

Features of Strategic Management of Business Processes of Telecommunication Enterprises in the Digital Economy

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Abstract— Currently, the Russian economy is in a transition period, preparing it for a change in the technological order. Such a dynamic transition has a significant impact on the development of the domestic economy as a whole and its individual sectors, in particular the telecommunications industry. The increasing role of information and communication technologies in public life in the XXI century has had a significant impact on the economy, thereby creating the basis for its transformational model – the digital economy. This transformation of the economy has had a significant impact on the existing one, at the level of companies (including telecommunications), mechanisms for building strategic management processes, transforming them under new realities. The need for significant changes in business process management at the strategic level of telecommunications companies has predetermined the relevance of our research topic.

The authors set out to develop methodological tools for the formation of adaptive strategies for the development of business processes of telecommunications companies in the digital economy. The study examines the features of strategic management of telecommunications companies in the digital economy, summarizes the world experience and analyzes the development strategies of telecommunications companies in the context of the process approach to management. The authors methodology is developed, which allows to form strategies for the development of business processes of telecommunication companies in the transformational conditions of the economy. The developed methodological tools for the formation of adaptive strategies for the development of business processes were tested in the practical activities of company "VimpelCom".

Keywords: *strategic management, digital economy, business processes, enterprise development, reengineering, telecommunications companies*

I. INTRODUCTION

Objective features of the last two decades of development of society are as intensive development of information technologies of management, and introduction of digital technologies in all aspects of economic activity [1]. The obvious consequences of these trends have become completely new conditions for the functioning of telecommunications enterprises, which are generated by the digital economy, and require a fundamental restructuring of their business processes, as well as the development of strategies for their transformation into a modern external environment. Most notably, these transformational processes are reflected in the so-called "digitally dependent" industries. We propose to include the following sectors: activities in the field of information and communication, including telecommunications, as well as education, science and innovation.

The aim of the study is to develop methodological tools for the formation of adaptive strategies for the development of business processes of telecommunications companies in the digital economy.

II. METHOD OF RESEARCH

The materials for the study were statistical data from official sources, data on the functioning of PJSC

"VimpelCom", published on the official website, as well as other telecommunications companies, information presented in scientific articles and monographs of other authors. In the process of research we used matrix methods, as well as such General scientific methods as analysis and synthesis of information sources.

III. OBTAINED RESULT

Strategic management occupies a significant place in the management of large companies, including the telecommunications sector. This is due to the fact that modern companies at any time need effective strategic solutions to achieve and maintain their competitive advantages. At the same time, an effective system of strategic management is one of the key factors for the success of telecommunications companies, and to achieve its effectiveness, it is necessary to take into account the following features of strategic management of telecommunications companies in the digital economy:

1. Significant impact on the company's business processes of the maturity level of the digital economy.
2. Permanent increase in the level of competition in the telecommunications market and changes in the needs of the target audience due to changes in digital literacy of the population.
3. The need to form a competent innovation strategy that will take into account current technological innovations that are characteristic of the digital economy [2].

Analysis and generalization of world experience of development strategies of Telecom companies shows that in the first place, namely the telecommunications company began to develop a process approach to management since its inception. This greatly influenced their strategic vision, as the internal environment was immediately evaluated from the perspective of end-to-end processes and orientation to the final result. At the same time, telecommunications companies operating in the global market (BT Group, Tencent, etc.) pay great attention to the development and updating of their development strategy and strategic management in General, while a significant place as a factor influencing the choice of strategy is occupied by the level of development of the digital economy in the target markets [3], [4].

At the same time, the management system of most such companies is such that functional strategies, including innovative ones, which are focused to a certain extent on the indicators of the digital economy, detail and translate the company's development strategy into the external environment in terms of process management [5],[6].

Based on all the studied features and trends, we have developed the author's methodology that allows us to form strategies for the development of business processes of telecommunications companies in the transformational conditions of the economy, which is presented in figure 1.

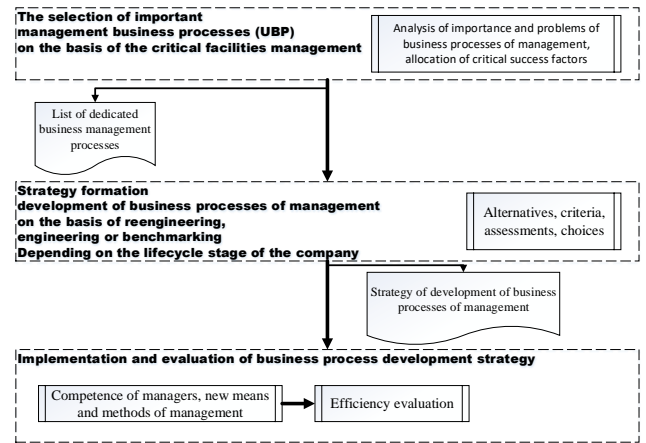


Fig. 1. Algorithm of formation of strategy of development of management business processes of telecommunication companies

As figure 1 shows, initially, the technique involves the allocation of key management objects specific to the telecommunications industry. On their basis, the most significant business processes of management (UBP) are identified, which must be constantly monitored, adapted and developed. At the same stage, the most significant CFCs for the industry are formed, which are then used to assess the significance of the allocated UBP and search for problem areas.

