Strategic enterprise management and methodological approaches for the telecommunications industry

Abstract. Formulation of the Problem. The major problem of any telecommunications company is building and implementing a development strategy. It features adapting strategic analysis tools and implementing strategic management in an IT company. The proposal efficiency is determined by the economic effect of implementing an adaptive development strategy, which allows reducing depreciation costs.

Goal. Developing a methodological approach to the concept of strategic management of a telecommunications industry enterprise exemplified by PJSC Megafon, highly efficient when introduced in the workflow, and proposing an action plan for implementing this strategy.

Results. The key aspects of developing Russian telecommunications companies, affecting the specifics of their development strategies have been identified, external and internal factors significantly affecting the telecommunication company development efficiency have been identified, and the methodological approach to developing a development strategy has been improved through multiple factor analysis.

1 Introduction

Management areas such as strategic management and strategic analysis of companies’ activities currently occupy one of the most significant places in the management circuit of both Russian and international companies. A similar approach is also acceptable for telecommunication enterprises, which currently need effective strategic solutions to ensure extensive growth of key performance indicators. An effective strategic management system is the basic paradigm for the successful existence, purposeful short-term activity, competitiveness, and survival of enterprises in the communication service market. Since strategic management sets long-term goals, the possibility of the organization’s further growth and development depends on the properly chosen development strategy. Updating strategies of individual international telecommunication companies is also important for the current industry development stage [1-2]. To increase the growth rate, effective management solutions should be timely offered to the leading players in this area. The state of the Russian telecommunication industry requires improving the competitiveness of telecommunication companies by choosing the best strategic development alternative.

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2 Materials and methods

Over the past few years, the world has changed beyond recognition. Many live now with a full sense of the existence of the fourth dimension—virtual reality. In the near future, the virtual space promises to become even more tangible and accessible due to the rapid development and gradual merger of the leading telecommunications industries: mobile technologies and the Internet. Such a prospect opens up wide opportunities for organizing and doing business in any field, for corporations to reach a completely new level of technological development.

At the present stage of development of telecommunications, there is an international integration of financial and technological resources in order to expand the range of communication services and cover new territories with services. This process required the renewal of the entire communications infrastructure by creating a global information infrastructure.

The creation of a global information space, the acceleration of the spread of new technologies around the world, the deepening of the international division of labor, a leap in the development of transnational production structures, the improvement of international transport infrastructure and the reduction of the economic distance between countries have formed a new world economy and a new geopolitical space, where the role of national borders and state institutions are being eroded. In particular, the increase in the role and importance of telecommunications services observed throughout the world, as well as their active penetration into various sectors of the economy, raises more and more new problems and questions about the role and place of this segment both for the current state and prospects for the development of the domestic economy, and for the entire world economy as a whole.

Until the 1980s, telecommunications services were not an independent sector in the national economy, they were assigned the role of an auxiliary tool in the development of industry and agriculture. Since the late 80's-early 90's of the 20th century, there is a rapid reassessment of values, and the level of provision of the population with telecommunication services becomes the engine of progress and an integral attribute of the system of indicators of the quality of life.

Telecommunication services due to their high manufacturability, strict technical indicators are quite complex in their presentation, difficult to perceive by the end user and difficult to understand their ultimate value. Therefore, it is necessary to carefully distinguish the main vectors of development from the side, auxiliary branches of development. It:

- Development of fixed and mobile communication networks;
- Replacement of analog technologies with digital ones;
- Implementation of e-commerce in everyday life;
- Entering the market of LTE, WiMAX and WiFi technologies, as well as preparing technological capabilities and entering a new high-quality level of data exchange—5G;
- Internetization of remote territories, including the use of the constructed telecommunications network in all spheres of human life. The level of internetization, the penetration of telecommunications services into agriculture, although not at such a fast pace, is developing towards improving the quality, as well as involving the audience in the latest telecommunications technologies.

Telecommunications in Russia is one of the most dynamically developing industries with the potential for long-term economic growth. Cellular communication coverage has already reached almost 100%, fixed-line subscribers are gradually abandoning this service. The most actively growing market segments are the Internet and smart TV, the Internet of things and others.
The telecommunication industry is quite specific and represents the arrangement of communication sessions, on the one hand, and considers the specifics of the data transmission, reception, processing, and identification using various information and communication technologies built on radio, satellite, and fiber optic cables, on the other hand. Accordingly, the telecommunication market is, first of all, providing the opportunity for data exchange and arranging remote communication between subscribers. These services are provided by telecommunication companies. Therefore, the development strategies of this industry organization have certain specifics.

