ORIGINAL PAPER

DOI: 10.26794/2304-022X-2022-12-2-55-67
UDC 334.012.42(045)
JEL M12

Hybrid Project Management Methodologies as a Sign for Organizational Ambidexterity

S.A. Titov
Financial University, Moscow, Russia
N.V. Titova
State University of Management; Moscow, Russia

ABSTRACT

Project management plays an important role in the modern economy and public administration. Trends in project management have a significant impact on the performance of companies, public organizations, and programs for the socio-economic development in Russia. One of the interesting developments in project management is the expansion of hybrid methodologies, which combine tools and approaches of flexible and predictive approaches. This article aims to study the forms, results, and types of hybrid project management methodologies through the lens of the concept of organizational ambidexterity. Methodologically, the research is based on a systematic review of the Russian-language scientific literature on project management hybrid methodologies and organizational ambidexterity, as well as a qualitative content analysis of selected papers. The results of the study indicate that there are significant similarities between key aspects of hybrid methodologies and organizational ambidexterity. The authors conclude that hybrid project management methodologies can be considered as the instruments of organizational ambidexterity. As practical recommendations, the authors propose to expand the use of hybrid methodologies in the management of not only project-based firms, but also in other organizations, as well as in the management of socio-economic programs, especially in conditions of high uncertainty. The potential of hybrid methodologies to improve organizational ambidexterity and thereby simultaneously ensure the stability and flexibility organizations makes them invaluable tools to increase the resistance organizations and strategic programs to technological disruptions, socio-economic crises, and global shocks.

Keywords: project management; hybrid methodology; organizational ambidexterity; content-analysis; qualitative data analysis; systematic literature research; global shocks

For citation: **Titov S.A., Titova N.V. Hybrid project management methodologies as a sign for organizational ambidexterity. *Management sciences*. 2022;12(2):55-67. DOI: 10.26794/2304-022X-2022-12-2-55-67**

INTRODUCTION

Project management plays an important role in modern economy, public administration and social development and is actively used not only in traditional project-oriented industries (such as information technology and investment construction), but also in manufacturing, especially when developing new types of products [1]. In the Russian Federation, project management plays a crucial role in the strategic development of the country, serving as a tool for the implementation of the State priority initiatives at both the federal and regional, municipal levels [2].

Along with the increasing role of project management in the modern world, its methodological development also impacts significantly the performance of projects and companies. Due to the increased dynamics and uncertainty of the business environment, the need to learning digital technologies and ensure the sustainability of the enterprise has to develop and develop new project management methodologies, including flexible, lean, extreme, evolutionary and some others, aimed at increasing the adaptability of management systems.

But, with the technological transformation of many industries, waves of disruptive technological innovation, social change, and economic crises accompanied by global shocks, such as the COVID epidemic and the Ukrainian crisis, flexibility alone is not enough. There needs to be a balance between adaptability and innovation on the one hand, and stability of current operations on the other. As a result, companies are beginning to apply so-called hybrid methodologies (HM) for project and program management, connecting elements of the predicate (appropriate for stable conditions), as well as oriented to dynamic and even extreme flexible or Agile approaches. The science of the HM relates to the incorporation into the theory and practical tools of project management of the methods, resources and research principles developed in operational and strategic management. In addition, the perspective of the HM is related to the analysis of their impact on organizational capacities to improve adaptability, flexibility and, at the same time, improve project outcomes.

The HM have been developing very rapidly over the past three years. Several well-structured and established HM have been already elaborated, such as Scrumban, PRINCE 2 Agile, P3.express, etc. More and more companies report using their own developments in this field. However, HM issues in project management are poorly researched in Russia. And it is not so much a small number of scientific publications (6 articles in Russian — language journals and 5 — in the proceedings of conferences), how much about the lack of conceptual understanding of this phenomenon in its relation to the already established in management science constructs and concepts. Current research focuses on the identification of different options for hybrid models, which is useful for the development of practice, but not sufficient for an in-depth study of the phenomenon.

