DOI: 10.17747/2618-947X-2022-4-312-325
УДК 338.4

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# Strategies of business units of diversified industrial companies at different stages of the life cycle

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## Abstract

The paper considers the models of organisational development of multidisciplinary companies and their business units. It is shown that the existing models need to be supplemented with two enlarged managerial competencies – management of incremental (modification) innovations and management of radical innovations. The proposed model of a business unit assumes that their development is structured as a progressive passage of the organisation through the stages of housing and communal services by developing the necessary managerial competencies for the next stage. The developed general models are used to form models of organisational development of the "Severgroup" multidisciplinary corporation and its business units. The strategic portfolio of business units, its parameters and position within the framework of the matrix of housing and communal services of the industry are determined. The result of the study was the formulation of two strategies – "growth to the core" and "growth to the peak". Models of organisational development of the corporation (changes in the composition and characteristics of the portfolio of business units) and models of transfer of managerial competencies have been developed for each strategy.

**Keywords:** multidisciplinary organisations, industry, organisation life cycle, industry life cycle, innovation management, organisational development.

## For citation:

Kolobov A.V. (2022). Strategies of business units of diversified industrial companies at different stages of the life cycle. *Strategic Decisions and Risk Management,* 13(4): 312-325. DOI: 10.17747/2618-947X-2022-4-312-325. (In Russ.)

# 多元化工业公司在生命周期不同阶段的业务单元策略

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## 摘要

文章研究了多元公司及其业务单位的组织发展模式。结果表明，现有的模式需要补充两个扩大的管理能力——管理渐进式创新和管理激进式创新。建议的业务单元模型假定，它通过发展下一阶段所需的管理能力，在组织生命周期的各个阶段逐步开发。所开发的一般模型被用来为多元的Severgroup公司及其业务单位形成组织发展模型。确定了业务单位的战略组合、其参数和在"组织生命周期——行业生命周期"矩阵中的位置。这项研究的结果是制定了两项战略——"发展到核心"和"发展到高峰"。对于每一项战略，都制定了公司组织发展的模式（改变业务单元组合的构成和特点）和管理能力转移的模式。

关键词：多元业务机构，工业，组织生命周期，行业生命周期，创新管理，组织发展。

## 供引用：

Kolobov A.V. （2022）。多元化工业公司在生命周期不同阶段的业务单元策略。战略决策和风险管理。13(4)：312-325。DOI：10.17747/2618-947X-2022-4-312-325。（俄文）。

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## Introduction

Despite the fact that life cycle theory is a fairly developed area of research, there is a limited amount of work in the literature on the life cycle of multidisciplinary organisations. The life cycle theory assumes that the birth, development and behaviour of an organisation can be described by a process model of organisational changes inherent in each stage of the life cycle. However, the same cannot be said for a multidisciplinary organisation, in which the business units that make up the multidisciplinary organisation may be at different stages of the life cycle. What strategic changes must occur to grow the entire multidisciplinary organisation?

This article attempts to fill a gap in Russian research in the field of the theory of the life cycle of diversified industrial organisations in order to clarify the patterns of development of each business unit of Russian diversified organisations and identify management strategies at different stages of the enterprise life cycle (hereinafter referred to as the ELC).

## 1. The theory of the organisation life cycle. Basic provisions

The first studies of organisational development stages appeared in the 1960s. For example, the authors of [Downs, 1967; Lippitt, Schmidt, 1967] identified three stages of development: inception – flourishing – decline. More recent studies based on the study of organisational development began to distinguish five or more stages. For example, L. Greiner's model [Greiner, 2002] contains five stages of the life cycle, W. Torbert's model - nine stages [Torbert, 1974], I. Adizes' model - ten [Adizes, 1979]. At the same time, the authors highlight the unique characteristics of each stage, the sequence of their implementation, and pay attention to the fact that each next stage is a consequence of the previous one [Greiner, 2002].

Further research focused on empirical analysis of life cycle stages and identification of their unique characteristics. For example, in the work of W. Scott [Scott, 1976], it is indicated that at the stage of inception and early development, companies are single-product and have survival as their goal; in [Lyden, 1975; Lorange and Nelson 1987; Greiner, 2002] this stage is characterised as entrepreneurial and innovative, since the main goal of the company is to occupy its niche in the market. In [Adizes, 1979; Kimberly, 1979] indicates the main goal of this stage as the search for financial resources. As for the organisational characteristics of this stage, for example, in [Adizes, 1979] it is called the "one-man show", since it is the founder of the company at this stage who takes responsibility for all aspects of management; similar conclusions are contained in [Torbert, 1974; Grainer, 2002], which point to the importance of building formal and informal interactions, as well as strong power and leadership.

The next stage is characterised by researchers as the stage of expansion and growth, the emergence of the ability to produce more than one product [Scott, 1976]. The company grows and there is a need for planning [Downs, 1967], organisational formalisation of all procedures, more formalisation of the management structure [Katz, Kahn, 1978], functional specialisation and departmentalisation [Scott, 1976].

The maturity stage is characterised by significant diversification, but at the same time a decrease in innovation and flexibility [Hanks et al., 1993]. As for the organisational structure, branched departmentalisation leads to the need to create a rigid organisational structure, and this, in turn, reduces the ability to make changes and flexible adaptation [Lippitt, Schmidt, 1967]. Greiner in his work recommended the use of a matrix organisational structure to increase flexibility [Greiner, 2002], and Scott wrote about the need to develop a multi-product line and use decentralisation and diversification [Scott, 1976].

The decline stage occurs precisely due to the organisation's low ability to adapt and structural change [Peters, Waterman, 1982], as well as due to structural rigidity and cultural inertia [Lorange, Nelson, 1987]. The organisational structure is characterised by poor communication, adherence to the old strategy, conformity, conservatism and lack of trust [Adizes, 1979; Pfeffer, 1981; Nystrom, Starbuck, 1984; Lorange and Nelson, 1987]. In the future, all these will lead to an increase in conflicts and "management paranoia" [Adizes, 1979; Pfeffer, 1981].

After passing through the stage of decline, the organisation either ceases to exist or enters the stage of renewal and complete reorganisation [Adizes, 1979].

