

STRATEGIC MANAGEMENT OF HUMAN CAPITAL IN THE CONTEXT OF A RADICAL CHANGE IN THE SOCIO-ECONOMIC SYSTEM

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ABSTRACT

The survey method was used to study the quantitative impact on the development of strategic management in organizations of 16 factors characterizing the context of the company, the key levers of change, the preparation of the change, and the process of implementing the change. The research results showed that more than 50% of respondents highly appreciated the results of the implementation of strategic management at their enterprises.

The purpose of the work is to develop practical recommendations for a strategic management system as a factor that significantly affects labor productivity and human capital in a developing economy.

The following blocks have the greatest influence on the success of the strategic management development: preparation of the change and implementation of the change, the factors of which are characterized by the maximum 5-point estimates of the success of the change implementation – $E_{SD}=3.9-4.2$ and the maximum difference between the maximum and minimum estimates $\Delta E_{SD}=0.6-1.4$.

The following factors have a high impact on the success of implementation: the level of preparation for the strategic management development – $E_{SD}=4.2$, the consolidation of changes – $E_{SD}=4.1$, the position of the initiator of strategic development – $E_{SD}=4.0$, the formation of a strategic team – $E_{SD}=4.0$, the type of corporate culture – $E_{SD}=3.9$, support for changes by top management – $E_{SD}=3.9$ and the influence of the resistance of stakeholders – $E_{SD}=3.9$.

The results of the work can be used in companies in the implementation of strategic management projects, as well as in business schools in teaching strategic management.

Keywords: Strategic Management, Change, Human Capital, Global Dynamics, Education, Forecasting, Corporate Culture.

INTRODUCTION

The modern world is in a state of radical change. The impulses of instability of the socio-economic system generate demographic transition (Kapitsa, 1996), the maturing of the technological revolution (Schwab, 2017; Prichina et al., 2020), the rapid growth of large

developing economies, the decline in the economic growth of developed countries (Hawksworth et al., 2017).

Significantly fewer stabilizing factors. These include human capital, which had accumulated up to 80% of the world's wealth by the end of the 20th century (Koritsky, 2013). Therefore, the global dynamics are largely based on the growth of the education of specialists (Mincer, 1974; Orekhov et al., 2019). However, the resources of human capital growth are gradually being exhausted. Workers with tertiary education already make up about half of the population in developed countries (OECD.Stat, 2018). It is necessary to enter new resources instead of this one.

One of these innovative resources is strategic management, which allows increasing the effectiveness of human capital and thereby ensuring the growth of its capitalization. Strategic management occupies a special place in the field of management, since it is the highest level of management of the organization, on the success of which all other processes depend. Therefore, the very fact of implementing a strategic management system can be identified relatively accurately.

This work is devoted to the study of the development of strategic management in a developing country – Russia, which indirectly allows studying the tools for influencing the growth of human capital.

The purpose of the work is to develop practical recommendations for the development of a strategic management system as a factor that significantly affects labor productivity and human capital in a developing economy.

LITERATURE REVIEW

According to Porter (1985), strategy is a process designed to ensure the competitive advantages of one organization over another one in the long term. Moving away from the paradigm of competition, some authors point out that strategic management should form strategic goals and ensure the creation and effective use of resources to achieve these goals (Henderson, 1984). The strategic process is iterative and includes analysis of the situation, choice of strategy, and its implementation (Johnson et al., 2008), and their order can be arbitrary. In this paper, we study the process of implementing a strategy, the main part of which is the implementation of a change in the implementation of the strategy.

The key levers of strategy implementation are corporate culture, structure, systems, and people (Boojihawon, 2005). A detailed analysis of various types of structures and their components was carried out in the works of Mintzberg (1979). The author identifies the following main types of structures: simple structure, machine bureaucracy, professional bureaucracy, divisionalized form, and adhocracy. Mintzberg emphasized the importance of ideology as one of the basic building blocks. This is why it is important to understand what the culture of the organization is. The works of Schein (1992) occupy a special place in the field of organizational culture. However, this model is theoretical and it is not convenient to use it in the management sphere. It is more convenient to use the well-known model of organizational culture – OCAI (Cameron & Quinn, 2011), according to which, there are four main types of culture: clan, adhocracy, market, and hierarchy. Systems, in particular control systems, are also an important lever of change, for example, according to Simons (1995). However, in conditions of high variability, this model does not seem to be flexible enough. Therefore, a model that suggests

that in a changing environment, the integration of different points of view on control, including both formal and informal systems of control, is required (Eisenhardt & Sull, 2001).