Because the HM assumes a duality embedded in project management systems, they are closely related to the concept of organizational ambidexterity (OA), which is understood as the ability to successfully implement two types of activity at the same time: operational (in foreign terms — exploitation), related to the stability and efficiency of current processes, and research (exploration), related to the flexibility and implementation of innovative and exploratory business initiatives [3]. OA plays an important role in the system of

modern managerial knowledge. More than 600 OA publications are found in the Scopus database, with half of these publications occurring in the last three years. Rapidly increasing number of materials on topics related to OA and in the Russian-speaking scientific space. OA researchers identified its positive impact on the long-term performance of companies in various contexts, especially under conditions of high turbulence and uncertainty. But the OA problem is studied mainly at the level of strategic management. Methods and tools for improving OA at the project management level, i.e. where strategies are largely implemented, are not well researched. This makes it a theoretical construct with an excessive number of possibilities, as it is not clear to the practicing managers which methodologies, methods and tools can be used to implement OA.

Also, until recently, researchers of OA emphasized the contradictory, conflicting nature of the combination of operational and research aspects in the activities of one organization. But more and more scientists pay attention that the duality of the OA is not necessarily manifested in contradiction. It appears to the authors that the practice of using the HM and its current variations suggests that at the project level the OA can be implemented as a conflict-free, harmonious combination of operational and research types of activities.

Thus, the research question can be formulated as: to what extent are the HM and the OA conceptually linked? If HM can be recognized as a manifestation of OA, it would indicate a huge potential for conflict-free implementation and thus more effective use of its positive results for the activities of companies. It will also prove that the rapid development of HM is largely due to their ability to create positive OA results, and HM itself can be seen as a practical tool to improve OA at the project management level. Hence, the following research issue is considered as the main focus of the article: **are hybrid project management methodologies the manifestation of organizational ambidexterity?**

METHODOLOGY OF THE STUDY

The present study is based on the study of Russian-language articles in scientific journals and conference materials. Principles and tools for a systematic review of the literature were used to identify and select them:

- source search bases have been substantiated (RINC, Google Scholar and Grebennikon);
- formulated search queries;
- criteria for selection of literature (attitude to management and business; belonging to articles in scientific journals or conference materials, professional standards or professional reviews mentioned in the list of literature in scientific articles; availability of full texts in electronic form; presence of search terms in the material itself, text or bibliographic descriptions).

The selected articles were analyzed qualitatively using techniques such as thematic coding of text, table and graphic fragments, cross-tabulation and thematic code hierarchical models. In particular, for OA, coding was done in the context of different terms describing the concept, the placement of terms in different elements of articles, varieties, orientations, OA aspects and related other concepts. Cross-tabulation was performed based on the terms used and their placement in the articles (to justify the most appropriate ones, as well as in terms of coded fragments and documents) to categorize the articles by depth of study of

the concept. The hierarchical model was used to organize thematic codes. For qualitative data analysis was used software MAXQDA®.

RESULTS OF THE STUDY

The first part of the section presents the results of the analysis of the HM, then the CCA, followed by — a comparative analysis.

Hybrid methodologies in Russian scientific and professional sources

The term "hybrid methodologies" in the professional and scientific environment is well established, it is fixed in the Russian-language edition of the authoritative standard PMBoK [1] and used by the vast majority of researchers and specialists. To reduce the scope and focus of the search on the desired subject area, the term "project management" was added to the search query.

Russian sources considering HM project management in databases RINC, Google Scholar and Grebennikon found 18, of which 4 could not find full-text documents, 2 were deleted (one re-publication and one graduate qualification work bachelor). Analysis of the remaining 12 revealed 3 additional Russian sources: standard PMBoK and standard "Agile: practical guide" [4], as well as the professional review of the HM [5]. All 15 selected materials were analyzed.

Not only the concept of "hybrid methodology" is used for project management, but also "hybrid life cycle», "hybrid project environment", "hybrid approach", "hybrid organizational structure", "hybrid model", "hybrid technology", "hybrid control", "hybrid control process", "hybrid systems", "hybrid dual control", "hybrid method" and "hybrid methodology" [4–7]. All of these terms either refer to individual elements or aspects of hybrid methodology (life cycle, project environment and organizational structure) or are synonymous (the rest).