## 2. General model of organisational development in a diversified commercial organisation

The main type of tools for studying and modeling the organisational development of a diversified commercial organisation is currently the matrix model of a corporation's strategic portfolio [Alimov, Gichiev, 2008; Udo-Imeh et al., 2012]. Matrix models usually distinguish two dimensions that order the business units of a corporation, most often depicted as circles. The size of the circle reflects the volume of activity (revenue) for each business unit. The organisational development of a corporation in such models is understood as a change in the characteristics of business models (and their positions within the matrix), so that the overall parameters of the portfolio of business units improve. The most famous model of this type, the Boston

Consulting Group Matrix, uses measurements of the market growth rate and the relative market share of a business unit [Gridnev, 2010]. The McKinsey / General Electric matrix is based on measurements of industry attractiveness and firm competitiveness [Luzhnova, 2017]. The Arthur D. Little matrix is based on measurements of the market life cycle and the company's competitive position [Kuzmin, Vysokovskaya, 2015]. Technology matrices are also used with two dimensions - the current competitive position and the stage of the technology life cycle (or in other cases, the speed of technology development), technology matrices with measurements of the nature of the market (existing, interconnected or new) and the nature of technologies (existing, interconnected and new)[1] and so on. In most cases, in such matrix models, one dimension reflects generalised characteristics of the business units, the second - the market/ industry/technologies business units are associated with.

The first dimension reflecting the characteristics of business units can be the staging of the organisational development model shown in Fig. 1 (without allocation of dysfunctional stages). The second dimension should relate to a generalised parameter of the external environment of business units, should not correlate with the first dimension and reflect a parameter that allows to optimise the organisational development of a diversified company. It would also be extremely useful if this measurement could be operationalized, led to a quantitative scale or a qualitative model with a categorical scale. Here we can propose to tie the second dimension to the life cycle of the market. The market (industry, segment) life cycle model is currently an established and well-developed scientific concept [Karniouchina et al., 2013] with the possibility of reasonable identification of stages [Golikova, 2011; Kochelaba, 2015]. The market and industry life cycle model is actively used both in scientific research [Novitskaya, 2012] and in practical management [Ibragimov, Golovkin, 2017]. The possibility of using this measurement is confirmed by the popularity of the Arthur D. Little matrix model. The possibility of combining characteristics of different types of life cycles (products, technologies, organisations) in one model is shown in [Dresvyannikov, 2008].

The assumption that the stages of the life cycle of the market and the company can correlate (at the early stages of the development of industries and markets, young companies dominate) has no clear confirmation or mention in modern scientific literature [Shirokova et al., 2007; Rozanova and Kataykova, 2012]. Even a little knowledge about the development of various markets reveals examples of the opposite. In the early stages of market development, different stages of a company's life cycle may operate, with more mature companies may dominate (for example, Yandex in the taxi aggregator market). Mature companies, like young ones, are entering new markets. At the same time, young companies are also appearing in mature markets (for example, VkusVill has noticeably squeezed out such established leaders as X5 Group and Magnit). The work [Popov et al., 2016] presents a hypothesis that at different stages of the life cycle of an industry, different organisational structures of diversified companies begin to develop. But this hypothesis has not been further tested on empirical data. The authors do not provide a single case confirming it, and most importantly, the hypothesis itself suggests that at certain stages of the industry life cycle, various types of organisational structures begin to develop, but do not become dominant or attractive and do not cease to be used by companies at subsequent stages.

Thus, as a general model of organisational development, we can offer the matrix shown in Fig. 1.

The stages of the life cycle of a market/industry in Russian science have different terminology. The terms proposed by [Bakanov, 2012][2]. are used here. This staging also seems to be the simplest (in some works, the growth stage is divided into "growth acceleration" and "growth slowdown" or into "growth" and "knocking out" [Popov et al., 2016]).

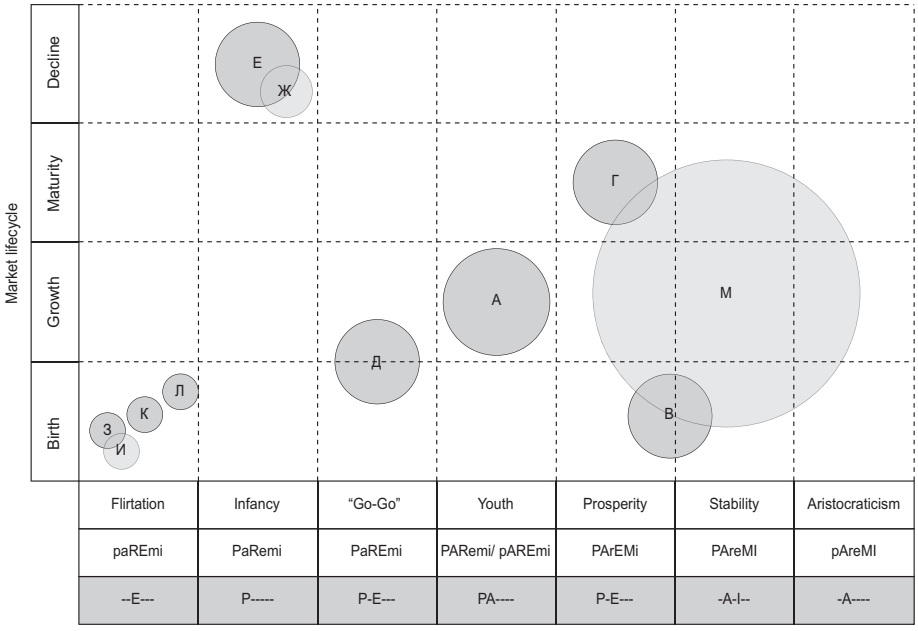
The simplest method for determining the stages of the market life cycle is based on an assessment of total revenue or production volumes [Rychikhina, 2013]. But this approach is now recognised as simplified [Bakanov, 2012]. The metrics of the dynamics of companies leaving and entering the market, innovations, company survival, etc. are also used. [Klepper, 1997]. As a more substantiated and practically acceptable alternative, one can use the expert method based on the assessment of typical stage features [Benda et al., 1993; Novitskaya, 2012].

The staging of the life cycle can also be determined on the basis of various quantitative indicators, such as the age of the company, the increase in market share, the growth rate of revenue, profit, etc. [Nazarenko, 2014]. But these indicators are not tied to the Adizes model, which offers its own survey form[3]. It is this form that is used in the present study. To ensure validity, the assessment of the stage of the life cycle should be carried out by three to five experts who have complete and reliable information about the company's activities.

