RISK MANAGEMENT IN AGILE ORGANIZATION IN THE CONDITIONS OF MARKET GLOBALIZATION

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Abstract: The aim of the article is to analyze risk management in agile organizations operating in the conditions of market globalization. The hypothesis assumes that agile management methods enable more effective identification and minimization of risks resulting from dynamic global changes. The article presents key aspects of risk management, such as the identification of risks specific to different markets, currency fluctuations, cultural differences and climate change. A case study from Mercedes-Benz Mobility AG illustrates the practical application of agile risk management methods. The findings show that agile allows for rapid adaptation to changing market conditions, which increases the competitiveness and sustainability of the organization. The added value of the article is to provide practical tips for managers on the implementation of agile risk management strategies in a global context.

Keywords: risk, agile organization, management, globalization, market

1. Introduction

In the age of globalization, the market is changing dynamically, and organizations must constantly adapt their management strategies to meet new challenges. In this context, risk management is of particular importance, especially in agile organisations that rely on flexibility and rapid response to changing market conditions (Boudreau & Ramstad, 2005). Agile management methods, initially used in software engineering, have successfully penetrated other business areas, promoting a culture of continuous improvement and innovation. However, market globalization introduces additional layers of risk that must be effectively managed for organizations to remain competitive (Prieto & Talukder, 2023).

The article provides a comprehensive understanding of how agile organizations can identify, analyze, and manage risks that arise as a result of global economic interactions. Today's businesses face not only traditional challenges such as political instability and currency fluctuations, but also new threats related to digitalization and climate change. Understanding these risks and developing effective risk management strategies is critical to maintaining the stability and sustainability of your organization.

The purpose of this article is to show how an agile approach to risk management can support organizations to respond effectively to global challenges, minimizing potential losses and maximizing the benefits of globalization. Through an analysis of various risk management methods and case studies, the article provides practical tips for managers on how to implement agile strategies in their own organizations. In doing so, it contributes to a better understanding of the role of risk management in agile organizations operating in the global marketplace.

2. Agile organization in terms of definition

An agile organization, also known as an agile organization, is an approach to management and business that emphasizes flexibility (Porter & Kramer, 2006), responding quickly to changing market conditions, and continually improving processes. It is a concept that originates from the agile methodology initially used in the field of software engineering, but its principles are also successfully adapted to other business areas (Bhati, Hansen, & Chan, 2017).

A key aspect of an agile organization is its ability to adapt quickly to change. Traditional management models are often based on rigid structures and long-term plans, which can lead to stagnation and inability to respond to dynamic changes in the environment (Nath & Agrawal, 2020). An agile organization, in contrast, is characterized by a flat organizational structure that allows for rapid communication and decision-making (Skyrius & Valentukevič, 2020). Hierarchical barriers are minimized, fostering collaboration between different teams and departments (Chen & Li, 2021).

In an agile organization, autonomous teams play a key role, which are responsible for the implementation of specific projects or tasks. These teams often work in short cycles, known as iterations or sprints, allowing for regular reviews of progress and making necessary adjustments. This makes it possible to quickly adapt to feedback from customers and other stakeholders, which significantly increases the quality of products and services provided (Joiner, 2019).

An organizational culture in an agile organization promotes openness, transparency, and trust. Employees are encouraged to share ideas, experiment and learn from their mistakes. Errors are seen as a natural part of the learning and innovation process, which contributes to creating an environment where employees are not afraid to take risks (Chen & Siau, 2020).

An agile organization also places a strong emphasis on customer satisfaction. Regular communication with customers and taking their feedback into account in the process of creating products and services is crucial. This allows the organization to respond quickly to changing market needs and expectations, providing solutions that are more tailored to current customer requirements (He & Harris, 2021).