The simplest interpretation of HM is that they combine classical and flexible methodology [6] or, in terms of [4] — predictive methodology, on the one hand, and flexible, adaptive or iterative methodology, on the other. The first (classical) type is most suitable for projects with high certainty content, technologies used and the environment, and is most often used for those that can be called generic or repetitive. The second set of flexible methodologies is suitable for high-risk projects with changing content, technological uncertainties and a dynamic external environment, in other words, mainly innovative, research, entrepreneurial. This kind of hybridity is the most common. It is noted in all studied sources. But HM can also combine elements of two or more methodologies [7], and can be different: flexible, adaptive or iterative [4].

At present, there are HM, connecting the methodologies: predictive (so-called "waterfall" or "cascade") and Scrum (in a broader sense — Agile); Scrum and Scrumban; PMBoK (predictive) and Agile (in different versions — Scrum, Crystal, Kanban etc.) [4]; PRINCE 2 (predictive) and Agile [10]. Hybrid methodologies are also considered P3.express, model interconnection Stage-Gate and Agile, "Hybrid Manifesto" Binfire, as well as scaled (i.e. applicable to large-scale projects and programmes) flexible methodologies LeSS and SAFe [9, 10]. But HM can be created situationally, in different organizations in their own way, based on specific needs and circumstances [7].

The sources reviewed identify hybridization options such as:

[1] A Guide to the Project Management Body of Knowledge. USA. Pennsylvania: Institute for Project Management; 2017. 726 p.

• Level: for example, Agile can be used at one level (usually at a lower level — at the level of executors), and on the other — "waterfall" (generally at a higher level), or separate elements of a predictive methodology (partly present in a "hybrid manifesto" [5], LeSS and SAFe) [4].

• Consistent: for example, in the early stages of projects (conceptualization, development, testing, design) flexible tools are used, and later (project product creation) — incremental methodology tools (partly present in the framework P3.express) [9].

• Structural: for example, for some company projects a predictive methodology is applied, and for others, more innovative and risk — one of the flexible; methodology thus adapts to the specifics of the subject area of the project [10]; Similarly, a separate part of the project, not necessarily sequential, could be implemented on the basis of an iterative methodology and the rest — on the basis of a predictive methodology.

• Methodical, which combines tools specific to different methodologies and used jointly to manage a single project; focus (depending on the circumstances) on more flexible, iterative or predictive aspects; for example, in the framework of Scrumban, Scrum tools are in many ways fused with Kanban [4]; in [6] this kind of approach is called "convergence of methodologies" and is separated from hybridization; or in [4, 11] the combination of predictive methodology in the gradual transition to Agile or other flexible.

The results of the hierarchical modelling of the thematic codes identified in the HM analysis are shown in the *figure*.

Organizational ambidexterity in the works of Russian scientists

As is common to many new scientific categories, the OA concept under study at the early stages of development is characterized by a variety of terminology. In the Russian-language scientific literature it is described by such terms as:

• ambidextria (and also ambidexterity, ambidexterness, and derivatives — ambidextrous, ambidexter);
• bilateralism;
• duality;
• bilateralism;
• ambicapability and etc.

Also actively used and the original English name "ambidexterity".

The large number of articles mentioning the concept (65 pcs.) indicates the need to harmonize terminology. The results of the quantitative analysis of the use of terms are shown in the *table*. Column "K" indicates the total number of references to the term, column "C" — the number of articles in which the term occurs (without the number of references within one article). The original name "ambidexterity" appears mainly in references to foreign sources and in translated versions of titles, abstracts and keywords. The most commonly used Russian term is "ambidextria".

The results of frequency analysis allow to recognize as the basic term "ambidextria". To distinguish it from similar in the field of medicine, pedagogy, sports, etc. it is proposed to use the phrase "organizational ambidextria". It is recommended to use the terms "ambidextr" and "ambidextrous", established in pedagogy, sports and other fields of knowledge as derivatives.

71 unique sources found in Russian journals indexed in the RINC and Google Scholar. Of these, were deleted 6: 1 — unable to find full-text version and 5 — due to lack of OA connection. The remaining 65 contained two publications in English (including one by foreign authors), which were left for study.

