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INVESTMENT ACTIVITY OF TELECOMMUNICATIONS PROVIDERS: CONDITIONS, PROBLEMS AND TRENDS

Urgency of the research. Today the increase in the volume and monetary investment activity of telecommunications providers is needed to survive in an intensely competitive field

Target setting. Providing a quality data-heavy transfer is a major factor in increasing the role and importance of investment activity in achieving the strategic targets of telecommunications providers.

Actual scientific researches and issues analysis. There are works dedicated to the problems and the value of ICT investment, but on the general issues of telecommunications. However, in the scientific literature surveyed, the investment activity of telecom providers is not addressed as it is in this paper.

Uninvestigated parts of general matters defining. The study of telecommunications providers' investment requires separate research that will address the issues in the context of ongoing changes.

The research objective. The purpose of this research is a study of conditions, problems and trends of telecommunications providers' investment activity.

The statement of basic materials. The trends of European and Ukrainian telecommunications providers' activity suggest that current providers should consider investment activities that solve higher important strategic tasks when ICT technologies spread very quickly.

Due to the existing complex problems, telecommunication providers in Ukraine, especially Ukrtelecom, which accounts for 14% of the market, are unable to provide sufficient and timely amounts of investment. As a result, the needed investment in facilities is lacking. This situation negatively influences the rate of penetration and diffusion of new generations of ICT in Ukraine compared with developed countries.

Conclusions. To overcome the existing technology gap in the implementation of investment activities by Ukrainian telecommunication providers, the main emphasis should be given to the selection of investment directions. This will provide not only the modernization of their networks, but also the basis of future long-term development.

The conditions and effectiveness of telecommunication providers investment activities are becoming more important not only according to strategic development, but also in terms of the availability of modern ICT.

Keywords: investment activity; trends; development; resources.

ІНВЕСТИЦІЙНА ДІЯЛЬНІСТЬ ОПЕРАТОРІВ ТЕЛЕКОМУНІКАЦІЙ: СТАН, ПРОБЛЕМИ І ТЕНДЕНЦІЇ РОЗВИТКУ

Актуальність теми дослідження. Сьогодні у всьому світі оператори телекомунікацій збільшують обсяги інвестування з метою збереження існуючої клієнтської бази та конкурентних позицій.

Постановка проблеми. Забезпечення трансферу даних, обсяг яких швидко прогресує є ключовим фактором зростання ролі та значення інвестиційної діяльності в досягнені стратегічних цілей телекомунікаційних операторів

Аналіз останніх досліджень і публікацій. У науковій літературі питанням інвестиційної діяльності телекомунікаційних операторів приділяється недостатньо уваги. Зустрічаються роботи, присвячені проблемам і значенню сфери ІКТ, загальним питанням інвестування телекомунікацій.

Виділення недосліджених частин загальної проблеми. Вивчення інвестиційної діяльності телекомунікаційних операторів вимагає окремих досліджень, які дозволять підняти проблемні питання в контексті змін, що відбуваються.

Постановка завдання. Метою статті є дослідження стану, проблем та тенденцій розвитку інвестиційної діяльності операторів телекомунікацій.

Викладення основного матеріалу. Тенденції діяльності операторів телекомунікацій Європи і України, свідчать, що сучасні оператори повинні розглядати питання інвестиційної діяльності з позиції вирішення стратегічних завдань першорядної важливості.

Внаслідок існуючих комплексних проблем оператори телекомунікацій України, особливо ПАТ «Укртелеком» на частку якого припадає 14% ринку не в змозі забезпечити достатні і своєчасні обсяги інвестування. В результаті спостерігається технологічне відставання в об'єктах інвестування навіть у найбільш успішних учасників ринку. Така ситуація негативно впливає на швидкість проникнення і розповсюдження нових поколінь ІКТ в Україні.

Висновок. Реалізація інвестиційної діяльності на постійній основі в обсягах достатніх для розвитку виробничої потужності операторів забезпечить відповідність їх діяльності сучасним тенденціям.

Питання стану та результативності інвестиційної діяльності операторів телекомунікацій набувають вагомого значення не тільки з позиції їх стратегічного розвитку, але і з точки зору забезпечення доступності сучасних ІКТ.

Ключові слова: інвестиційна діяльність; тенденції; розвиток; ресурси.

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Urgency of the research. Today the increase in the volume and monetary investment activity of telecommunications providers is needed to survive in an intensely competitive field due to several factors. In order to maintain their existing customer base and competitive position everywhere in the world, especially in developed countries, telecommunications providers need to improve the speed and volume of information transfer to satisfy current and future customers' needs by increasing the volume of investment in development and construction of new generation networks.