On the proposed model, it is recommended for ease of use to highlight the functional and dysfunctional combinations of managerial abilities inherent in each of the Adizes life cycle stages. Business units are traditionally depicted as circles, the size of which reflects the share of the company's revenue in the total revenue of the diversified organisation. The affiliation of the organisation of a particular stage for

[1] https://www.wikipro.ru/wiki/matrica-rynoktehnologiya/.
[2] This work is the most cited in Google Scholar and searched for the term "industry life cycle".
[3] https://adizes.me/life_cycle_test/.

Fig. 1. The model of organisational development in a multidisciplinary company

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companies with large revenues and, accordingly, a larger circle size (company M in Fig. 3) is determined by the center of the circle. It is allowed, but recommended only if there are grounds for the location of the company between different stages, as shown by the example of companies D and C in Fig. 3. If several business units are located in one of the segments of the matrix (companies E and G in the "infancy – decline" segment, as well as companies Z, I, C and L in the "courtship – birth" segment), it is advisable to place them inside the segment in accordance with the ranking of assessments of belonging to the stages (beginning, middle or end of the stage). If there are no grounds for such gradations, then placement is allowed that facilitates the visual perception of business units on the model, without considering the gradation. If there are various cases of placement within the segment (with real and conditional gradations), they should be explained.

The corporation development model suggested in Fig. 3 provides an opportunity to identify and use synergistic effects based on the connectedness of the managerial abilities of the business units of a diversified company. But at the same time, there can be a huge number of connectivity options, taking into account the various stages of the life market, and, most importantly, among them many options can be identified that provide an increase in the efficiency and sustainability of the corporation as a whole. In other words, there may be a lot of trajectories of the organisational development in a corporation, in terms of the model presented in Fig. 3. Let us dwell only on some of them – on the trajectories arising from the results of previous studies.

As the first direction, we can single out ensuring the similarity of the managerial abilities of the corporation's business units. There can be three sub-options here: (1) moving towards the main business unit (or group of those), (2) moving towards the advanced business unit (or group of those), (3) moving towards the optimum (flourishing and stability stages).

Moving towards the main business unit (1.1) involves identifying in the strategic portfolio of a diversified company one business unit that is noticeably larger in terms of activity than all the others. An example is company M in Fig. 3. There can be several business units at the same stage of the life cycle with a large total volume, and they can operate in markets with different stages of the life cycle. It is not at all necessary that these business units are at the peak of functionality in terms of the Adizes model, that is, they are at the stage of stability. So, Figure 2 shows the core of a corporation of major business units, the combined volume of activities of which is clearly more than half of the volume of its activities. Companies A, B, and C are in the go-go stage and are placed in different stages of the market life cycle. The rest of the companies are in other segments of the matrix. The recommended development trajectory in this case would be the progressive movement of all business units located to the left of the core, while stabilising the position of all other business units. Business units lagging behind the core must be actively developed or replaced as part of M&A activity, so that they "grow" to the core. And this is the main focus of organisational development. This is shown by arrows in Fig. 2.

Fig. 2. The model of organisational development in a multidisciplinary organisation, assuming the option of moving to the main business unit (development of managerial abilities)

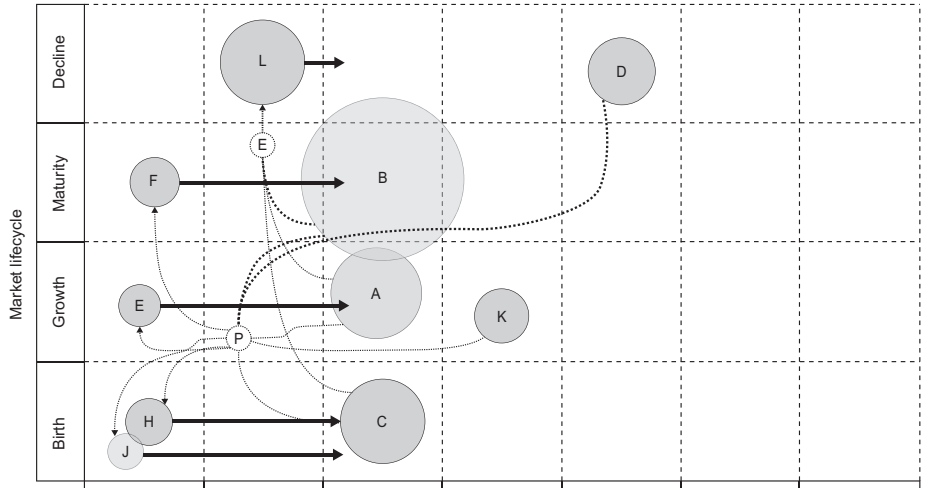


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Fig. 2. The model of organisational development in a multidisciplinary organisation, assuming the option of moving to the main business unit (development of managerial abilities)

It is expedient to make this effort using the managerial abilities that have developed in the core, which are required for lagging business units for their development. Thus, for company L, an enhanced development of entrepreneurial ability (E) is required, which can be done by using this ability from the core companies and companies K and D. Companies E, H, F and J need to be brought initially to the infancy stage through active development of competence manufacturer (P), which all other business units can assist in, since all of them have a highly developed ability (P). And only after the transition to the stage of infancy, it is necessary to transfer companies E, H, F and J to the "go-go" stage through the development of ability (E). Transfers or scaling of managerial competencies from one business unit to another are shown in Fig. 4 with dotted arrows.

Assistance with the development of the required capabilities from donor companies in practical terms can be:

- transfer of managers and management teams to recipient companies;
- training of managers of recipient companies, including through internships;
- formation of informal expert communities to transfer the best experience;
- mentoring/supervising the managers of the recipient companies by the donor companies or the management company;
- scaling business processes, procedures, standards, documented or algorithmic practices;
- scaling information systems that regulate portable practices;
- formation of knowledge bases or centers of best practices related to relevant abilities, etc.

The best practices transfer activity is organised and coordinated by the management company or headquarters, but it is implemented with the active involvement of business units with the building of horisontal links.

The transfer of best practices naturally becomes a certain additional burden on donor companies, so it is important to identify transfer options that would not weaken donors and the corporation as a whole. For example, from the variants of ability transfer (P) in Fig. 2, it seems preferable to use company D in the first place. This company operates in the market at the stage of decline, and, accordingly, the expansion of this company is not appropriate. It is also a good option to transfer capability (P) from company B. This business unit is the largest, has the most resources, and in a mature market, this company does not seem to be expected to grow rapidly. Similarly, in the case of the development of competence (E) in company L, it is better to use company B, since company A and company C are at the stages of the market life cycle, suggesting a further increase in the volume of their activities. Preferred options for synergistic support for the development of managerial competencies are shown in Fig. 4 with thick dotted lines.