METHODS

The entry into the process of change is diagnosed using these key levers of strategy implementation: corporate culture, structure, systems, and personnel. The context of the companies is also recorded at the input (Balogun & Hailey, 2008). The model of structure types according to Mintzberg (1979) was used to diagnose the structure. The culture of the organization was evaluated using the method of competing values of corporate culture – OCAI (Cameron & Quinn, 2011). The characteristics of personnel (human capital) were characterized by the level of tertiary education (UIS UNESCO, 2013), as well as the level of business education of top managers. The process of strategic management development was evaluated by the consistency of the change organization (Kaplan & David, 1996), including the impact of top management support for strategic development, stakeholder resistance, and resource support. The evaluation of the development process results (E_{SD}) was determined using a 5-point scale through the following questions:

1. To what extent was the strategic management development project implemented?
2. How noticeable are the changes that have occurred in the market position of the organization?
3. To what extent has the implementation of strategic changes been accompanied by improvements in the corporate culture, structure, and systems?
4. What positive changes did participation in the project give to the leader?

Graduates of the MBA program and strategic management courses of the International Institute of Management LINK, who were trained in the programs of The Open University (UK), were selected as the respondent base of the study.

We used a comparison of the average quantitative results of the strategic management development as the main method of analysis – E_{SD} , as well as the difference between the minimum and maximum value of E_{SD} , which was designated $-\Delta E_{SD}$.

RESULTS

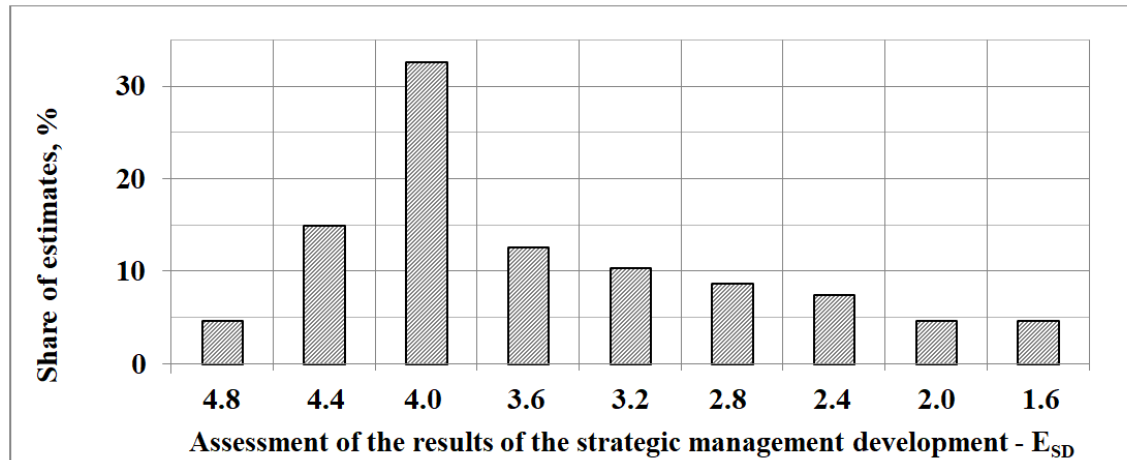
The Context of the Companies Studied

Since human capital is currently the main productive force of many organizations, the role of strategic management is to ensure the successful operation of this capital in the long term, development, and provision of the necessary resources (Porter, 1985; Ilina et al., 2016; Khetagurova et al., 2018; Mosalev et al., 2018).

Let us consider the characteristics of the surveyed organizations, based on the responses of managers who were engaged in the strategic management development. Figure 1 shows the distribution of the average estimates of the success of the strategic management development – E_{SD} .

The most common score is 4 points (range 3.8–4.1). About 52% of graduates gave this grade and higher. This confirms the main hypothesis of this study about the significant impact of strategic management on human capital in Russia. About 17% of graduates did not rate highly their experience in implementing strategic management ($E_{SD}=2.5-1.4$).