The Russian telecommunication market is represented by thirty large companies, apart from smaller telecom operators. Five telecommunication companies have the greatest impact on the Russian telecommunication dynamics: MTS PJSC, Megafon PJSC, Rostelecom PJSC, VimpelCom PJSC, and T2 Mobile PJSC [3-4].

Each of these companies has certain individual development features, however, in general, their development stages coincide. Immediately after the emergence of these companies on the Russian market, the pace of their development started increasing rapidly and over the years of existence, the scale of their activities has significantly expanded. The dynamics of changes in the number of, e.g., Megafon PJSC’s connected subscribers are shown in Fig. 1.

Analysis of the company’s activity identified the following development specifics:

1) telecommunication companies pay special attention to developing innovative communication techniques, so their strategy, among others, is focused on funding research and development,
2) they continuously bring new solutions in the field of mobile communication technologies and IT services to the market, which contributes to retaining a significant market share and ensures a significant share of highly profitable products in their assortment,
3) these organizations’ activities are not limited to telecommunication services; usually, groups of companies incorporate subsidiaries operating in the fields of media, entertainment, and advertising services.
1) a significant innovation degree in the development strategy, 
2) the use of a flexible mechanism for responding to changes in the telecommunication market, 
3) differentiated approach to the development strategy, which should perform, among others, a unifying function.

The telecommunication company management includes the following critical objects:
1) organizational structure, 
2) innovation, 
3) range and quality of services.

Consequently, when studying the internal environment, considerable attention is paid to the structure as one of the five external factors while focusing on such functional areas as innovation and assortment. Thereat, finance is the determining functional area for any type of commercial company, therefore, it should also be included in the analysis. The following approach is suggested:
1) coefficient analysis of the organizational structure, 
2) identification of the company’s strengths and weaknesses in the following areas: innovation, assortment, and finance (including assessing the company’s financial condition).

PESTLE analysis of external factors has been performed. According to the table, political, economic, and technical factors have the strongest impact on telecommunication companies, therefore, studying external factors requires their detailed analysis.

Table 1. Table PESTLE Analysis of Telecommunication Companies

<table>
<thead>
<tr>
<th>Environmental Factors</th>
<th>Factor Impact</th>
<th>Mean Opinion Score</th>
<th>Factor Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
<td></td>
<td></td>
<td>0.70</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td></td>
<td>0.89</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td></td>
<td>0.53</td>
</tr>
<tr>
<td>Technical</td>
<td></td>
<td></td>
<td>0.55</td>
</tr>
</tbody>
</table>
According to the table, political, economic, and technical factors have the strongest impact on telecommunication companies, therefore, studying external factors requires their detailed analysis.

A generalized SWOT analysis of internal and external factors has been performed. Thus, the use of such a strategic analysis tool as SWOT allows for identifying external and internal factors having a significant impact on the efficiency of the telecommunication company’s development strategy and proposing mini-strategies for inclusion in this strategy.

Considering the Russian telecommunication company development specifics and the factors most affecting the telecommunication company’s development strategy, an improved methodological approach to building a telecommunication company’s development strategy is proposed as follows:

Table 2. Table SWOT-Analysis Matrix to Determine the Key Strategic Actions.

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Internal Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
</tr>
</tbody>
</table>

The ambiguity of the Russian legal framework and Environmental friendliness of technologies applied to technologies applied.
In the first stage, a basic strategy is determined that will define a critical management object such as a range of services. As a tool at this stage, the Boston Consulting Group (BCG) Matrix is proposed. The BGK Matrix for Megafon PJSC’s services is given below to illustrate this stage.

Fig. 2 shows that all the services considered belong to the Wild Cats category. However, Mobile Internet leans towards the Stars category, therefore, it is the most competitive service. Mobile Communications and Home Internet and TV have approximately the same level of competitiveness. Herewith, all of these services are leaders in a fast-growing industry. In this situation, the organization should maintain and strengthen its market status. This means not reducing but probably increasing investments in the development of core activity and marketing, which will serve as a guarantee of future stable cash flows. Therefore, intensive growth should be underlined as the basic strategy.