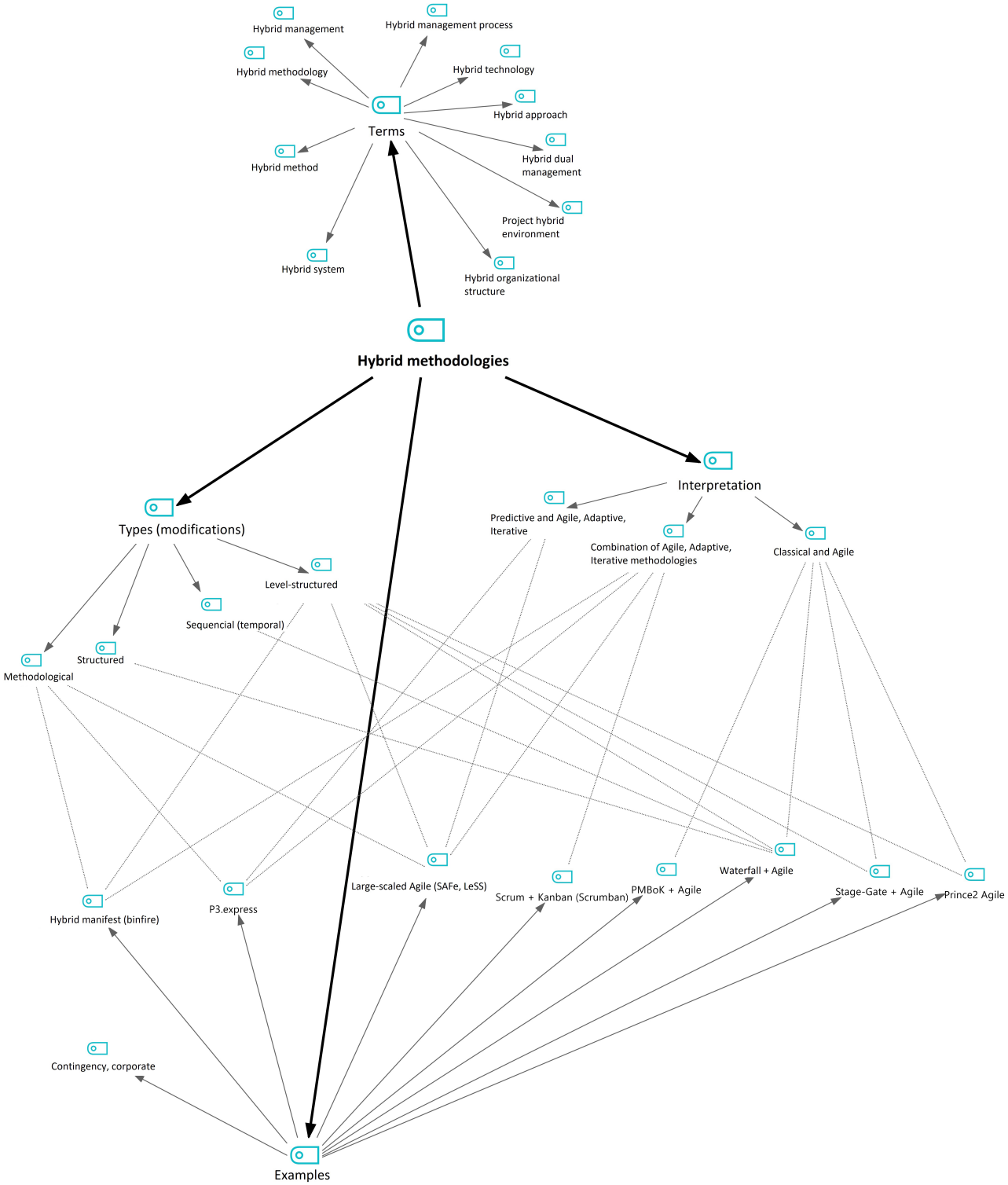

Fig. **Hierarchical model of thematic codes for hybrid methodologies**

Source: developed by the authors.

Table

Frequency analysis of the use of the different terms describing the concept of organizational ambidexterity

	Ambidexterity		Ambidextria		Bilateralism		Duality		Uncertainty		Bilateralism		Ambicapability		Universality		Total	
Place in the article	**K**	**C**	**K**	**C**	**K**	**C**	**K**	**C**	**K**	**C**	**K**	**C**	**K**	**C**	**K**	**C**	**K**	**C**
Title of the article	2	2	1	1													**3**	**2**
Abstract, including:	11	7	12	9			1	1	2	1							**25**	**10**
Abstract	11	7															**11**	**7**
Abstract (In Russ.)			12	9			1	1	2	1							**14**	**10**
Keywords including:	6	6	8	8					1	1							**15**	**9**
Keywords	6	6															**6**	**6**
Keywords (In Russ.)			8	8					1	1							**9**	**9**
Main text	23	16	172	26	11	3	1	1			2	1	1	1	1	1	**210**	**34**
References	121	54															**121**	**54**
Annex	1	1	1	1													**2**	**1**
Total	164	63	194	26	11	3	2	1	3	1	2	1	1	1	1	1	**376**	**110**

Source: developed by the authors.