In the course of bringing all the lagging business units to the stage of the core of organisation life cycle, the level

of development of management organisations is equalised, which becomes the basis for a synergistic effect. In the future, the corporation develops through the systematic transition of the main group of already aligned business units to the subsequent stages of the life cycle up to the most functional ones - prosperity and stability.

Taking into account the difference in the stages of the market life cycle, it makes sense to supplement the model in Fig. 2 with proposals for organisational development in terms of the scope of activities. From modern scientific ideas about the life cycle of the market, it follows that the stage of decline is characterised by negative growth rates of production volumes, so the expansion of the activities of companies L and D does not seem appropriate. It makes sense to reduce their activities by moving resources to business units that are at more promising stages of the market life cycle. The stage of market maturity is characterised, as a rule, by extremely low growth rates tending to zero. Companies at these stages should also not be developed. How much they should be reduced, it is necessary to determine taking into account other considerations. For example, in Fig. 3 business unit B is the largest and is operating at the maturity stage. Thus, the diversified company becomes overly conservative, tied to a small growth rate at the stage of maturity. It makes sense to carefully move resources from company B to more promising ones. If you look at the overall distribution of activity volumes across the market life cycle stages, you can see excess volumes in the maturity and decline stages. The position of the corporation seems to be more stable, when most of the volumes are concentrated at the growth stage (with a natural presence at other stages). It is most convenient to shift the volumes of the corporation towards the growth stage at the expense of company B. Options for changing the volumes of company activities are shown in Fig. 2 by dotted circles.

Company F can be treated differently. It is relatively small and has a good potential for growth within the framework of the LCL. There is no need to hurry with the withdrawal of resources, but it is worth taking into account the prospects for the development of the market and the competitive position of the company. If the market does not stagnate in the short term, and the company has good competitive advantages, then it makes sense to allow the internal development of the company without expanding the volume of activities.

Also, the strategy in relation to company L requires caution. It is obvious that the company is already in a stagnating market, but it still has the potential for internal development. If a company can strengthen its competitive position, then moving it to the “go-go” stage can also lead to an improvement in its performance – increasing efficiency, maintaining (and possibly expanding due to less efficient competitors) its share even in shrinking markets.

Expansion of the volume of activities is advisable in companies at the later stages of the stage of origin and the stage of market growth. At the same time, it is better to expand the volume in companies that have the potential for internal development, that is, those that are at the stages of life cycle and infancy, “come on, come on”, and youth, and to a lesser extent – and flourishing. It is risky to develop companies at the courtship stage intensively. So, in Fig. 3 expansion of volumes is advisable for companies A and K, perhaps also for C.

Fig. 3. The model of organisational development in a multidisciplinary organisation in terms of volume changes

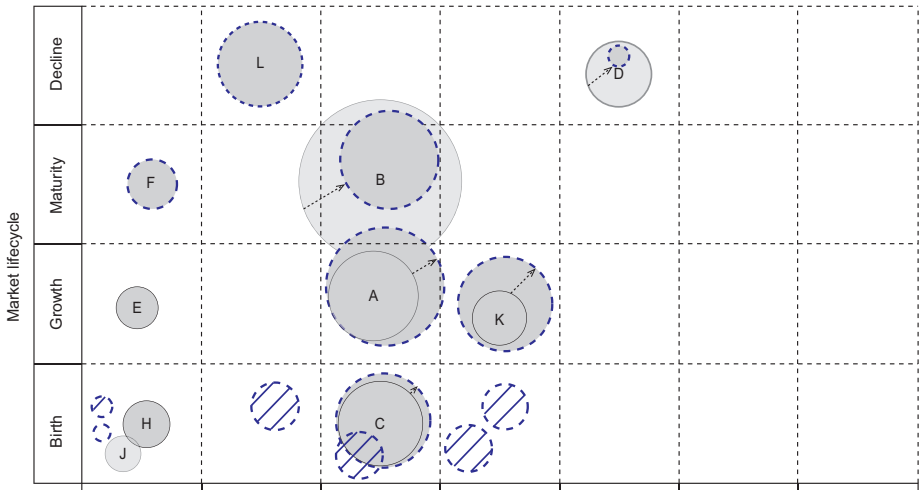


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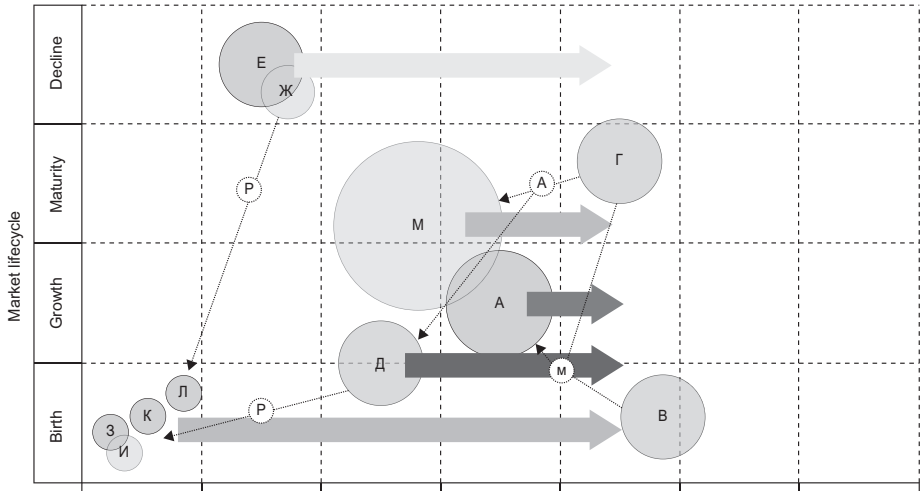
Fig. 4. The model of organisational development in a multidisciplinary organisation, assuming the option of moving to an advanced business unit




| Flirtation | Infancy | "Go-Go" | Youth | Prosperity | Stability | Aristocraticism |
|---|---|---|---|---|---|---|
| paREmi | PaRemi | PaREmi | PARemi/ pAREmi | PArEMi | PAreMI | pAreMI |
| --E--- | P----- | P-E--- | PA---- | P-E--- | -A-I-- | -A---- |

Lifecycle stages of an organisation, their functional and dysfunctional combinations of managerial capabilities