An agile organization uses a variety of tools and techniques that support its flexibility and ability to respond quickly (Rahimi & Mansouri, 2019). Methodologies such as Scrum, Kanban, or Lean are often used to optimize processes and eliminate waste. Regular retrospectives, stand-up come-ups, and visual whiteboards are just a few of the practices that help teams stay effective and continually improve the way they work (He & Harris, 2021).

Leadership is also of great importance in an agile organization. Leaders in such an organization act as mentors and coaches, supporting teams in achieving their goals. Instead of imposing decisions from the top down, leaders focus on delegating authority and building competence among employees, which leads to greater commitment and accountability for work performance (Borowski & Karlikowska, 2023).

In summary, an agile organization is a management model that promotes flexibility, rapid adaptation to change, continuous improvement, and strong employee and customer engagement. As a result, it is able to effectively compete in a dynamically changing business environment, providing products and services that better meet market needs.

3. Risk management and market globalization

Risk management in the context of market globalization is a complex issue that is gaining in importance with the ongoing process of integration of global economies. Globalization, characterized by an increase in the international exchange of goods, services, capital, and technology, presents both numerous opportunities and challenges for businesses. Effective risk management in such an environment requires taking into account specific risks that can arise from a variety of sources, such as political instability, currency fluctuations, regulatory changes, cultural differences, and climate change (Attar, Almusharraf, Alfawaz, & Hajli, 2022).

One of the key aspects of risk management in a global context is the identification and assessment of market-specific risks (Sedej & Justinek, 2021). Companies must conduct a meticulous analysis of the external environment to identify potential risks associated with operating in different countries (Sajdak, 2021). For example, political instability in one key region can lead to supply chain interruptions, which in turn can affect a company's ability to fulfill orders. Changes in regulation, such as new tariffs or trade restrictions, can also pose a significant risk, requiring a quick adjustment of the business strategy (Kt & Sivasubramanian, 2023).

Exchange rate fluctuations are another challenge in managing risk in a globalizing market (Ramadhana, 2021). Fluctuations in the value of currencies can significantly affect the profitability of international transactions (Joiner, 2019). Companies must therefore use a variety of hedging strategies, such as hedging, to minimise the impact of adverse currency movements on their operations. In practice, this means using financial instruments that lock the exchange rate at a certain level, thereby protecting the company against unpredictable movements in the foreign exchange market (Luo, Ren, Cao, & Hong, 2020).

Cultural and legal differences pose another challenge to risk management in a global context (Borowski, 2021). Operating in different countries often involves adapting to local norms and customs, which can affect the way you negotiate, manage your workforce and communicate with your customers. Ignorance of local conditions can lead to misunderstandings and mistakes that can have serious consequences for the company (Chen & Siau, 2020). Therefore, companies need to invest in understanding the cultural and legal aspects of the markets in which they operate and develop intercultural competence among their employees (Mrugalska & Ahmed, 2021).

Climate change and related environmental risks are an increasingly important element of risk management in the context of globalisation (Routledge, 2020). Extreme weather events such as hurricanes, floods and droughts can disrupt operations, leading to production interruptions, increased costs and loss of resources. Companies therefore need to develop sustainability strategies and contingency plans that allow them to effectively manage environmental risks and minimize their impact on their operations (Munodawafa & Johl, 2019).

Another important aspect of risk management in a global context is cybersecurity. With increasing digitalization and the growing importance of information technology, businesses are increasingly vulnerable to cyberattacks that can lead to data loss, business interruption, and reputational damage. Effective cyber risk management requires the implementation of advanced security systems, regular threat monitoring, and training employees in data protection (Jones & Adam, 2023).

Risk management in the context of market globalisation also requires close cooperation with external partners, such as suppliers, customers, financial institutions and regulators. Companies need to develop relationships based on trust and transparency to effectively identify and minimize risks associated with international operations. In practice, this means conducting regular audits, risk assessments, and cooperation in the exchange of information and best practices (Borowski & Karlikowska, 2023).

