:

- insufficient level of the state support of the industry for the establishment of publicly available electronic information resources and promotion of private and public partnership of telecommunication projects;

- low solvency of low-income consumers of the services;

- low level stimulation by the state of production development of domestic products in the field of information technology.

Table 2. Subscribers link 2015-2017 (K Units)

	2015		2016		2017	
	of all	incl. individuals	of all	incl. individuals	of all	incl. individuals
Mobile mobile subscribers	57456,5	53693,3	55862,3	51655,2	54682,8	50179,9
Cable TV subscribers	3419,6	3412,2	2354,3	2340	2240,2	2233,4
- including digital ones	758,5	755,1	752,2	744,2	749,6	746,3
satellite	215,5	215,3				
interactive	300,1	299,8				
Number of subscribers on the Internet	15834,9	14597,8	22957,5	20619	26014,9	23395,2
- of them with the provision of broadband access	13592,7	12605,2	21812	19684	25175	22804,6
including						
fixed	4965,4	4614,1	5087,3	4734,4	5248,9	4894,8
wireless	8627,3	7991,1	16724,7	14949,6	19926,1	17909,8

Source: compiled by [17].

The effective management of the telecommunication companies competitiveness depends on the following elements:

1) strategic monitoring, which includes an information base to reflect the contradictory nature of the economic environment, contradictions in the system, economic interests, business partners and competitors;

2) situational analysis, the formation of an integrated assessment of the actual state of the company's potential.

Taking into account these elements, the system of actions is oriented on a concrete market situation, which includes the principles, methods of the hypothesis. The principles include:

- continuum principle (continuous increase of competitiveness due to the combination and variability of internal and external factors of the development);

- principle of rational sustainability (distribution of the realized potential of the system in time);

- principle of absolute stability (forming the overall competence of the enterprise to manage its own competitiveness).

The methods determining the successful solution of problems, accelerating the processes of the telecommunication company development or lost opportunities and weakening the company's development potential include analysis and modeling methods.

It is an efficient organization of the telecommunication network management system that ensures their reliability and,

therefore, under the conditions of saturation of the basic segments of telecommunication services, there is a need to develop a management concept for the further development of the telecommunication network.

The competitiveness of telecommunication services provided through the telecommunication network poses the possibility of offering a wide range of services to meet the criteria for optimal operation of its management system: productivity, reliability, cost, etc. Anyway, the assessment of the threshold values of the indicators confirms the level of work of the management system, but for its optimization, it is advisable to apply the criteria for executing a business process transaction and the reliability of management information.

Increasing the competitiveness of not only telecommunication operators, but also telecommunication services on the basis of modernization of the telecommunications network is achieved through the construction of infocommunication networks or electronic communication networks that meet the following requirements:

- convergence of telecommunication and informatization systems in Ukraine;

- minimum required level of investment in telecommunication network development;

- ability to provide comprehensive modern types of information and communication services (table 3).

Table 3. Concentration of the termination market of mobile network operators

<i>Period of analysis</i>	<i>Herfindahl-Hirschman Index</i>	<i>Market concentration coefficients</i>
1H 2015	4078	99,7
2H 2015	4173	99,7
1H 2016	4022	99,8
2H 2016	4188	99,7
1H 2017	4340	99,8

Source: compiled by [18]

Worldwide practice has shown the development of conceptual approaches to telecommunication management based on business process management models (TM Forum, ATM, Smart TMN and IETF, etc.), which allows to manage under the conditions of network neutrality. We agree that the network management system is characterized by features and meets the requirements of its architecture, which should satisfy the service management process, which will be largely determined by the level of interaction management with partners and suppliers (in the eTOM model) [13].

The strategic toolkit for the development of the telecommunication services market serves as a regulatory framework that establishes a clear division of powers and cooperation among different institutions and provides a legal framework for strategic investment promotion and competition with the balance of public and private interests as well as a wider strategic structure related to the formation and the implementation of electronic communication policy: on the part of the proposal aimed at facilitating access to traditional and innovative electronic communication services, as well as on the demand side aimed at promoting the educational skills of using businesses and citizens, e-government, and so on.

The sustainability of the telecommunication services market needs long-term investment, which requires that uniform and transparent rules be in place in a regulatory framework that will contribute to the stability and predictability of regulation and to reduce its impact by fostering competition [14, 15, 16].

Assessing the effectiveness of the regulatory framework, it is appropriate to use indicators that will allow regulators to identify issues that include tariffs, competition, investment, and infrastructure deployment.

Conclusions. By implementing a mechanism for managing competitiveness it is expedient to use modified models and innovative approaches. Innovative approaches for ensuring competitiveness include conducting and acquiring research, new technologies, industrial design, other types of production preparation for the release of new products or services, introduction of new methods for their production, purchase of machinery, equipment, installations, other fixed assets and capital expenditures associated with the introduction of innovation, marketing.

The hypothesis will be presented as follows: competitiveness has an internal origin and is characterized by the established laws, the current state of the enterprise and the general trend of telecommunication company's development.

Defined and specified elements of the management of telecommunication company's competitiveness allow to establish conditions for implementation and ensuring the efficiency of innovative technologies in providing modern communication services.

Thus, the elements of the management of telecommunication company's competitiveness are those components of the internal and external environment that determine or may determine the future performance of the company in the international and domestic markets.

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