# Agile Management (Management 3.0) as the Basis of the Management System in the Conditions of Globalization

Marta Kopytko <sup>†</sup>, Olha Chyrva <sup>††</sup>, Yuliia Stavska <sup>†††</sup>, Nataliia Karvatska <sup>††††</sup>, Hanna Chyrva <sup>†††††</sup>

pnult12@ukr.net Fuchyla.olena@outlook.com ssfaculty77@yahoo.com knapdr@outlook.com babkina.maiya@outlook.com

<sup>†</sup> Lviv State University of Internal Affairs, Lviv, Ukraine

<sup>††</sup> The Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine
<sup>†††</sup> Vinnytsia National Agrarian University, Vinnytsia, Ukraine
<sup>††††</sup> Khmelnitskyi National University, Khmelnitskyi, Ukraine
<sup>†††††</sup> The Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine

#### Abstract

The main purpose of the study is to determine the key aspects of Agile management as the basis of a management system in the context of globalization. The research methodology includes several scientific and theoretical methods that have achieved this goal. Adaptation of enterprises engaged in the development, production, and sale of innovative products to constant and rapid changes in the external environment requires managers to apply appropriate management methods. The use of Agile management in the management of innovation processes can speed up their implementation, minimize and optimize the use of resources, time, and effort of staff, can increase customer and customer satisfaction with the end result and, consequently, improve the company's competitive position in the market. The results of the study identified key aspects of the application of Agile management in the management system in the context of globalization.

#### Keywords:

Management, Agile management, management 3.0, globalization.

## 1. Introduction

Management 3.0 brings together the latest ideas in complex adaptive systems, flexible management, and lean learning to offer a healthy, smart, and practical mechanism for effective management in the 21st century. Management 3.0 provides a roadmap for leading teams in case of major uncertainty because it is a broad view of the world of modern administration, Agile management, and leadership, which is just beginning to appear on the horizon. Agile management (Management 3.0) as the basis of management and administration includes new ideas for promoting flexible approaches in the context of adaptive, creative, flexible management, which should be implemented in all management and administration structures.

Agile management is a paradigm of new flexible management - healthy, smart, and practical, which is the main trend in the management practice of the

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digital society. Management 3.0 helps to overcome chaos, entropy, uncertainty, various bifurcation points, and the search for that attractor (point of attraction) in this complex digital world, which can be fixed by the formation of a new management elite that forms positive, creative, creative, adaptive thinking. concepts such as "state in a smartphone" and new digital software that acts as complex adaptive systems.

Organizations as complex adaptive systems must adapt to changes in the environment, systemic changes, stochasticity, and emergence. The new digital age is about thinking in terms of complex systems. Therefore, it is necessary: 1) to form a new digital culture and new digital thinking capable of working in the system dynamics mode; 2) develop thinking in terms of complex systems that can adapt to changes in the environment. Such organizations are called complex adaptive systems, which must use Agile management (management 3.0) because management 2.0 and management 1.0 have long ceased to correspond to digital modernity.

the modern communication world, most In enterprises have begun to apply the project approach to their activities more often. Businesses have wide access to information, but the excess of this information leads to the fact that every day we are surrounded by all kinds of gadgets, and communication is increasingly done through communication devices. And yet we move around in this communication space and are in contact with a large number of people, and at the same time, we feel that we are not effective enough in managing our organizational processes. Management in Agile management is a new stage in which there will be no opacity of processes, ineffective management, and an

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emotional outburst of poor-quality communication indicators.

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## 2. Methodology

The theoretical and methodological basis of the study is fundamental scientific concepts, applied developments of domestic and foreign scientists and practitioners on the problems of management development. In the work, to solve problems and achieve the goals set, the following research methods were used: abstract-logical analysis, methods of analysis, and synthesis to form the results of the study. The graphical method was used to demonstrate the main results of the study.

#### 3. Research Results

The global development of the most developed countries of the world is based on the introduction of modern innovative information and communication technologies, which are dynamically changing based on the accelerated development of new products. This requires the compression of innovation lifecycles on the principle of "faster – more powerful – cheaper". In such conditions, there is a need for continuous improvement of approaches to managing innovative projects.

Agile focuses ensuring effective on collaboration between cross-functional teams capable of self-organization. The project is not divided into successive phases, but into small subprojects, which are then combined into a finished product. Planning is carried out for the entire project, and such actions as development, testing, etc., are determined for each mini-project separately. This allows you to quickly complete and transfer the results of mini-projects to senior management, and make changes in new subprojects without high costs and impact on other parts of the overall project. Its feature is a value-oriented approach to managing people.