In the second stage, to consider the major external factors, the Thompson-Strickland Matrix should be used, adapting the development strategy to political, economic, and technical factors. Moreover, for a reasonable choice of one of the strategies in the Thompson-Strickland Matrix quadrants, the GE/McKinsey Matrix should be built. The Thompson-Strickland Matrix for Megafon PJSC is given below to illustrate this stage (Figs. 3 & 4).
Fig. 3. Thompson-Strickland Matrix for PJSC Megafon

Fig. 3 shows that Megafon PJSC falls into the 1st strategy quadrant. This supposes a choice of three strategies: concentration, vertical integration, and centered diversification. Then, the GE/McKinsey Matrix should be built for MegaFon PJSC to justify the choice of one of the three strategies specified.

Considering the analysis results shown in Fig. 4, strategy directions are developed for each Megafon PJSC’s SBU.

SBU 1 – winner 3. This market segment can be characterized as one of medium attractiveness. The company has a fairly stable market position as a whole. However, in this situation, the most attractive market segments should be chosen, the available funds should be directed to them, and the ability should be developed to withstand competition and increase production volumes and thus achieve increased profitability.

SBU 2 – winner 2. In this situation, a critical analysis of own weaknesses and strengths, and the redistribution of existing funds on its basis is required to gain the maximum benefit from strengths and improve weaknesses [9-11].
3 Conclusion

Thus, the company considered should choose a strategy of centered diversification combined with intensive growth. Also, the methodological approach has shown that goals are the critical object of management for any company. Given the aforementioned, the following structure of actions is proposed:

1) setting or updating the company’s goals,
2) setting and assessing strategic benchmarks,
3) forming the development strategy implementation indicators.

This stage is illustrated by the measures taken to implement the Megafon PJSC development strategy built. The proposed Megafon PJSC’s mission is as follows: to lead the telecommunication market by expanding the boundaries of our customers’ capabilities in the digital world and help people enjoy communication and feel free in time and space.

When implementing its corporate strategy, the company should rely on the following actions we propose:

1. Developing and implementing a common national business model that allows deploying a network in the regions in the prescribed manner within a short period,
2. Increase the level of standardization, increase efficiency through economies of scale in sales and marketing, improve the effectiveness of information technology and personnel management;
3. Developing and implementing additional communication services, i.e., wireless internet and internet of things,
4. Developing and implementing services in related markets such as financial services, cloud technologies, and information and analytical products,
5. Improving the customer service quality by optimizing distribution channels, as well as refining existing and providing new communication services [12].
6. Creation of ecosystem products (within one window, obtaining all services related to the basic needs of life), both for individuals and for businesses.

It is also necessary to develop our own planning and forecasting tools (not forgetting the methods of approach to organizing and managing sales). The following key aspects of top management should be used:

1. Planning and forecasting
2. Setting goals
3. Motivation
4. Control and summing up intermediate results
5. Feedback (the team and each employee in particular, in order to achieve the set goals, it is necessary to know their strengths and develop them. An important factor is the identification and definition of areas of growth, work with which will lead to an improvement in the overall result)
6. Achieving the goal – summing up, final control.

To fulfill all the tasks of the Company, the following strategic guidelines are established:

1. The number of regions covered (where the LTE base stations are installed) – 85%,
2. The number of subscribers covered by the HD Voice function – 90%,
3. 3G lines integrated into an IP network, which should be transferred to an IP basis – 80%.
4. Updating and modernizing the network to support the possibility of organizing VoIP and VoLTE communications – in 80% of the regions of presence
5. Organization of 5G communication standard

The estimated results of implementing the proposed strategy are given in the Table.

Table 3. Table Estimated Indicators of Implementing The Development Strategy
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The growth rate of devices supporting the LTE standard, % of total</td>
<td>212%</td>
</tr>
<tr>
<td>LTE tablets, %</td>
<td>132%</td>
</tr>
<tr>
<td>LTE smartphones, %</td>
<td>217%</td>
</tr>
<tr>
<td>Smartphones in the B2C segment, %</td>
<td>83.4%</td>
</tr>
<tr>
<td>The total Internet traffic growth rate, %</td>
<td>139%</td>
</tr>
<tr>
<td>Mobile Internet users, M people</td>
<td>38M</td>
</tr>
<tr>
<td>Increase in the number of users of the operator's services (mobile communications, in the mass market) million people</td>
<td>72M</td>
</tr>
</tbody>
</table>

Herewith, improving the customer service quality always remains among the key company activities. As part of this direction, innovative products and services should be developed, which will improve its performance.

References

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