A study of the initial state of strategic management found that only 17% of companies had formulated strategies that played an important role in the management of organizations. It was in these organizations that the development of the strategy was quite successful – $E_{SD}=3.7$. In cases where the strategy formally existed, but managers did not use it enough, the implementation was less successful $E_{SD}= 3.3$, which is the result of a fixed disregard for strategic guidelines – strategic drift.



Source: Developed by the authors.

FIGURE 1 EVALUATING THE RESULTS OF STRATEGIC MANAGEMENT DEVELOPMENT

Approximately 36% of the reasons for improving strategic management are negative, but more than 42% of the reasons are developmental, such as the development or growth of the organization. It is for these reasons that the result of the development of strategic management was the most successful – $E_{SD}= 3.7$. The worst result was realized when the financial situation in the company deteriorated – $E_{SD}=3.2$.

Key Levers of Change

Table 1 shows the distribution of the types of corporate culture and structure of the organizations studied, as well as the average E_{SD} score for each type. It can be seen that the corporate culture has a significant impact on the success of the development of strategic management.

Type of corporate culture	%	E_{SD}
Bureaucratic (hierarchy, procedures, longtermness)	35	3.1
Clan (similar to the family, the importance of traditions, caring for people)	28	3.4
Market (the main thing is the fulfillment of tasks, competitiveness)	22	3.8
Adhocratic (flexible, open, adaptive, non-hierarchical)	11	3.9
Difficult to answer	5	3.1

Source: developed by the authors.

The type of organizational structure has less impact. Thus, the minimum score of $E_{SD}=3.3$ is typical for a simple structure, and the maximum score of $E_{SD}=3.8$ is typical for an adhocratic structure. The professional bureaucracy is also characterized by a high rating of $E_{SD}=3.7$.

Among the types of control systems, the least successful results of $E_{SD}=2.7$ are demonstrated by organizations in which only financial control is carried out. The best results are observed in organizations with control based on the participation of various stakeholders $E_{SD}=3.7$.

The influence of education on strategic management development is quite small, and the difference between the maximum and minimum values of E_{SD} estimates is $\Delta E_{SD}=0.3$.

At least 50% of top managers in 56% of enterprises have a business education, and 20% have it in 21% of enterprises. The results of the strategic management development were stronger in companies where the level of business education of top managers was higher.

Preparing and Implementing the Change

The strategic development of the company is most effective if the initiator is its owner $E_{SD}=4.0$ or the head $E_{SD}=3.8$. As the level of power decreases, so does the effectiveness of the change. With a good level of strategic development training, the value of $E_{SD}=4.2$, which is more than the maximum estimate for all other differentiating factors. The difference between the maximum and minimum value of E_{SD} is also large and is $\Delta E_{SD}=1.3$.

A significant factor in the success of the change is whether a strategic team, a project, or an appropriate organizational structure has been formed. If it was created and worked well, then $E_{SD}=4.0$, otherwise $E_{SD}=3.2$.

With strong support for the development of strategic management by top management, the average value of $E_{SD}=3.9$, and in its absence, $E_{SD}=2.8$ ($\Delta E_{SD}=1.1$). The impact of resource support for changes is slightly less $\Delta E_{SD}=0.9$. Resistance to change also has an impact on how successful the change was. With a weak resistance, the value of $E_{SD}=3.9$, and with a strong $E_{SD}=3.3$.

The highest E_{SD} ratings were given to those cases of implementing a strategic change in which the changes were fully consolidated $E_{SD}=4.1$. However, in most cases, the consolidation was not carried out in all aspects (48%) and for them, $E_{SD}=3.8$.

The respondents were also asked an open question: "What are the main obstacles or difficulties you have encountered in the process of developing strategic management?" The most common responses among organizations with an $E_{SD}>3.8$ were: resistance from stakeholders (15%), difficulties in combining the efforts of company employees (9%), lack of market information (9%), lack of management education among managers (8%), and limited resources (8%). There were problems of a more unpredictable nature in a similar study of the main difficulties in implementing strategic change in the UK (Alexander, 1985).