Based on the results of the frequency analysis of the use of OA terms in different parts of the OA text and the quantitative analysis of its volumes, four categories of articles were identified based on the role of OA in the study:

- C — OA as a central concept (found in 1 article);
- V — OA is an important but not central concept (10 articles);
- P — OA is used as a term at the periphery of the main study (17);
- S — OA terms are found as random (37).

The substantive analysis of the articles from the first three categories can be said, that OA is understood as a combination of operation and research with an emphasis on the different shades of this compound or without [3, 12–18]. OA — this ability to "combine the effective implementation

of current market opportunities with innovation activities to meet future market challenges" [16], the ability to "use existing and known technologies and produce the same goods and services", "to research new technologies and to produce new products and services in accordance with changing demand" [17], "the ability of a company to use current business processes with an ever higher level of efficiency, while simultaneously searching for new opportunities and radical innovations" [3], the ability to accumulate resources and adapt quickly to radical changes, "keep focus on operational issues and long-term opportunities" [18].

The investigated sources of the OA understand as a combination of internal flexibility and discipline, flexibility and stability, creativity and discipline, increase of efficiency and search for new opportunities, strategic planning and operational activities, creative and "production-exploitation" thinking, classical and innovative approaches to management, routines and search for new opportunities, teamwork and activities within hierarchical structures, a standard mechanism for coordination and development of adaptation solutions and innovations [19–21].

The relationship between the two aspects of the OA is perceived as conflicting [17], conflict and tension [3], arising from the divergence of activities difficult to reconcile and requiring conscious efforts to mitigate [18], find a compromise, balance, conflict management, balance, and the right mix of resources for different contexts [19].

The utility of OA is related to the need to overcome the trap of excessive focus on one of the aspects [3] which may lead to either excessive rigidity or misalignment. OA benefits from overcoming structural inertia, increasing productivity and ensuring competitive sustainability [3], with the growth of the company [16], better financial performance, better learning and innovation [3], with crisis survival and shock mitigation [20].

OA can be implemented [3, 13, 14, 19]:

- by means of alternate focus on operational, then research aspects;
- by structural differentiation, which involves specialization of different parts of the company in different aspects;
- through structural decentralization, where delegation of authority leads to the adaptation of organizational resources to those high-priority aspects of the activities, as structural formalization (ensuring effective transfer of knowledge and other resources from units and projects involved in different activities);
- by creating an organizational context in which the same resources can carry out both types of activities.

Based on the different directions of implementation, it is possible to speak of several types of OA:

- temporary, or alternating [3, 13, 14];
- structural, based on structural differentiation [3, 22];
- contextual, based on communication, organizational culture or simultaneous focus on both aspects of the OA [3, 19];
- different combinations of the types (reciprocal, harmonic, divided, cyclic, etc.) [3].

OA research is carried out in the context of other scientific concepts. In [20] the OA converges with strategic entrepreneurship, which also involves combining two aspects of the company's business: strategic, planned, progressive, on the one hand, and risk, opportunistic, exploratory — on the other. [19] ACS is a relevant area for knowledge management development, as it integrates existing and new knowledge,

and is based on leaders' ability to connect different approaches and work in different contexts. [17] shows that OA contradictions can be overcome through transformational leadership. And [23] refers to a positive relationship between OA and transactive (i.e. collective) memory.

Comparative analysis of hybrid methodologies and organizational ambidexterity

The results of the study indicate that the concepts of the OA and the HM are indeed very close. Both reflect a combination of two different activities — the exploitation of existing resources in established markets, products and technologies on the one hand, and studies that explore new business opportunities, adapt flexibly to change, innovate — on the other, and highlight the benefits of balancing them through different organizational solutions. Similarities are also found between OA types and HM directions. In both cases, temporal (or consistent) and structural forms are distinguished, and methodical hybridization has a number of similar aspects to contextual ambidexterity.