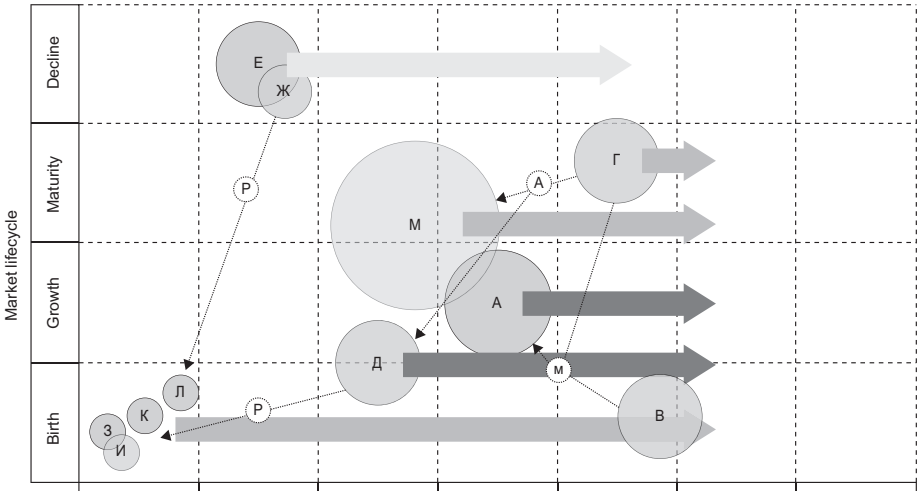
In many cases, attention should also be paid to the number of companies. For example, for the conditionaly considered corporations in Fig. 4 and 5 it seems to be an insufficient number of companies at the stage of the life cycle of the infant market. This stage is characterised by high "mortality", especially among companies at the initial stage of the life cycle. It is better to increase the number of companies at this stage of the market life cycle. And if it is possible to increase the number of companies by acquiring them, then it is advisable to acquire business units at the stages of infancy, go-go and adolescence, so that they have greater stability, but at the same time the potential for internal development. Acquisitions of companies in the courtship stage do not seem promising. Business units at this stage will arise in the case of the creation of new enterprises from scratch, in the course of corporate venture entrepreneurship. Options associated with the emergence of new business units are shown in Fig. 4 with hatched circles.

Moving towards a leading business unit (1.2) involves identifying one, and if possible several – not necessarily the main ones – business units that are at the most advanced stages of the life cycle, and a combination of efforts to bring all the rest. The development of the necessary managerial abilities is carried out by cross-transfer between different business units at different stages. For example, Fig. 5 shows the general direction of development of business units and individual options for the transfer and scaling of managerial competencies.

The colour intensity of the wide horisontal arrows reflects the priorities in the development of business units. The light arrow from companies E and G indicates the expediency of not the most active development of these companies, since they are at the stage of decline of their markets. The most intensive development is appropriate for companies in the growth stages and late stages of market emergence.

Compared to the trajectory of movement to the main business unit, the movement to the advanced business unit is characterised by potentially faster access to more functional stages of the life cycle. But at the same time, the consistency and, accordingly, the synergistic potential is somewhat lower. Business units will need more time to reach a state aligned in terms of the stage of the life cycle and the set of capabilities. But at the same time, in their development, they are aimed at more functional stages.

Fig. 5. The model of organisational development in a multidisciplinary organisation, assuming the option of moving to the optimal stages of housing and communal services




| Flirtation | Infancy | "Go-Go" | Youth | Prosperity | Stability | Aristocraticism |
|---|---|---|---|---|---|---|
| paREmi | PaRemi | PaREmi | PARemi/ pAREmi | PArEMi | PAreMI | pAreMI |
| --E--- | P----- | P-E--- | PA---- | P-E--- | -A-I-- | -A---- |

Lifecycle stages of an organisation, their functional and dysfunctional combinations of managerial capabilities

Table 1
Assessment of the scope of activity, stages of housing and communal services of the branch of business units in the «Severgroup» multidisciplinary corporation

| Code | Strategic business unit | Turnover estimates | Share in the total volume of the company | Stage of life cycle according to the Adizes method | Industry Life Cycle Stage |
|---|---|---|---|---|---|
| SS | Severstal | 11.4 bln USD | 47.88 | Heyday | Maturity |
| L | Lenta | 6.6 bln USD | 27.72 | Heyday | Late growth |
| PM | Power Machines | 2 bln USD | 8.40 | Aristocracy | Early maturity |
| NG | *Nordgold* | 1.82 bln USD | 7.64 | Youth | Maturity |
| T | *TUI Group* | 1.1 bln USD | 4.62 | Witch-hunt | Decline |
| GS | Sveza Group | 36 bln USD | 2.61 | Youth | Growth |
| TT | Severgroup TT (TalenTech) | 15 bln USD | 1.09 | "Go-Go" | Early birth |
| M | Severmed | 0.5 bln USD | 0.04 | Infancy | Late birth |

*Source:* compiled by the author based on data from open sources.

Table 2
Directions of organisational development of business units of the «Severgroup» multidisciplinary corporation

| Code | OLC stage according to the Adizes method | Current managerial competencies | Required Competencies according to the Growth to the Core Strategy | Required Competencies for Growth to the Peak Strategy | Industry Life Cycle Stage | Business Unit Scope Recommendations |
|---|---|---|---|---|---|---|
| SS | Heyday | PArEMI | _ _ _ _ _ _ | _ _ R _ _ _ | Maturity | Slow reduction |
| L | Heyday | PArEMI | _ _ _ _ _ _ | _ _ R _ _ _ | Late growth | Slow growth |
| PM | Aristocracy | pAreMI | P _ _ E _ _ | P _ R E _ _ | Early maturity | Volume maintenance |
| NG | Youth | PARemi | _ _ _ E M I | _ _ _ E M I | Maturity | Slow reduction |
| T | Witch-hunt | pAremI | P _ _ E M _ | P _ R E M _ | Decline | Reduction/output |
| GS | Youth | pAREmi | P _ _ _ M I | P _ _ _ M I | Growth | Expansion |
| TT | "Go-Go" | PaREmi | _ A _ _ M I | _ A _ _ M I | Late birth | Rapid Expansion<br>Creation of new business units |
| M | Infancy | PaRemi | _ A_ E M _ | _ A_ E M I | Early birth | Expansion<br>Creation of new business units |