To sum up, risk management in the context of market globalization is a multifaceted process that requires taking into account the various risks arising from international operations. Effective management of these risks requires advanced analytical tools, flexible strategies and the ability to quickly adapt to changing conditions. Companies that can effectively manage risk in a global context are more likely to succeed and remain competitive in a rapidly changing global market.

4. Methods of risk management in an agile organization

Risk management in an agile organization requires a specific approach that integrates flexibility, adaptability, and continuous improvement. In agile organizations that operate in a dynamically changing environment, risk identification and management becomes a process constantly built into daily operations. Rather than treating risk management as a separate function, in agile organizations, risk management is an integral part of every stage of a project, from planning to execution and retrospective (Bhati, Hansen, & Chan, 2017).

One of the foundations of an agile approach to risk management is regular and open communication within the team. Daily stand-ups, retrospectives, and sprint reviews are key moments for team members to identify and discuss potential risks. During these meetings, the team analyzes progress towards the goals, identifies obstacles and develops strategies to eliminate them. This ensures that risks are detected and addressed on an ongoing basis, allowing adjustments to be made quickly (Awasthi & Awasthi, 2023).

The iterative nature of work in agile organizations allows for frequent testing and verification of design assumptions (Brown, 2009). In short work cycles, such as scrum sprints, the team can quickly identify which elements of the project are most at risk and adjust their efforts to respond to emerging challenges. Regularly delivering product increments enables early detection of problems and reduces the risk of large errors that could only be noticed later in the project (He & Harris, 2021).

A variety of risk analysis techniques are also used in agile organizations. One of them is the brainstorming method, which allows teams to collectively identify potential risks and assess their impact on the project. Another technique, known as SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, allows for a systematic assessment of the project's strengths, weaknesses, opportunities and threats, which is crucial for understanding the context in which they operate (Kurnia & Chien, 2020).

Often used in agile organizations, the practice of a risk backlog involves creating and maintaining a list of potential risks that could affect a project. This backlog is regularly reviewed and updated during sprint planning and other team meetings. This allows for continuous monitoring of risks and taking appropriate preventive actions before they become critical to the project (Johnson, 2019).

An important element of risk management in an agile organization is also the use of tools to visualize the work and progress of the project. Kanban boards, Gantt charts, and other visual tools enable teams to track the status of tasks, identify bottlenecks, and respond quickly to changing conditions. Visualization allows for a clear presentation of risks and facilitates communication within the team and with project stakeholders (Kocot & Kwasek, 2022).

Leadership in an agile organization plays a key role in risk management. Agile team leaders, such as Scrum Masters, act as facilitators, supporting teams in identifying and managing risks.

They also support the development of a culture of openness and trust, which is essential for effective risk management. These leaders ensure that teams have access to the necessary resources and tools to effectively manage risk (Li & Karahanna, 2015).

Risk management in an agile organization also includes close cooperation with project stakeholders. Regular meetings and progress reviews allow teams to understand customer expectations and adapt to changing needs. Transparency in communication with stakeholders allows for early detection of potential threats and joint development of strategies to mitigate them (Rosário & Raimundo, 2021).

Technologies that support agile project management also play a vital role in risk management (Chen & Li, 2021). Project management tools like JIRA, Trello, and Asana allow teams to monitor risks, track progress, and report issues in real time. Process automation and integration with other systems allow for more effective risk management and faster response to changing conditions (Raschke, 2010).

In conclusion, risk management in an agile organization requires a flexible, iterative, and integrated approach that allows for continuous monitoring and adaptation to emerging threats. Regular communication in the team, the use of appropriate risk analysis techniques and the use of visualization and technological tools are key here. Leadership and close collaboration with stakeholders are also of paramount importance to enable effective risk management in the rapidly changing environment of an agile organization.

5. Risk Management Methods in an Agile Organization in a Global Market – A Case Study

Risk management methods for an agile organization in the global market can be illustrated using the example of Mercedes-Benz Mobility AG. In the face of a rapidly changing technological environment and increasing demands for sustainability, Mercedes-Benz has abandoned traditional methods of managing waterfall projects in favor of an agile approach based on the Scaled Agile Framework (SAFe) (United Nations Global Compact, 2021).