Comparison of the Impact of Various Factors on the Implementation of the Change

The analysis of the influence of various factors on the success of the strategic management development allows comparing the difference $-\Delta E_{SD}$ between the maximum and minimum levels of E_{SD} , depending on the studied indicator. The greatest difference between the maximum and minimum estimates is typical for the block's implementation of the change

process $-\Delta E_{SD}=1.0$ and preparation for the change $\Delta E_{SD}=0.93$. The following factors have the highest value of ΔE_{SD} : consolidation of the change $-\Delta E_{SD}=1.4$, the level of preparation for the strategic management development $-\Delta E_{SD}=1.3$, and support for strategic development by top management $\Delta E_{SD}=1.1$.

Usually, it is considered in the theory of strategic management that the most important element of strategy implementation is the key levers of change. However, this is stated concerning countries with developed strategic management. In this case, the introduction of strategic management in Russia only takes its place in companies, and therefore “*preparing for changes*” and “*implementing the change process*” play a more important role.

Most of the maximum estimates of $E_{SD}=4.2-3.9$ are also localized in the “*change preparation*” and “*change process implementation*” blocks, in particular:

- level of preparation for the development of strategic management $E_{SD}=4.2$,
- fixing the change $-E_{SD}$,
- position of the initiator of strategic development $-E_{SD}=4.0$,
- formation of a strategic team or structure $-E_{SD}=4.0$,
- resource change support $-E_{SD}=4.0$.

In other blocks, the “*company size*” of $E_{SD}=4.1$ has a high value of E_{SD} , which is due to the presence of a small proportion (3%) of representatives of large multinational companies among the respondents. The rating for the “*type of corporate culture*” factor is also higher than the others $-E_{SD}=3.9$.

DISCUSSION

Although systematic and qualified strategic management can increase the capitalization of human capital, however, the factors studied to increase the effectiveness of strategic development do not provide a direct link between these two concepts, either in value terms or in physical terms. They only determine the trend. As a first approximation, estimates of the growth of the capitalization of top management can be used to overcome this gap.

We used only paired comparisons of the impact of various indicators on the effectiveness of the development of strategic change, although it is clear that this system is multidimensional and interrelated. However, the measurement tools used and the sample size do not allow obtaining multivariate regression-correlation dependencies. Therefore, it will be necessary to increase the resolution of quantitative estimates and the sample size in future studies.

It should be noted that strategic management development directly increases the value of the company's human capital, as the strategic competencies of top management are developed (Shinkareva et al., 2018; Sultana & Zayed, 2018; Kryukova & Khetagurova, 2020; Shahi & Neloy, 2020). Thus, strategic management has many properties characteristic of human capital.

The results of the work can be used in companies when implementing strategic management projects, as well as in business schools when teaching strategic management.

CONCLUSION

Studies of the quantitative impact on the development of strategic management in organizations of 16 factors that characterize the key levers of change, the preparation of change,

and the process of implementing change have been carried out. The majority of respondents highly appreciate the success of implementing strategic management in their organizations.

According to the indicator of the difference between the minimum and maximum values of the estimates of the strategic management implementation success $-\Delta E_{SD}$, the blocks “*implementation of the change process*” – $\Delta E_{SD}=1.0$ and “*preparation for change*” – $\Delta E_{SD}=0.93$ have the greatest impact on the effectiveness of the change.

In these blocks, most of the maximum estimates of the effectiveness of the change $-E_{SD}$ are localized. (5-point rating). In particular, the level of preparation for the strategic management development $-E_{SD}=4.2$, the position of the initiator of strategic development $-E_{SD}=4.0$, the formation of a strategic team or structure $-E_{SD}=4.0$, the consolidation of change $-E_{SD}=4.1$, resource support for change $-E_{SD}=4.0$, support for strategic development by top management $-E_{SD}=3.9$ and the impact of stakeholder resistance $-E_{SD}=3.9$. The “*type of corporate culture*” has the highest rating $-E_{SD}=3.9$ in the “*key levers of change*” section.