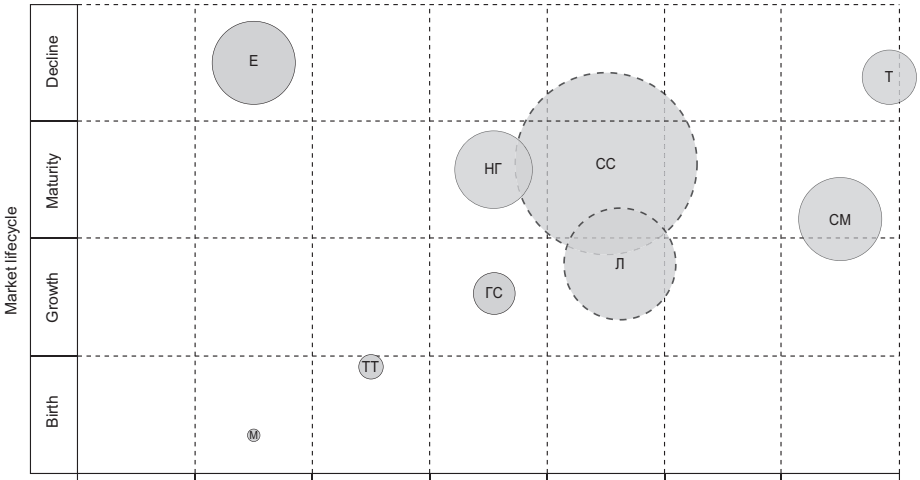
The speed of reaching the most functional stages of the life cycle is even higher, but there is also a noticeably lower synergistic potential for moving towards the optimum. This trajectory lies in the fact that all business units develop their abilities immediately towards the optimal stages – flourishing or stability, naturally, passing sequentially through the previous stages. Visually, this is shown in Fig. 5, where all business units develop at once towards the stability stage.

As in the previous trajectories, it is necessary to be cautious about the prospects for the development of companies in the stage of market decline and in the early stages of the life cycle at the same time. There is a high probability that they will not have time to reach the stage of stability, but it is possible that they will flourish. Business units exchange and support each other in terms of managerial abilities. But at the same time, business units have their own unique sequences of passing through the stages of the life cycle, which is accompanied by the fact that, in general, the entire strategic portfolio of the corporation only at the last stages of development becomes aligned with a set of managerial abilities.

## 3. The research of Severgroup Organisational Development Model

To build specific models of organisational development of the multi-profile organisation "Severgroup", enlarged business units are allocated, operating in various industries and uniting several legal entities. The volume of their activities is determined on the basis of data on annual turnover (revenue) from open sources. The share of the company's activity in the total volume of the corporation's activity is determined based on the same data. The stage of the life cycle is determined in relation to the business unit

Fig. 6. The model of the strategic portfolio of the «Severgroup» business units

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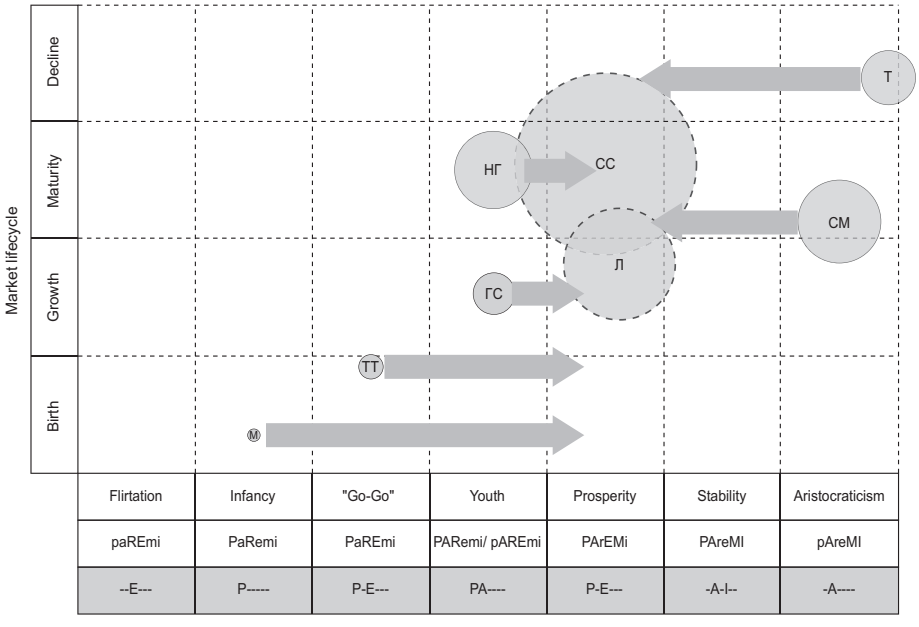
as a whole using a survey tool (https://adizes.me/life_cycle_test/) and expert judgments of the authors of the study and representatives of the company. The life cycle stage of an industry is determined based on the indicators specified by [Popov et al. (2016)] and data on them from open sources. The definition of the life cycle stage of the industry was determined by the authors of the study. The obtained estimates are given in Table. 1.

Fig. 6 presents a practical model of the strategic portfolio of business units of the diversified organisation "Severgroup" based on the estimates formulated in Table. 1. Severstal and Lenta business units can be identified as the core of the organisation (current affiliation to the organisation remains in question). They cover 75.21% of the overall activities of the organisation and are at the same stage of the life cycle. On Fig. 6 they are marked with a dotted line.

Based on the composition of the strategic portfolio of business units of the Severgroup organisation, two strategies for the organisational development of the corporation as a whole and its individual business units can be formulated. One strategy involves bringing all business units closer to the "core company" lifecycle stage, that is, to the heyday stage. The second strategy is aimed at achieving the peak of the functionality of all business units, which is characterised by the high development of all six managerial competencies. Due to the fact that the core is at a stage close to the peak of functionality and is characterised by a weak development of only one competence (R – competence in the management of radical innovations), the difference between the two strategies is not cardinal.