Researchers evaluate the features of Agile management in different ways. In particular, the disadvantages of the methodology include the unpredictability of decision-making, but the advantages are maximum adaptability and focus on employees. It involves the performance of tasks by small (up to nine people), but close-knit teams in which participants closely cooperate and interact. However, the size of the team depends on the human factor. Many managerial problems make it necessary to establish interaction between team members. In an Agile team, the project manager defines the relationships between roles to ensure effective coordination and control of the project.

The human factor in such teams is decisive. The psychology of collective interaction is important, linking, for example, the complexity of decisionmaking and the effectiveness of information exchange with the number of employees in the team. Therefore, it is important that every team member understands what the team is doing. Employees must be highly motivated and guided by moral values. "Personnel feel belonging to a company or team if there is a group project, social activities, and wellbeing. Recognition and evaluation of work, promotion, and assignment to work is the achievement of respect. Knowing that people achieve the best results with the right level of respect and self-actualization, Agile management focuses on achieving and ensuring a high level of satisfaction for the needs of each team member [1-3].

The introduction of an Agile methodology entails a dramatic change for leaders. After the introduction of Agile, functional managers actually have only the tasks of monitoring and control, since a team working on an Agile methodology is inherently self-regulating [4-5]. Thus, managers are relieved of an unnecessary managerial burden, but they may wonder whether project teams can work productively without the constant supervision of superiors. Practical examples show that efficiency is only growing, which is one of the main benefits of implementing an Agile methodology for managers. The main elements of the essence of Agile management are presented in Table 1. Table 1: The main elements of the essence of Agile management

Elements	
Terms of Use	The market situation is constantly changing
Activity planning	Complicated by a high degree of uncertainty in the formulation of the main problems, ways to solve them, many technical characteristics of an innovative product.
Organization of work	The work can be divided into separate parts and performed in rapid repeating cycles. Inter-functional cooperation is desirable
Ability to make changes	Changes can be made at any stage of the process, even at the final

The success of Agile management has its own mechanisms, which include: leadership development; culture of learning; self-organization of small teams; control over the results by the employees themselves; diversification of teams (presence of different people according to individual characteristics); accessibility of managers to business information; unity of principles, goals, and values [6-9].

The main methods of Agile management are presented in Table 2.

Table 2: The main methods of Agile management	
Methods	
Scrum	Defined as the process of collaborative teamwork that transcends functional barriers, working in cooperation with each other and clients to carry out the iterative and incremental development of a new product as one team
Kanban	It provides for the control of the supply chain in terms of production through the use of cards that signal the need to move materials within the enterprise or move materials from an external supplier to production
Lean production	It characterizes the management of a manufacturing enterprise, based on the constant desire to eliminate all types of losses. Lean production involves the involvement of each employee in the process of optimizing the business and the maximum focus on the consumer

In the context of the global economic crisis, the task of maintaining competitiveness and development is especially relevant for domestic organizations due to the fact that negative geopolitical and economic influences have significantly weakened their positions in the domestic and foreign markets. Solving the actual problems that an organization faces on a daily basis in an environment of uncertainty depends on the ability to apply strategic management methods and the ability to find a balance between strategy and flexibility to respond to change, that is, to find a balance between strategic management and Agile management.

Strategically oriented behavior allows an organization to survive in the long term. All organizations in a competitive environment should

not only focus on the internal state of affairs but also develop a long-term strategy that would allow them to follow the chosen development vector and achieve their long-term goals. Therefore, there is a need to distinguish and determine the role of the strategic approach and strategic planning in the activities of the organization, that is, Agile management, which allows you to quickly adapt to market trends. In the current conditions, the lack of a developed development strategy and experience in the application of Agile management by domestic companies slows down the development of the organization or leads to a crisis and its disappearance from the market.

The core values of Agile management can be adapted as the principles of Agile organization planning management: Agile and customer engagement. The Agile project manager is responsible for the overall strategy and coordination of projects. The Agile manager complements his unified skills with traditional unique decision-making and action skills in the context of fast-paced, changing projects for effective communication in an Agile development environment [10-13].

As noted by The Annual State of Agile survey data (Respondents were able to select multiple responses), almost the majority of companies using the Agile methodology are software development and IT companies [14] (Fig. 1).

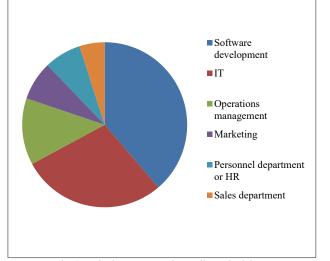


Fig. 1. Main departments using Agile methodology in 2021, % (Annual State Of Agile Report) [14]

It must be remembered that Agile is now a necessary approach that redefines the values and principles by which successful creative teams in the world operate. Agile methodology provides an answer to many questions related to enterprise management, namely: how to make creative innovation teams well managed how to speed up the work of these teams several times over, and how to objectively assess the growth rate of teams and predict project completion dates.