In some cases, the characteristics of the other can easily be seen in the description of one concept. For example, the [18] OA describes, on the one hand, how informal planning is combined in the product creation process, and on the other — as long-term formalized planning within the operation of the product. The HM also assumes that the preparatory and initial project requirements phases are carried out according to a predictive methodology, while the design, development and testing phases are carried out using a flexible methodology.

Several sources argue that both flexibility and streamlined planning are necessary for successful project management [6–8]: thus, [24] states that a combination of predictive and flexible methodologies can improve the efficiency of company management (achieving better results, going to goal, minimizing costs) and its adaptability to the external environment (finding solutions suitable for individual needs). Many consistent formulations can be found in OA descriptions [20] — improving efficiency and finding new opportunities, classical and innovative approaches to management, stability and flexibility.

However, there are also differences between the OA and the HM. First, the organizational ambidexterity appears to be a more dualistic concept, often emphasizing the inconsistency and complexity of coordination between the two dimensions. The HM most often combines two methodologies (predictive and flexible), but increasingly focuses on harmonizing elements from other: for example, iterative and adaptive. That is, the HM implies (which, of course, is not a trivial task) the ability to effectively reconcile elements of different methodologies without creating antagonism even between very different ones. Second, the OA is a strategic concept for the organization as a whole (hence, apparently, acute dualism, as it is difficult for one company to move in several directions at the same time). The HM addresses the project level where the OA can be implemented as a combination of innovative projects with varying degrees of radicalization (which does not necessarily imply duality).

Summarizing the comparison of the two concepts, it can be concluded that the HM is a manifestation of the OA at the project management level and, in this context, it is acceptable to consider it as an instrumental implementation of the OA. Organizational ambidextrous can be understood as a general direction of development of project management, which stimulates

hybridization, while increasing stability and adaptability of management systems.

The positive impact of OA on both short-term and strategic company results, reflected in a large number of studies, leads to the conclusion, that the HM should be actively developed in contexts where organizations have to simultaneously ensure the stability of ongoing operations, the search for new opportunities and interaction with a highly dynamic environment.

At the same time, the well-established and evolving practical tools of the HM can be applied in organizations that are not purely project-oriented but are committed to the development of the OA. To date, there are a number of proven cases of successful HM application not only in IT-companies, including large [24] but also in other sectors of the economy. [9] Positive results of using tracking as a hybrid project management tool in JSC "TVEL" (Russian manufacturer of nuclear fuel), a part of the state corporation "Rosatom". In [25] reviewed in detail the encouraging outcome application of the HM by a large Russian FMCG-company.[2] In [8] presents the positive experience of the HM's integration into a university that is both an ongoing academic process and developing new technological directions. In [11] substantiates the positive effect of the HM in the management of digital business transformation.

The examples document such results as improved efficiency of standard (reduced implementation time, reduced violations of budgets, positive economic results), as well as innovative, research and business projects (increase in the share of those whose results reached the market or internal user; reduction of budgets for closed to the results). This demonstrates the ability of the HM to create the positive impact of the OA.

CONCLUSION

The conducted content analysis obtained during the systematic selection of literature of Russian-speaking sources allows to conclude that hybrid methodologies can be considered as a manifestation of organizational ambidexterity at the project level of company management. The HM has a wide range of institutional solutions and practices, which allow a balance between the operational and research activities of the organization and actually allow for a more harmonious and consistent integration of the two aspects of the OA.

The theoretical significance of the study lies in the conceptual understanding and better understanding of the actively developing trend of hybridization of methodologies, methods and tools of project management. The study enriches the management theory with new ambidextrous aspects arising from the use of the HM and points to the possibility of developing objective perceptions of the OA.

The value of the study for practice lies in the rationale for using the HM to achieve the OA and to improve simultaneously both the efficiency of current operations and the sustainability of innovative initiatives. The HM does have the potential to bring OA benefits to companies, and the practices identified therein can be used by enterprises and institutions to ensure their sustainability even in the most adverse, chaotic and shock-like conditions. In cases of radical technological change and global shocks, the HM could usefully be used in public project management and strategic socio-economic development programs to enhance their adaptability and long-term sustainability. In addition, the development

[2] FMCG — fast-moving consumer goods.

and application of the HM can be enriched by existing tools to enhance the OA. A disadvantage of the study is that it is based only on Russian and mainly on scientific publications.