According to research, 39% of customers globally consider switching a provider due to network issues. Data traffic is growing exponentially, driven especially by media content. Customers are increasingly using their handheld devises for data-heavy activity. On this basis, telecommunications providers can create opportunities for attracting new customers. For example, mobile data traffic in Europe is predicted to grow six-fold by 2019 and video is expected to account 72% of the total volume [1].

Target setting. Providing a quality data-heavy transfer is a major factor in increasing the role and importance of investment activity in achieving the strategic targets of telecommunications providers. A modern telecommunications provider must invest large amounts in both the development of telecommunications networks' capacity and the technical level of existing networks. European operators have already made significant investment in 4G mobile networks, as well as fiber access for fixed broadband to increase network capacities [1].

The increase of investment in technological development of telecommunications networks forms the basis for the spread of ICT. According to the ICT Development Index (IDI), European countries take the leading position in network expansion [2].

In 2015, the ICT of Ukraine was one of the most attractive and formative branches of investment in Ukrainian economy, receiving the highest growth of investment. However, according to the International Telecommunication Union (ITU), in 2015Ukraine's position in the IDI was 79. This had worsened by 10 points since 2010 [2]. This decline was caused by many different internal and external factors [3].

In such circumstances, the research of telecommunications provider's investment activity will form the analytical and methodical base for improving its investment activity, define the directions of investment that will meet the current trends, and allow them to survive and thrive in the market.

Actual scientific researches and issues analysis. There are works dedicated to the problems and the value of ICT investment, but on the general issues of telecommunications. However, in the scientific literature surveyed [4-8], the investment activity of telecom providers is not addressed as it is in this paper.

Uninvestigated parts of general matters defining. Thus, the study of telecommunications providers' investment requires separate research that will address the issues in the context of ongoing changes.

The research objective. The purpose of this research is a study of conditions, problems and trends of telecommunications providers' investment activity.

The statement of basic materials. We can divide a telecom provider's investment activity into internal and external. An internal telecom provider's investment activity is linked with development of its operating activity and is funded by capital investments. For this paper, the scale of capital investments of an enterprise is characterized by the ratio of capital expenditure to revenue in the same year. This coefficient is used by the Ukrainian enterprises as well as elsewhere in the world. The ratio of capital expenditure to revenue demonstrates an active participation of the enterprise in the development its operating activity. For example, in 2010, capital expenditure of American telecom providers averaged 5% to 25%, and concentrated in the range 15% – 20% of operating revenue [9, p. 21].

Ukrainian telecom providers invest differently. Where and how much depends on the level of the activity efficiency, financial condition, market position of enterprise, and other factors. For example, when the financial statements and annual reports MTS, Kyivstar and Ukrtelecom were analyzed, the data showed that MTS invested between 10% and 22% of operating revenue and concentrated it in

the range of 11% – 13% during the last 5 years. Kyivstar invested between 25% and 30%. Ukrtelecom invested between 2% and 11%, concentrated at about 5% [10-12].

Permanent investments in the development of telecommunications networks propel the growth of telecom providers' revenues and profits. However, the necessity to provide a plan for the evolution of telecommunications networks improvement is an important aspect in this context.

Today, leading telecom providers have concluded that supporting their legacy network infrastructure, composed of various network protocols and technologies, is increasingly complex and costly for them. They are migrating to All-IP networks to maximize the benefits of a unified network within their groups and achieve truly cross-border presence for their customers [1]. British Telecom started such a reconstruction in 2004 [13].

The experience of Ukrainian operators shows that if any operator will not invest enough money in the development of its operating activity, they will fall behind technically. This will become a serious threat to the provider in existing and future markets. For example, while the leading Ukrainian operators MTS and Kyivstar began the process of migration to All-IP networks in 2009-2010 [14], Ukrtelecom will start to invest in an partial modernization of its networks only in 2016 [15].

The activity results of Ukrtelecom and the efficiency of its capital investment over five years were analyzed in Tables 1 to 3. According to Ukrtelecom statements, the main areas of capital investment for the company are the modernization of transport and local networks and multiservice packet-based network, including fixed broadband.