Further, the method involves the definition of the stage of the life cycle of the company (the method assumes the use of the matrix BCG), on the basis of which determines the method of transformation of UBP, we propose the following technologies for optimizing business processes: reengineering [7], [8], [9], engineering [10],[11] benchmarking [12]. The following mechanism is proposed (Fig. 2).

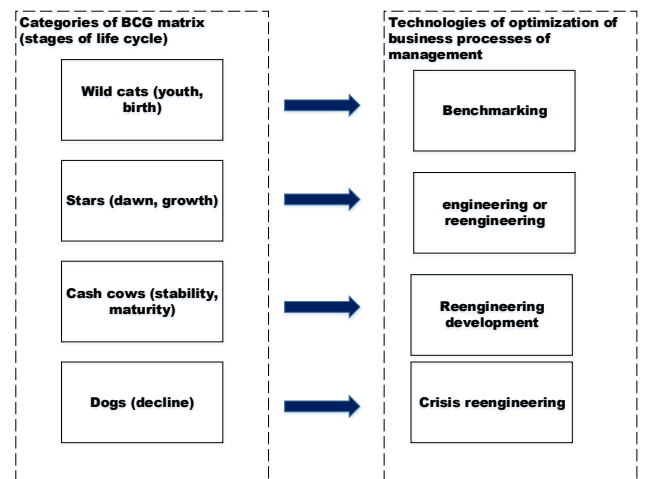


Fig. 2. Mechanism of selection of technology optimization UBP depending on the stage of the life cycle

Then there is a formation of strategy of development of UBP according to the chosen technique. The final stage of the methodology is to evaluate the strategies developed on the basis of KPI [13], typical for the industry.

For approbation of the developed technique of formation of adaptive strategies of development of business processes we have chosen one of the largest companies of the telecommunication market of the Russian Federation "VimpelCom". This choice is due to the average position of the company in the advising market, both in terms of revenue and the number of subscribers (table. I) [14].

TABLE I. RATING OF TELECOMMUNICATION COMPANIES OF THE RUSSIAN FEDERATION FOR 2018

Ranking position	Name company	Business model	Revenue, mln. rub.	Subscriber base, million people.
1	«MTS»	Cellular communication	448100	78
2	«Megafon»	Cellular communication	330000	75.2
3	«Rostelekom»	Wire communication	320239	No data
4	«VimpelCom»	Cellular communication	291540	57.4
5	«T2 Mobil»	Cellular communication	143200	42.3

Thus, "VimpelCom" on the one hand needs to increase the level of competitiveness to achieve the position of market leader of PJSC "Mobile TeleSystems", and on the other-has the necessary financial resources to implement the transformation of its management business processes in order to adapt them to the conditions of the digital economy.

In accordance with the developed methodology, we identified critical management objects (KOU), the management of which has a significant impact on the company's results. As the study showed, they are innovation and organizational development. Thus, for each of these COE needs its own separate business process, however, practice shows that often they are combined into one, this, in turn, leads to a lack of resources for each of the processes, which reduces their quality.

Then, using the matrix of the Boston consulting group, we determined the stage of the LC of PJSC VimpelCom, the study showed that the company occupies the category of "Stars", and, therefore, is at the stage of growth (dawn), so we chose the technology of reengineering of development. Next, we evaluated the effectiveness of the developed strategies for the development of UBP (table. II) [15].

TABLE II. KPI FOR EVALUATION OF MANAGEMENT BUSINESS PROCESSES OF «VIMPELCOM»

KPI	Approximate value (industry average) for 2018	Values of PJSC VimpelCom for 2018(before development reengineering)	Projected values of VimpelCom for 2020 (after development reengineering)
Profitability of sales, %	14.6	18.33	23.8
Market share (maximum as of 2018), %	41.89	27.97	38.1
Level of customer satisfaction with the service, %	82.26	71.4	83.4
The turnover rate, %	11	16.9	10.9

As shown in table II, all KPI indicators projected after the implementation of development reengineering, there is an increase, which allows us to recognize the development strategies of UBP effective.

IV. CONCLUSIONS

Summarizing all the results of the study, we can say that the development of strategic management of telecommunications companies is closely related to the features that arise due to the functioning of the digital economy.

The world experience of development strategies of telecommunication companies in the context of the process approach to management shows the need for constant adaptation of business processes, primarily management to the conditions of the modern global world, including increasing the "digital" influence in the economy.

The developed author's method of formation of strategy of development of management business processes of telecommunication companies in the conditions generated by digital economy allows to support competitiveness of the companies and provides conditions of their sustainable development in the future. That is confirmed by its approbation on the basis of data of "VimpelCom".

V. DIRECTIONS FOR FUTURE RESEARCH

The most significant direction of further research at the moment is the formation of the concept of sustainable development of the telecommunications sector in the digital economy by adapting the business processes of leading telecommunications companies to them.

This concept should be based on the correspondence of business processes of telecommunication companies, both basic and managerial, to the key success factors typical for the telecommunications sector. In particular, the concept includes typical strategies for transforming business processes in accordance with the trends in the development of the digital

economy, as well as a comprehensive system for assessing the effectiveness of business processes.

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