To determine the content and direction of the transfer of managerial competencies in the context of two strategies, the current compositions of managerial competencies were determined based on the model in fig. 2, which is a modification of the Adizes model. Based on the same model, the competencies that are needed to reach the target level of the life cycle of the company were determined. These are the competencies that are required to be acquired for the corresponding stage of the company lifecycle. Intermediate stages of the company lifecycle are not described for the sake of simplicity. On the basis of the same model and considerations outlined in the context of consideration of Fig. 5, proposals are formulated for expanding or reducing the volume of activities of business

Fig. 7. Graphical representation of the «growth to the core» organisational development strategy for the «Severgroup» multidisciplinary corporation

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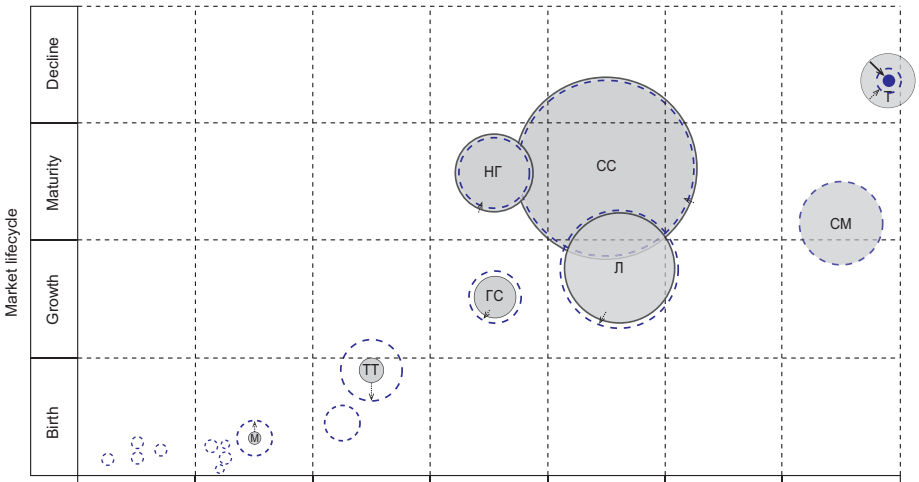
units. These proposals are based on the assessment of the life cycle of the industry in which the business unit operates. Proposals for the development of the competencies required to reach the target stages of the life cycle cycle and recommendations on the scope of activities are summarised in Table. 2.

The growth strategy towards the core in terms of competency development is shown in Fig. 7.

As can be seen from Fig. 7, the business units of Nordgold, Sveza, Severgroup TT and Severgroup Medicine must go through a path of progressive upward development from the current stages to more functional ones. The Severstal and Lenta business units are not undergoing any significant transformation. They act as sources of managerial competencies that are in demand in other business units. The Power Machines and TUI Group business units (the organization's ownership has not been fully clarified) are now at the dysfunctional stages of the life cycle, which implies their renewal through the development of managerial competencies necessary for a conditional return to more functional stages of the life cycle.

Fig. 8. Graphical representation of recommendations on changing the volume of activity of «Severgroup» business units

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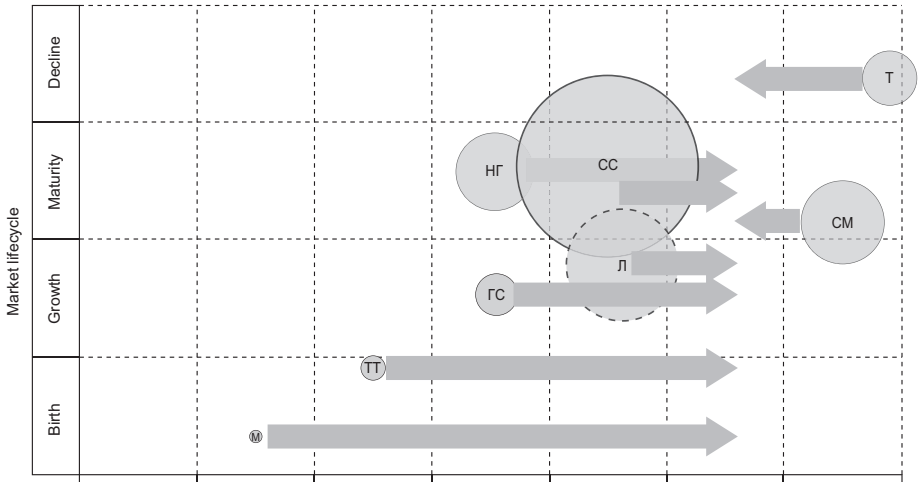
Directions for the transfer of managerial competencies within the framework of the organisational development strategy of the corporation "growth to the core" are shown in Table. 3. This table is a matrix consisting of the organisation's business units. The second column and the second row show the combination of available managerial competencies. The third line shows the competencies necessary for the business unit to reach the target stage of the life cycle cycle. So, for example, Power Machines needs to be strengthened by competencies P (producer) and E (entrepreneur) to move to the heyday stage. And to move to the same stage, the Severstal TT business unit requires managerial competencies A (administrator), M (modifying innovator) and I (integrator).

At the intersection of rows and columns, managerial competencies are shown that it is advisable to transfer from the business units indicated in the rows to the business units indicated in the columns. So, Power Machines can be "strengthened" by the competencies P (producer) and E (entrepreneur) from Severstal or Lenta. The competence of P can also be strengthened by a transfer from Nordgold, Severstal TT or Severstal Medicine. Competence E can also be strengthened by Sveza (GS). And the Severstal TT business unit can be strengthened by Severstal, Lenta and Power Machines (whose competencies A, M and I are

Table 3. Transfer of managerial innovations within the framework of the «growth to the core» strategy

| | | SS | L | SM | NG | T | GS | TT | M |
|---|---|---|---|---|---|---|---|---|---|
| | | PArEMI | PArEMI | pAreMI | PARemi | pAremI | pAREmi | PaREmi | PaRemi |
| | | _ _ _ _ _ _ | _ _ _ _ _ _ | P _ _ E _ _ | _ _ _ E M I | P _ _ E M _ | P _ _ _ M I | _ A _ _ M I | _ A _ E M _ |
| SS | PArEMI | | — | **P, E** | **E, M, I** | **P, E, M** | **P, M, I** | **A, M, I** | **A, E, M** |
| L | PArEMI | — | | P, E | E, M, I | P, E, M | P, M, I | A, M, I | A, E, M |
| PM | pAreMI | — | — | | M, I | M | M, I | A, M, I | A, M |
| NG | PARemi | — | — | P | | P | — | A | A |
| T | pAremI | — | — | — | I | | I | A | A |
| GS | pAREmi | — | — | E | E | E | | A | A, E |
| TT | PaREmi | — | — | P | E | P, E | P | | A, E |
| M | PaRemi | — | — | P | — | P | P | — | |

Fig. 9. Graphical representation of the «growth to peak» organisational development strategy for the «Severgroup» multidisciplinary corporation




| Flirtation | Infancy | "Go-Go" | Youth | Prosperity | Stability | Aristocraticism |
|---|---|---|---|---|---|---|
| paREmi | PaRemi | PaREmi | PARemi/ pAREmi | PArEMi | PAREMI | pAreMI |
| --E--- | P----- | P-E--- | PA---- | P-E--- | -A-I-- | -A---- |

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at a high level of development), as well as Nordgold, TUI and Sveza (competence A).