To effectively carry out the strategic management of an organization, it is necessary to identify and study the strategic context in which this organization exists. To achieve the desired results, teams must understand the market and the strategies of competing companies. If the organization's team jointly determines the competitive leverage that can be a guarantee in the struggle for market share, all risks and opportunities can be unified, combined, with a developed plan of action and counteracting risks. Having a single "map" of risks and opportunities, teams will not only make better decisions but also do it faster. Philips tells its managers, "If one of your people does something stupid, don't blame anyone - ask yourself what you're missing out on by defining strategic context and building knowledge about it with your teams".

traditional red command-and-control In organizations, strategies are developed at the highest levels and at the managerial level and then moved down to the lower levels in the form of detailed annual plans. This approach is completely incompatible with the philosophy of an Agile organization, where everyone is expected to make judgments and propose ideas, and jointly define and form goals. Therefore, leaders must capture the essence of strategic goals and give teams the freedom to determine how to achieve them without limiting them. Personnel must know a clear answer to the question of where and how the company is trying to win. Traditionally, companies have separated the process of formulating a strategy and implementing it. However, in Agile organizations, the strategic process is a continuous cycle (changes are made constantly, when appropriate, in the process of achieving them, when the initial data and market conditions change). То ensure two-way communication (instead of the traditional top-down approach), forums can be held where teams present their understanding of certain goals and share plans for their implementation, create a system of meetings and reporting, but care must be taken not to overload the system with excessive bureaucracy.

#### 4. Discussions

Discussing the results of the study, it should be noted that the main goal of Agile management in information exchange is to establish common sense in a team of professionals and a communication process with feedback takes place. It is important to understand that communication in Agile management does not come up with an ideal process, but rather simplifies the existing one. The process can be simplified and streamlined only by reorganizing the departments of the enterprise. How to make a team self-organized, and the cost of them is cheaper? There is an answer to this, and this is effective management through the new Agile methodology. In Agile, you must first of all pay attention to the interaction between teams [15]. Optimizing processes and setting up interaction within the team and the enterprise as a whole does not at all mean improving the performance of the enterprise. Communication between different structural divisions is the key moment in the work of the enterprise. Information is inseparable and purposeful because it is thanks to this that the output is an intellectual product ready for development in enterprise management. Key Agile development practices are: Agile planning, client acquisition, refactoring, unit testing, and pair programming. These practices are modulated across four sectors: customer acquisition, change management, Agile planning and control, refactoring, and design quality.

Planning, process, and project management in Agile allow professional specialists with a large set of specific skills to have part of the communication responsibilities of two or more roles at the same time. The Agile project manager is responsible for the overall strategy and coordination of projects. Agile complements its unified skills with the traditional unique ability to make decisions and act in the context of fast-paced, changing projects while communicating effectively in an Agile development environment.

Software development is dynamic in nature and Agile encourages quick and flexible responses to change. Because adaptability is key to the conceptual framework, teams using this approach are wellequipped to respond to change throughout the development cycle.

## 5. Conclusions

Summing up the results of the study, it should be noted that today's technology markets are changing faster than ever before. Agile development helps product groups create software that meets growing customer needs. And that positions them to win. Team spirit is one of the important directions in which communications in Agile management are developed and promoted. It is achieved thanks to the patriotism and perseverance of the head of the communication process. The best results are achieved by a team of motivated professionals. In such an organizing process, the Agile project leader must create conditions for his team and secondly provide broad support through various training and thirdly monitor the atmosphere in the team. In serviceoriented projects, when you have a task and a goal, you can afford some more leeway. If the whole process is strictly regulated and clear goals are indicated, then Agile management is most likely not suitable. Once again, I would like to emphasize that this is rather an ideology based on which all the principles of work are built. If employees or the future team are not capable of self-organization, then flexible working principles will not be able to work. It all starts with the consciousness of people.

Managing capable teams that create complex products of the communication-innovation environment is not an easy task. As the projects themselves become more complex, client proposals are constantly changing at an increasing rate, and responding to such changes becomes more important than sticking to the set plan.

Under these conditions, the principles of project management do not justify themselves. A more flexible approach is needed to improve the product and increase its competitiveness. And this approach turned out to be Agile management, which is used today in various industries. He redefines the values and principles by which successful businesses operate today. The main advantage of Agile management is flexibility and flexibility again. Small steps and willingness to change allow you to quickly adapt to dynamic conditions. Risks and costs are reduced to a minimum because it is no longer necessary to change the company's strategy. As you can see, it is not surprising that this approach is now gaining momentum and is mainly popular in IT enterprises.