The findings stimulate further research of hybrid methodologies using the concepts of strategic and corporate entrepreneurship and strategic flexibility. Empirical studies of the relationship between the use of the HM, the performance of companies under various uncertainties and OA levels seem to be promising. The most relevant is the analysis of the potential of hybrid methodologies to increase the resilience of organizations in times of shock and catastrophic change.

REFERENCES

1. Katunina I.V. Configuring the project management office: Case of an innovation industrial company. *Strategicheskie resheniya i risk-menedzhment = Strategic Decisions and Risk Management*. 2018;(1):58–63. (In Russ.).
2. 2. Tsvetkov V.A., Dudin M.N., Ermilina D.A. Managing of the Arctic development: Financial support of the region and the criteria choice for evaluating the effectiveness of investment projects. *Upravlencheskie nauki = Management Sciences in Russia*. 2019;9(2):62–77. (In Russ.). DOI: 10.26794/2304–022X-2019–9–2–62–77
3. Chaplina A.N., Maksimenko I.A. New managerial paradigm to attain balance between research and operation for the purpose of gaining competitive advantages. *Problemy sovremennoi ekonomiki = Problems of Modern Economics*. 2021;(2):64–68. URL: http://www.m-economy.ru/art.php?nArtId=7093 (accessed on 03.11.2021). (In Russ.).
4. Agile practical guide. Newtown Square, PA: Project Management Institute; 2017. 210 p. (Russ. ed.: Agile: prakticheskoe rukovodstvo. Moscow: Olymp-Business; 2019. 182 p.).
5. Pavlov A. Encyclopedia of hybrid project management methods. PRO Kachestvo. 2019. URL: https://kachestvo.pro/kachestvo-upravleniya/proektnoe-upravlenie/entsiklopediya-gibridnykh-metodov-upravleniya/ (accessed on 03.11.2021). (In Russ.).
6. Bushuyev S.D., Bushuyev D.A., Neizvestny S.I. Convergence and hybridization of project management methodologies. *Scientific Journal of Astana IT University*. 2020;2(2):86–101. (In Russ.). DOI: 10.37943/AITU.2020.22.12.008
7. Bushuyeva N., Kozyr B., Zaprivoda A. Multilevel hybrid infrastructure program management. *Scientific Journal of Astana IT University*. 2020;2(2):71–85. (In Russ.). DOI: 10.37943/AITU.2020.20.47.007
8. Burenina V.I., Mitrofanova Ja.S. Application of a hybrid approach in project management for the creation and development of a smart university. In: Technologies for the development and checkout of complex technical systems. Proc. 7th All-Russ. sci.-pract. conf. (Moscow, April 01–02, 2020). Moscow: Bauman University; 2020:50–55. (In Russ.).
9. Azgal'dov P.Y., Krechetov S.D., Malozemov S.N. Project tracking in industry: Development and application of a hybrid project management method. *Upravlenie proektami i programmami = The Project Management Journal*. 2021;(2):90–98. (In Russ.). DOI: 10.36627/2075–1214–2021–2–2–90–98
10. Pervoukhin D.V., Isaev E.A., Rytikov G.O., Filyugina E.K., Hayrapetyan D.A. Theoretical comparative analysis of cascading, iterative, and hybrid approaches to IT project life cycle management. *Business Informatics*. 2020;14(1):32–40. DOI: 10.17323/2587–814X.2020.1.32.40 (In Russ.: *Biznes-informatika*. 2020;14(1):32–40).
11. Mitrofanova Ya.S. A hybrid approach to project management of business digital transformation. *Vektor nauki Tol'yattinskogo gosudarstvennogo universiteta. Seriya: Ekonomika i upravlenie = Science*

Vector of Togliatti State University. Series: Economics and Management. 2020;(3):42–48. (In Russ.). DOI: 10.18323/2221–5689–2020–3–42–48