One of the main challenges faced by Mercedes-Benz was the need to quickly introduce new technologies such as operating systems, artificial intelligence and facial recognition, as well as the integration of various data sources and better risk models. In response to customer concerns about electric cars and their range, the company introduced rental and subscription models that allowed customers to get a better understanding of the charging ecosystem before buying. By adopting SAFe, the company was able to not only meet these challenges, but also significantly increase the level of digitalization and automation, which allowed it to better adapt to environmental, geopolitical, and consumer requirements (Scaled Agile) (Project Management Institute, 2018).

The transformation process began with a simplified management structure, reducing the number of management bodies from more than 50 to 10 lean portfolios, allowing for more efficient management of initiatives. The introduction of SAFe has allowed for collaborative cultures where diversity of skills and the integration of different roles such as Release Train Engineer, Scrum Master, and Product Owner have become a priority. This approach fostered the creation of innovative solutions and increased employee engagement (Scaled Agile) (Zink, 2022).

One of the key aspects of risk management was also the development of new risk models that better responded to the needs of the global market. Mercedes-Benz used SAFe to integrate various data sources, which enabled more precise risk modeling and better risk management on a global scale. In addition, the company focused on increasing the efficiency of building and deploying solutions, which allowed for a significant reduction in the time to market for new products (Scaled Agile) (Deloitte Insights, 2020).

The implementation of SAFe has enabled Mercedes-Benz not only to better manage risk, but also to dynamically adapt to changing market conditions. Thanks to its agile methodology, the company was able to respond quickly to changing customer needs and adapt its products to new technological and environmental challenges. This approach has enabled the company to not only remain competitive, but also to meet its ambitious Scaled Agile goals (McKinsey & Company, 2021).

6. Conclusions

In summary, risk management in an agile organization in a global market, as the example of Mercedes-Benz Mobility AG shows, requires an adaptive and flexible approach that integrates modern project management methodologies. The transformation from traditional waterfall methods to an agile approach based on the Scaled Agile Framework (SAFe) has enabled the company not only to manage risk more effectively, but also to dynamically adapt to changing market and technological conditions.

With the adoption of SAFe, Mercedes-Benz has been able to simplify its management structure, which has allowed for more efficient management of initiatives and rapid innovation. The integration of different data sources and the development of new risk models have enabled more precise risk management on a global scale. The company also focused on increasing the efficiency of building and implementing solutions, which significantly reduced the time to market for new products.

Creating a collaborative culture where diversity of skills and the integration of different roles such as Release Train Engineer, Scrum Master, and Product Owner have also been a key element of success. Thanks to this approach, it was possible to increase employee engagement and foster the creation of innovative solutions.

The implementation of agile methodologies has enabled Mercedes-Benz not only to better manage risk, but also to respond quickly to changing customer needs and adapt its products to new technological and environmental challenges. As a result, the company was able to remain competitive and meet ambitious sustainability and innovation goals. The example of Mercedes-Benz Mobility AG shows that agile risk management is a key component of success in a dynamically changing global market.

Based on the analysis of risk management in an agile organization on the example of Mercedes-Benz Mobility AG, several key recommendations can be drawn for companies operating on the global market. First of all, it is important to adopt agile project management methods, such as the Scaled Agile Framework (SAFe), which enable you to quickly adapt to dynamically changing market and technological conditions. The adaptive approach allows for ongoing monitoring of risks and the introduction of necessary adjustments in real time, which minimizes potential losses and optimizes business processes.

Companies should focus on simplifying management structures and reducing the number of decision-making bodies, which allows for faster decision-making and more effective management of initiatives. Integrating different data sources and developing accurate risk models are crucial for effective risk management on a global scale. This makes it possible to better predict threats and react quickly to them.