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REFERENCES

- Alexander, L.D. (1985). Successfully implementing strategic decisions. *Long Range Planning*, 18(3), 91-97.
- Balogun, J., & Hailey, V.H. (2008). *Exploring strategic change*. Pearson Education.
- Boojihawon, D.K. (2005). *Implementing strategy: Structure, systems, culture, and change*. B820. Book 6. Walton Hall: Open University.
- Cameron, K. S., & Quinn, R.E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- Eisenhardt, K.M., & Sull, D. N. (2001). *Strategy as simple rules* (pp. 107-112). Harvard Bus Pub.
- Hawksworth, J., Audino, H., & Clarry, R. (2017). *The world in 2050. The long view how will the global economic order change by 2050?* PwC. Retrieved from <http://www.pwc.com/world2050>
- Henderson, D.D. (1984). *The logic of business strategy*. Cambridge, Mass: Balinger.
- Ilina, I., Kryukova, E., Zotova, A., Kuznetsova, E., & Nakhratova, E. (2016). Teachers of Russian higher educational institutions in the professional labor market. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 8(2), 128-136.
- Johnson, G., Scholes, K., & Whittington, R. (2008). *Exploring corporate strategy: Text and cases*. Pearson education.
- Kapitsa, S.P. (1996). The phenomenological theory of world population growth. *Physics-Uspekhi*, 39, 57-71.
- Kaplan, R.S., & David, P.N. (1996). *The balanced scorecard. Translating strategy into action*. Boston: Harvard Business School Press.
- Khetagurova, V.S., Kryukova, E.M., Maloletko, A.N., Kaurova, O.V., Mosalev, A.I., Mukhomorova, I.V., & Egorova, E.N. (2018). Volunteer tourism as a variety of responsible tourism. In *IOP Conference Series: Earth and Environmental Science* (Vol. 204, No. 1, p. 012015). IOP Publishing.
- Koritsky, A.V. (2013). *Influence of human capital on economic growth: Training aid*. Novosibirsk: NGASU.
- Kryukova, E.M., & Khetagurova, V.S. (2020). Modern methods and approaches to the management of the hotel services promotion. *Revista TURISMO: Estudos e Práticas*, (3).
- Mincer, J. (1974). *Schooling, experience and earnings*. New York: Columbia University Press for the National Bureau of Economic Research.
- Mintzberg, H. (1979). *The structuring of organisations*. Englewood Cliffs: Prentis Hall.

- Mosalev, A.I., Kryukova, E.M., Mukhomorova, I.V., Egorova, E.N., & Khetagurova, V.S. (2018). Experience of Socially Responsible Tourism Projects in Russia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 204, No. 1, p. 012030). IOP Publishing.
- OECD.Stat. (2018). *Educational attainment and labor-force status*. OECD Publishing.
- Orekhov, V.D., Prichina, O.S., Blinnikova, A.V., Panfilova, E.A., & Shchennikova, E.S. (2019). Indicative diagnostics of the educational component of human capital based on mathematical modeling. *Opción*, 35(20), 2337-2365.
- Porter, M.E. (1985). *Competitive advantage*. New York: The Free Press.
- Prichina, O.S., Orekhov, V.D., Egorova, E.N., Kukhareenko, O.G., & Blinnikova, A.V. (2020). Developing and testing the forecasting algorithm for the technological revolution theme through the analysis of the scimago JR scientific journal database. *Journal of Advanced Research in Dynamical and Control Systems*, 12, 712-724.
- Schein, E.H. (1992). *Organisational Culture and Leadership*. San Francisco: Jossey-Bass.
- Schwab, K. (2017). *The fourth industrial revolution*. New York, NY: Crown Business, 192 p.
- Shahi, K., & Neloy, H. *Global transition of HR practices in covid-19 pandemic situation: a systematic review through 5P's model of HRM*.
- Shinkareva, O.V., Orekhov, V.D., Solodukha, P.V., Prichina, O.S., & Gizyatova, A.S. (2018). Multifactor assessment of indicators on dynamic modeling of programs for managing the performance of scientific labor. *International Journal of Civil Engineering and Technology*, 9(13), 303-317.
- Simons, R. (1995). Control in an age of empowerment. *Harvard Business Review*, 73, 80-88.
- Sultana, F., & Zayed, N.M. (2018). *Effects of intellectual capital on organizational progression: A study Of food manufacturing and service in Dhaka city*.
- UIS UNESCO. (2013). *International Standard Classification of Education 2011*. Retrieved from <http://uis.unesco.org/sites/default/files/documents/iscd-2011-ru.pdf>