12. Kadyrov N. T., Filippov V. V. The influence of the transactive memory system on innovativeness and knowledge management in teams and organizations. *Kreativnaya ekonomika = Journal of Creative Economy*. 2016;10(12):1417–1434. (In Russ.). DOI: 10.18334/ce.10.12.37175
13. Guseinova T. N. Innovation production models. *Vestnik MGIMO-universiteta = MGIMO Review of International Relations*. 2016;(3):54–65. (In Russ.). DOI: 10.24833/2071–8160–2016–3–48–54–65
14. Chursin A. A., Yudin A. V., Grosheva P. Yu., Myslyakova Yu.G., Neklyudova N. P. Territories' predisposition assessment to "smart" companies's location. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz = Economic and Social Changes: Facts, Trends, Forecast*. 2021;14(3):99–117. (In Russ.). DOI: 10.15838/esc.2021.3.75.6
15. Karlik A. E., Platonov V. V., Krechko S. A. Organizational and managerial innovations in providing information and network economy. St. Petersburg: St. Petersburg State University of Economics; 2020. 171 p. (In Russ.).
16. Shirokova G. V., Skaleckii E. V. The main directions of firm growth research: Findings from literature review. *Sovremennaya konkurentsiya* = Journal of Modern Competition. 2016;10(2):77–106. (In Russ.).
17. Sharkova A. A. Contemporary research on organizational leadership: Methodology and sociological tools. *Izvestiya vysshikh uchebnykh zavedenii. Povolzhskii region. Obshchestvennye nauki = University Proceedings. Volga Region. Social Sciences*. 2010;(1):92–98. (In Russ.).
18. Plotnikov A. V. Organizational agility conceptual model. *Kreativnaya ekonomika = Journal of Creative Economy*. 2021;15(12):4851–4862. (In Russ.). DOI: 10.18334/ce.15.12.113931
19. Popov E. V., Aksenova T. V. The main trends of the knowledge management theory. *Universitetskoe upravlenie: praktika i analiz = University Management: Practice and Analysis*. 2019;23(3):14–29. (In Russ.). DOI: 10.15826/umpa.2019.03.016
20. Shirokova G., Ivvonen L., Gafforova E. Strategic entrepreneurship in Russia during economic crisis. *Foresight and STI Governance*. 2019;13(3):62–76. DOI: 10.17323/2500–2597.2019.3.62.76 (In Russ.: *Forsait*. 2019;13(3):62–76).
21. Gotz M. The Industry 4.0 induced agility and new skills in clusters. Foresight and STI Governance. 2019;13(2):72–83. DOI: 10.17323/2500–2597.2019.2.72.83. (In Russ.: *Forsait*. 2019;13(2):72–83).
22. Stepanenko D. A., Ermolina A. A. Comparative characteristics and features of organization structures for innovations implementation. *Vestnik obrazovaniya i razvitiya nauki Rossiiskoi akademii estestvennykh nauk = Herald of Education and Science Development of Russian Academy of Natural Sciences*. 2020;24(1):72–77. (In Russ.). DOI: 10.26163/RAEN.2020.24.31.011
23. Kadirov N. T., Merkushova N. I. How does transactive memory system affect a process of collaborative working and its results? *Organizatsionnaya psikhologiya = Organizational Psychology*. 2017;7(1):51–82. (In Russ.).
24. Sukhonenko S. A. Hybrid IT-project management technique. *Postulat*. 2021;(6):50. (In Russ.).
25. Malakhov A. Case of implementing hybrid project management using an IT platform. Portal for professionals in project management "Project Management Journal. URL: https://pmjournal.ru/articles/keysy/keys-vnedreniya-gibridnogo-upravleniya-proektami-s-primeneniem-it-platformy/ (accessed on 03.11.2021). (In Russ.).

ABOUT THE AUTHORS

Sergey A. Titov — Cand. Sci. (Econ), Associate Professor of the Department of Management and Innovation of the Financial University, Moscow, Russia
https://orcid.org/0000-0001-6857-579X
satitov@fa.ru

Natalya V. Titova — Cand. Sci. (Econ), Senior Lecturer, Department of Project Management, State University of Management, Moscow, Russia
https://orcid.org/0000-0001-9676-7203
titova5nv@mail.ru

Conflicts of Interest Statement: The authors have no conflicts of interest to declare.

The article was submitted on 31.01.2022; revised on 10.03.2022 and accepted for publication on 15.04.2022
The authors read and approved the final version of the manuscript.