Creating a culture of cooperation and diversity of skills in project teams fosters innovation and employee engagement. It is recommended that companies invest in the development of their employees' competences, especially in the field of project management, data analysis and information technology. Regular training and development of intercultural skills help to better understand the specifics of local markets and effectively manage cultural and legal differences.

References

- Attar, R. W., Almusharraf, A., Alfawaz, A., & Hajli, N. (2022). New Trends in E-Commerce Research: Linking Social Commerce and Sharing Commerce: A Systematic Literature Review. Sustainability, 14(23), 16024. https://doi.org/10.3390/su142316024
- Awasthi, K., & Awasthi, S. (2023). Green computing: A sustainable and eco-friendly approach for conservation of energy (A contribution to saving the environment). In S. Awasthi, G. Sanyal, C. M. Travieso-Gonzalez, P. Kumar Srivastava, D. K. Singh, R. Kant (Eds.), Sustainable Computing: Transforming Industry 4.0 to Society 5.0 (pp. 319–333). Springer International Publishing. https://doi.org/10.1007/978-3-031-13577-4_19
- Bhati, A., Hansen, M., & Chan, C. M. (2017). Energy conservation through smart homes in a smart city: A lesson for Singapore households. Energy Policy, 104, 230–239. https://doi.org/10.1016/j.enpol.2017.01.032

- Borowski, P. F. (2021). Digitization, digital twins, blockchain, and Industry 4.0 as elements of management process in enterprises in the energy sector. Energies, 14(7), 1885. https://doi.org/10.3390/en14071885
- Borowski, P. F., & Karlikowska, B. (2023). Clean hydrogen is a challenge for enterprises in the era of low-emission and zero-emission economy. Energies, 16(3), 1171. https://doi.org/10.3390/en16031171
- Boudreau, J. W., & Ramstad, P. M. (2005). Talentship and HR Measurement and Analysis: From ROI to Strategic Organizational Change. *Human Resource Planning, 28* (2), 25-33. Retrieved from https ://www . cupahr . org /knowledgecenter/files/StrategicHR. pdf
- Brown, T. (2009). Change by design: How design thinking transforms organizations and inspires innovation. HarperBusiness.
- Chen, X., & Siau, K. (2020). Business Analytics/Business Intelligence and IT Infrastructure: Impact on Organizational Agility. Journal of Organizational and End User Computing. DOI: 10.4018/joeuc.2020100107
- Chen, Y., & Li, X. (2021). The Role of Organizational Agility in Managing the COVID-19 Pandemic: A Case Study of Two Chinese Hospitals. International Journal of Environmental Research and Public Health, 18(1), 70. DOI: 10.3390/ijerph18010070
- He, H., & Harris, L. (2021). The impact of organizational agility on crisis management and firm performance: A moderation analysis. Journal of Business Research, 122, 698-708. DOI: 10.1016/ j .jbusres.2020.11.026.
- Johnson, M. (2019). How Spotify Markets Itself Across the Globe. *Marketing Week* . Retrieved from https://www.marketingweek.com/how-spotify-markets-itself-globally/
- Joiner, B. (2019). Leadership Agility for organizational agility. Journal of Creating Value, 5(2), 194-208. Available on: journals. sagepub . com
- Jones, E., & Adam, C. (2023). New frontiers of trade and trade policy: digitalization and climate change. Oxford Review of Economic Policy, 39(1), 1–11. https ://doi. org /10.1093/oxrep/grac048
- Kocot M., & Kwasek A. (2022). Organizational agility as a determinant of the effective use of ICT, Scientific Journals of the Humanitas University of Management, No. 23(4).
- Kt, M.A., & Sivasubramanian, C. (2023). Workforce Agility: A Review on Agility Drivers and Organizational Practices. Researchers' Forum, Department of Commerce. University of Kerala, Karyavattom. DOI: 10.59640/cbr.v14i2.1-8.
- Kurnia, S., & Chien, S. W. (2020). Building organizational agility through strategic management accounting: A case study of an Indonesian manufacturing company. Journal of Asia Business Studies, 14(4), 591-612. https://doi.org/10.1108/JABS-09-2019-0253
- Li, J., & Karahanna, E. (2015). Online Recommendation Systems in a B2C E-Commerce Context: A Review and Future Directions. *Journal of the Association for Information Systems, 16* (2), 72-107. doi: 10.17705/1jais.00386
- Luo, B. N., Ren, X., Cao, Z., & Hong, Y. (2020). Corporate sustainability paradox management: A systematic review and future agenda. *Frontiers in Psychology, 11* , 579272. https://doi.org/10.3389/fpsyg.2020.579272
- McKinsey & Company. (2021). How artificial intelligence will transform the automotive industry. McKinsey Insights. Retrieved from https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/how-artificial-intelligence-will-transform-the-automotive-industry
- Mrugalska, B., & Ahmed, J. (2021). Organizational agility in industry 4.0: A systematic literature review. Sustainability, 13(15), 8272. Available at: mdpi. Com
- Munodawafa, R.T.; Johl, S. K. A systematic review of eco-innovation and performance from the resource-based and stake-holder perspectives. Sustainability 2019, 11, 60-67. DOI: 10.3390/su11030607.
- Nath, V., & Agrawal, R. (2020). Agility and lean practices as antecedents of supply chain social sustainability. International Journal of Operations & Production Management, 40(10), 1589–1611. https://doi.org/10.1108/IJOPM-10-2019-0676
- Porter, M.E.; Kramer, MR Strategy & Society: The link between competitive advantage and corporate social responsibility. Harvard Business Review 2006, 84, 78-92. DOI: 10.1225/R0606E.
- Prieto, L., & Talukder, M. F. (2023). Resilient Agility: A Necessary Condition for Employee and Organizational Sustainability. Sustainability. DOI: 10.3390/ su 15021552.