The modern market of the telecommunications service sector and the unstable geopolitical situation force enterprises to constantly adapt to changes in society. The thing to remember is that Agile is a necessary approach today that redefines the values and principles by which the world's most successful creative teams now operate. Agile methodology answers many questions related to enterprise management, namely: how to make creative innovation teams well managed, how to speed up the work of these teams several times over, and how to objectively assess the growth rate of teams and predict project completion dates.

#### References

- Tizroo, A., Esmaeili, A., Khaksar, E., Šaparauskas, J., & Mozaffari, M. M. 2017. Proposing an Agile strategy for a steel industry supply chain through the integration of balance scorecard and Interpretive Structural Modeling. Journal of Business Economics and Management, 18(2), 288-308. <u>https://doi.org/10.3846/16111699.2017.1279683</u>
- [2] Szostak, M., & Sułkowski, Łukasz. 2020. Manager as an artist: creative endeavour in crossing the borders of art and organizational discourse. Creativity Studies, 13(2), 351-368. <u>https://doi.org/10.3846/cs.2020.11373</u>
- [3] Melnikas, B. 2005. Management specialists in the knowledge based society: Life-long learning oriented human resourse development. Journal of Business Economics and Management, 6(3), 155-170. <u>https://doi.org/10.3846/16111699.2005.9636104</u>
- [4] Abdi, K., Mardani, A., Senin, A. A., Tupenaite, L., Naimaviciene, J., Kanapeckiene, L., & Kutut, V. 2018. The effect of knowledge management, organizational culture and organizational learning on innovation in automotive industry. Journal of Business Economics and Management, 19(1), 1-19. <u>https://doi.org/10.3846/jbem.2018.1477</u>
- [5] Al-Hakim, L. A. Y.; Hassan, S. 2013. Knowledge management strategies, innovation, and organisational performance: An empirical study of the Iraqi MTS, Journal of Advances in Management Research 10(1): 58–71. https://doi.org/10.1108/09727981311327767
- [6] Okoń-Horodyńska, E., Zachorowska-Mazurkiewicz, A., Wisła, R., & Sierotowicz, T. 2020. New approach to create more effective teams in the innovation process in enterprises. Journal of Business Economics and Management, 21(3), 805-825. <u>https://doi.org/10.3846/jbem.2020.12221</u>
- [7] Rad, D., & Rad, G. 2021. Going Agile, a Post-Pandemic Universal Work Paradigm - A Theoretical Narrative Review. Postmodern Openings, 12(4), 337-388. <u>https://doi.org/10.18662/po/12.4/380</u>
- [8] Roy, S., Raju, A., & Mandal, S. 2017. An empirical investigation on e-retailer agility, customer satisfaction, commitment and loyalty. Business: Theory and Practice, 18, 97-108. <u>https://doi.org/10.3846/btp.2017.011</u>
- [9] Savanevičienė, A., & Vilčiauskaitė, B. 2017. Practical application of exclusive and inclusive talent management strategy in companies. Business, Management and

Economics Engineering, 15(2), 242-260. https://doi.org/10.3846/bme.2017.366

- [10] Chlivickas, E., Papšienė, P., & Papšys, A. 2010. Human resources: strategic management aspects. Business, Management and Economics Engineering, 8(1), 51-65. <u>https://doi.org/10.3846/bme.2010.04</u>
- [11] Arrova, D. D., & Mohana, M. 2014. The Agility of Agile Methodology for Teaching and Learning Activities. In IEEE (Ed.), 2014 8th. Malaysian Software Engineering Conference (MySEC) (pp. 255-259). IEEE. https://doi.org/10.1109/MYSEC.2014.6986024
- [12] Paliulis, N. K., & Labanauskis, R. 2015. Benchmarking as an instrument for improvement of quality management in higher education. Business, Management and Economics Engineering, 13(1), 140-157. https://doi.org/10.3846/bme.2015.220
- [13] Rutkauskas, A. V. 2013. Integrated management of migration, employment, fiscal policy and public debt. Business, Management and Economics Engineering, 11(2), 376-390. <u>https://doi.org/10.3846/bme.2013.21</u>.
- [14] Annual State Of Agile Report. 2021. Agile adoption accelerates across the enterprise <u>https://digital.ai/resourcecenter/analyst-reports/state-of-agile-report</u>
- [15] Rahimiatani, A., Zare, H., & Yazdani, H. 2018. Increasing Organizational Agility based on Effective Meta-Organizational Parameters. Postmodern Openings, 9(4), 140-156. <u>https://doi.org/10.18662/po/49</u>