The Indexes Ukrtelecom in 2011-2015

Table 1

Indexes by year	2011	2012	2013	2014	2015
Net Revenue, billion UAH	6,81	6,95	6,43	6,49	6,32
Ratio of annual change of Net Revenu	1,004	1,02	0,93	1,01	0,97
Capital Expenditure, billion UAH	0,612	0,747	0,132	0,317	0,234
Ratio of Annual Change of Capital Expenditure	1,79	1,22	0,18	2,40	0,74
Ratio of Net Revenue to Capital Expenditure, %	9	11	2	5	4
Market share, %	17	17	16	15	14
Operating expenses, billion UAH	6,97	5,94	5,87	5,85	5,27
Profitability of operating activity, %	5	13	8	13	21

Source: Created on the basis of Ukrtelecom statements

Table 2

Analysis of Ukrtelecom Indexes for 2011-2015

Indexes	Ratio
Ratio of annual change of Net Revenue	0,93
Ratio of annual change of Capital Expenditure	0,38
Ratio of Net Revenue to Capital Expenditure, %	-5
Market share, %	-3
Profitability of operating activity, %	16

Source: Created on the basis of Ukrtelecom statements

Table 3

Ratio of Annual Cha	nae of Revenue
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Indexes by year	2011	2012	2013	2014	2015	2015/2011
Ratio of Annual Change of Ukrtelecom Net Revenue	1,004	1,02	0,93	1,01	0,97	0,93
Ratio of Annual Change of Communication Services Total Revenue in Ukraine	1,06	1,04	1,004	1,02	1,066	1,11

Source: Created on the basis of Ukrtelecom statements

The change of the revenue amount did not have a steady annual trend. It depended on the considerable competition in the market of telecommunication services. As a result, during the five years ana-

lyzed, the revenue of Ukrtelecom decreased by 7%. In addition, the decreasing market share of Ukrteleom occurred gradually. This decrease was a total of 3% for the same period.

Capital expenditure of Ukrtelecom also decreased considerably by 62% for the five years. This analysis of all indexes illustrates the inefficiency of investment activity of the telecom operator in general. There is one "bright spot" – the increase in operating activity profitability by 16%. Such a change was result of the reduction of operating expense by 24%.

The internal financial resources are one of the main sources for a development of operating activity of a telecom provider. The data about changes and structure of such financial resources of Ukrtelecom are given in Tab. 4 and Fig. 1.

Analysis of Ukrtelecom's Internal Financial Resources for 2011-2015

Table 4

Index*	The index amount by year					
index	2011	2012	2013	2014	2015	
Internal financial resources, ths. UAH	1 338 718	1 285 142	940 303	847 215	784 004	
Ratio of Annual Change Internal Financial Resources	0,97	0,96	0,73	0,90	0,93	
Accumulated Net Profit (Deficit), ths. UAH	(138 322)	(2 802 539)	(3 022 828)	(6 378 724)	(6 505 177)	
Ratio of annual change of Accumulated Net Profit (Deficit)	0,07	20,26	1,08	2,11	1,02	
Net Profit (Deficit) by year, ths. UAH	(136 592)	366 802	84 728	286 198	311 475	
Ratio of annual change of Net Profit	0,53	2,69	0,23	3,38	1,09	
Depreciation and Amortization, ths. UAH	1 338 718	918 340	855 575	561 017	472 529	
Ratio of annual change of Depreciation and Amortization	0,97	0,69	0,93	0,66	0,84	
Net Investment, ths. UAH	-726 718	-171 340	-723 575	-244 017	-238 529	
Ratio of annual change of Net Investments	0,92	0,24	4,22	0,34	0,98	

Source: Created on the basis of Ukrtelecom statements

The analysis of the annual change ratio of the internal financial resources Ukrtelecom shows the considerable decrease. The absence of an accumulated profit is a negative factor. In addition, the amount of accumulated deficit was increasing. The structure of the internal financial resources had changes connected with the growth of net effective profit share and the decrease of the share of depreciation and amortization (Fig.1).

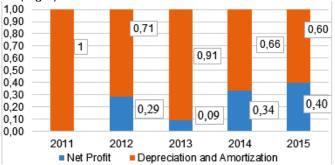


Fig. 1. The structure of Ukrtelecom internal financial resources for 2011-2015 *Source:* Created on the basis of Ukrtelecom statements

^{*}The data are given by the end of the certain year

The net investment was negative during 2011-2015. It indicates that the enterprise had a trend in recent years of a decrease of the fixed capital reproduction process. The annual capital investments are less than the annual depreciation and amortization.

In addition, the net investment was approaching zero. The cause of this is not the increase in the depreciation and amortization expense, but in the reduction of accrued depreciation and amortization. In the author's opinion, this links with the desire to present the activity of telecom provider as effective. The gross amount of the internal financial resources in 2015 when the share of net profit was 40 percent is half the gross amount of the internal financial resources in 2011 when the share of net profit was zero.