- Project Management Institute. (2018). Agile risk management. PMI. Retrieved from https://www.pmi.org/learning/library/agile-risk-management-11422
- Rahimi, G., & Mansouri, A. M. (2019). The relationship between the organizational intelligence and organizational agility (Case study: employees of municipality of Tabriz). IAJOBHRM. DOI: 10.9756/iajobhrm/v5i1/1810010.
- Ramadhana, R . (2021). Employee Agility. Center for Open Science. DOI: 10.31219/ osf . io /vrwnq.
- Raschke, R. L. (2010). Process-based view of agility: The value contribution of IT and the effects on process outcomes. International Journal of Accounting Information Systems, 11(4), 297–313. https://doi.org/10.1016/j.accinf.2010.09.005
- Rosário, A., & Raimundo, R . (2021). Consumer Marketing Strategy and E-Commerce in the Last Decade: A Literature Review. Journal of Theoretical and Applied Electronic Commerce Research, 16(7), 3003-3024. https ://doi. org /10.3390/jtaer16070164.
- Routledge, P. (2020). Organizational Agility with Mobile ICT? The Case of London Black Cab Work. DOI: 10.4324/9780080463681-26.
- Sajdak, M. (2021). Strategic agility of enterprises. Poznań University of Economics and Business Press. DOI: 10.18559/978-83-66199-32-3.
- Sedej, T., & Justinek, G. (2021). Effective Tools for Improving Employee Feedback during Organizational Change. DOI: 10.4018/978-1-7998-7297-9.ch022.
- Skyrius, R., & Valentukevič, J. (2020). Business Intelligence Agility, Informing Agility and Organizational Agility: Research Agenda. Informatics, 90, 47. DOI: 10.15388/im.2020.90.47.
- Zink, M. (2022). Agile transformation in the automotive industry. Automotive World. Retrieved from https://www.automotiveworld.com/articles/agile-transformation-automotive-industry/