It should be noted that the transfer of managerial competencies from business units should be linked to organisational development in terms of increasing or decreasing the volume of activities of business units. Fig. 8 graphically shows recommendations for changing the volume of activities of the business units of the corporation.

The activities of business units that are in decline (TUI), it is advisable to significantly reduce or completely exit from them. Severstal and Nordgold operate in already mature markets. Their activities should be carefully reduced. In Power Machines, it is possible to maintain the existing scope of activities. The activities of Lenta, Sveza, Severgroup TT and Severgroup Medicine should be expanded with varying degrees of intensity. It makes sense, however, to create a few companies in the early stages of the life cycle of courtship and infancy, and perhaps acquire a more mature company in the go-go stage. In general, the strategic portfolio of the organization is characterised by a lack of companies in the early stages of the life cycle and the early stages of the life cycle of the industry. Moreover, these companies do not have to be created in the same industries as Severstal Medicine or Severstal TT.

Based on the recommendations for changing the volume of activities of business units, it seems appropriate to actively transfer managerial competencies from companies that reduce their activities and not transfer them from companies that offer expansion of activities. This aspect is shown in Table. 3 with fill and bold. Shading shows inappropriate donors of managerial competencies. The darker the fill, the less appropriate it is to use the business unit as a competency donor. Thus, Sveza, Severstal TT and Severstal Medicine are not recommended to be used as a donor of competencies for most companies. Also, not the best option is to transfer competencies from the “Tape” (but the degree of inappropriateness is lower, respectively, and the fill is paler). The transfer of competencies from TUI, Nordgold and Severstal is most expedient.

You should also pay attention to the exception. For example, in Severstal Medicine, it seems appropriate to transfer competencies from Sveza and, to some extent, from Severstal TT. This is due to the fact that significant differences in organizational culture may arise between the already established Severstal (or TUI, or Nordgold) and the young Severstal Medicine. These differences will be less than between Severstal Medicine and Severstal TT (or Sveza). Bold font shows the migration options that seem to be the most preferred.

After reviewing the main aspects of the growth strategy, the key points of the growth-to-peak organizational development strategy are brought to the core. Graphically, it is shown in Fig. 9. The matrix of competencies transfer within the framework of the growth-to-peak strategy is shown in Table. 4.

As the peak of functionality, the situation is considered when all six managerial competencies are equally well developed. According to the Adizes model, such a state is not stable, but potentially achievable. Nevertheless, as the

target state of the discharges of this stage, the company lifecycle looks quite acceptable.

The interpretation of the above models of the growth strategy to the peak is similar to the models of the growth strategy to the core. Fig. 9 shows the general directions of the organisational development of business units in terms of the stages of the life cycle. Recommendations for changing the volume of activity of business units remain the same (Fig. 8), since they are determined by the dynamics of the development of industries, not business units. Table. 4 shows the direction and content of the transfer of managerial competencies from the business units indicated in the rows to the business units indicated in the columns. Bold indicates the transfer options that seem to be the most appropriate. Flooding marks options that look less appropriate.

Comparing the strategies of growth to the core and growth to the peak with each other, it can be noted that the latter seems to be a more complex and longer strategy in terms of implementation time. More business units need to be transformed. The organisational development of business units involves the passage of a greater number of stages of the life cycle. The number of transferable competencies between business units is greater, the directions of their transfer are more complex.

## 4. Conclusions and application of the results obtained in practice

In this article, general models of organizational development of diversified companies and their business units have been developed. The model of organisational development of a business unit is based on the Adizes life cycle model, while the latter is supplemented by two enlarged managerial competencies – management of incremental (modification) innovations and management of radical innovations. The proposed business unit model assumes that their development is structured as the organsation's progressive passage through the stages of the life cycle by developing the managerial competencies necessary for the next stage.

The model of organisational development of a diversified company is formulated as a two-dimensional matrix, one of the dimensions of which is the life cycle of the industry, and the second is the life cycle of the industry. Each of the business units is represented by a circle, the size of which indicates the share of activities in the total volume of the corporation's activities. Consideration of the development model of a diversified company made it possible to identify a number of available organisational development strategies: development to the main business unit, development to the advanced business unit, development to the optimal stage.

The developed general models were used to form models of organisational development for the diversified corporation Severgroup and its business units. The strategic portfolio of business units was defined, its parameters and position within the framework of the matrix of the life cycle of the organization – the life cycle of the industry. Based on the results of consideration of development options, two strategies were formulated – growth to the core and growth to the peak. For each strategy, models of the organizational development of a corporation (changing the composition and characteristics of a portfolio of business units) and models for the transfer of managerial competencies have been developed.

Further research should be aimed at studying the relationship between organisational development strategies and the most effective management tools at each stage of the life cycle.

Table 4. Transfer of managerial innovations within the framework of «growth to peak» strategy

| | | SS | L | PM | NG | T | GS | TT | M |
|---|---|---|---|---|---|---|---|---|---|
| | | PArEMI | PArEMI | pAreMI | PARemi | pAremI | pAREmi | PaREmi | PaRemi |
| | | _ _ R _ _ _ | _ _ R _ _ _ | P _ R E _ _ | _ _ _ E M I | P _ R E M_ | P _ _ _ M I | _A _ _ M I | _A_ E M I |
| SS | PArEMI | | — | **P, E** | **E, M, I** | **P, E, M** | **P, E, M, I** | **A, M, I** | **A, E, M, I** |
| L | PArEMI | — | | P, E | E, M, I | P, E, M | P, E, M, I | A, M, I | A, E, M, I |
| SM | pAreMI | — | — | | M, I | M | M, I | A, M, I | A, M, I |
| NG | PARemi | **R** | **R** | **P, R** | | **P, R** | **P** | **A** | **A** |
| T | pAremI | — | — | — | **I** | | **I** | **A, I** | **A** |
| GS | pAREmi | R | R | R, E | E | R, E | | A | **A, E** |
| TT | PaREmi | R | R | P, R, E | E | P, R, E | P | | A, E |
| M | PaRemi | R | R | P, R | — | P, R | P | — | |

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The article was submitted on 12.10.2022; revised on 15.11.2022 and accepted for publication on 28.11.2022. The author read and approved the final version of the manuscript.

文章于12.10.2022提交给编辑。文章于15.11.2022已审稿，之后于28.11.2022 接受发表。作者已经阅读并批准了手稿的最终版本。