The analysis of Ukrtelecom external resources for 2011- 2015 is not necessary because the capital expenditure is less than available financial resources. Hence, if the external resources were exercised for possible loan options, they would not be for operating activity development, but for supporting the current activity and covering losses. Such investment activity and the use of internal resources have a negative impact on the enterprise growth rate, as well as on the state of its fixed assets (Tab. 5).

Ukrtelecom capital assets indexes 2011-2015

Table 5

Indexes by year *	2011	2012	2013	2014	2015	
Historical / Market Value, ths. UAH	24 911 009	25 698 148	25 744 680	5 200 931	8 983 451	
Dynamics of value	1,28	1,03	1,002	0,20	1,73	
Accumulated depreciation ths. UAH.	17 609 396	18 425 775	19 252 038	595 326	-	
Ratio between Accumulated Depreciation and Historical or Market Value	0,71	0,72	0,75	0,11	0,00	

Source: Created on the basis of Ukrtelecom statements *The data are given by the end of the certain year

Dynamics of the indexes of Ukrtelecom capital assets for 2011-2015 shows an increase in their historical value in 2011-2013, although does not show this the level of obsolescence. The ratio between accumulated depreciation and historical value increase and reached 75% at the end of 2013. At that point, the enterprise's management made a decision to change the capital asset accounting policy. The enterprise began to use the market value of capital assets instead their historical value in its statements [9].

This change in accounting policy of the capital assets cost seemed to indicate a reduction of 80% in 2014. According to the statements, the increase in the capital assets cost by 73% in 2015 is due to the revaluation of several items of capital assets – e.g. building, improvement of rented premises, communication and other network equipment, cable lines and transmission equipment.

All changes and trends of Ukrtelecom indexes that have characterized its investment policies confirm the investment activity of Ukrtelecom is inefficient. It does not provide the renewal of and decrease in the obsolescence of the enterprise's technical base.

These problems and trends are a consequence of Ukrtelecom's significant technology gap. This technology gap is caused by operating profitability based upon its main market segment (services of fixed communication), where the enterprise has historically concentrated its efforts. In addition, the enterprise does not have enough financial resources to upgrade its technology. Since the time of the USSR (1990), the technical base has gotten very old and worn-out. For the last ten years, Ukrtelecom has concentrated its efforts on providing various Internet services.

The management of Ukrtelekom plans to solve the problem of network and equipment technical renovation by the implementation of a large-scale project in 2016-2018. This project has been implemented in cooperation with Xuawei and the China Development Bank [14]. The project foresees a network modernization in the six biggest cities in Ukraine. Also, the project will implement building a

fiber-optic network in rural areas with the goal of fixed-converting voice to VoIP technology. This will create the technological base for providing services of broadband Internet and other additional related services. The total amount of investment will be about 3,8 billion UAH. This is more than 40% of current Ukrtelecom capital assets cost [10].

This project will help to reduce the obsolescence of the enterprise's technical base. This will also lead to a reduction in operating expenses due to the reduced maintenance cost of a modern network [1; 14]. The real estate, which will became free after the modernization (old telephone stations sometimes occupy the whole building), can be sold, rented etc. The enterprise will get additional financial resources for development of its investment activity.

Conclusions. The trends of European and Ukrainian telecommunications providers' activity suggest that current providers should consider investment activities that solve higher important strategic tasks when ICT technologies spread very quickly. The conditions and problems of the development of Ukrtelecom support this conclusion.

Due to the existing political instability, UAH devaluation, and other complex problems [3], telecommunication providers in Ukraine, especially Ukrtelecom, which accounts for 14% of the market, are unable to provide sufficient and timely amounts of investment. As a result, the needed investment in facilities is lacking. This causes a technology gap even with the most successful market participants. This situation negatively influences the rate of penetration and diffusion of new generations of ICT in Ukraine compared with developed countries. For example, the Ukrainian "E-government" can not be implemented large-scale as planned [3].

At this article illustrates, to overcome the existing technology gap in the implementation of investment activities by Ukrainian telecommunication providers, the main emphasis should be given to the selection of investment directions. This will provide not only the modernization of their networks, but also the basis of future long-term development. This takes into account the ever-increasing demand for faster, more reliable, increased information transfer.

Implementation of investment activities on a permanent basis in amounts great enough to develop the service capacity of the providers will allow them to modernize their system as needed. Therefore, the conditions and effectiveness of telecommunication providers investment activities are becoming more important, not only according to strategic development, but also in terms of the availability of modern ICT.

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