Organizational Agility: Thriving in a Highly Dynamic and Turbulent Environment

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Abstract
The article explores the evolution of the organizational agility concept in the specialized literature. Organizations should face the challenge of becoming agile to keep their competitive advantage and remain sustainable in an unpredictable business environment. Each organization should decide on its strategy and the steps to follow to become agile. The paper analyzes the relations that authors, by using scientific papers that approach these concepts to perform a bibliometric analysis, found between agility, organizational agility, strategic agility, and related topics. The literature review is based on articles addressing organizational agility identified in Web of Science, Taylor & Francis, Research Gate, ProQuest, and Google Scholar. Within it, we presented the definitions found in the literature for agility, organizational agility, and strategic agility to identify the definitions most often used by the authors. To achieve the bibliometric analysis, we used documents indexed in Scopus, which is considered one of the most complex and reliable databases. Supported by the analyzed literature, the paper investigates the main concepts that influence or are influenced by organizational agility. At the same time, we present the main challenges that an organization that decides to become agile should face, but also the opportunities that it can benefit from when it becomes agile. The semantic connections found in the bibliometric analyses, along with the intensity of the links found between the analyzed topics (agility, organizational agility, strategic agility) and other related concepts, support the conclusion that analyzed topics are closely interconnected with knowledge management, innovation, intellectual capital, information systems, digital transformation, enterprise resource management, dynamic capability/dynamic capabilities, competition, organizational performance/performance.

Keywords
Agility, Dynamic Capabilities, Environmental Changes, Knowledge Management, Organizational Agility, Strategic Agility.

Introduction

Organizational agility is one of the methods found by organizations as an answer to the highly dynamic and complex business environment in which they should operate, this new normal being the result of the transformations that occurred in this century in terms of economic processes and, in particular, of the radical transformation of communicational channels (Nafei, 2016, p. 97). The author defines organizational agility as "a new paradigm for engineering competitive organizations and firms" (Nafei, 2016, p. 97). This idea is also supported by Walter (2021, p. 344), who considers that a

high agility level represents a capability that allows organizations to exploit the changes that have occurred in the market in the interest of the business.

The term agility was formulated at the end of the last century by Brown and Agnew (1982), the authors defining corporate agility as "the capacity to react quickly to rapidly changing circumstances." They consider it "requires a focus on clear system output goals and the capability to match human resources to the demands of changing circumstances." The document considered an initiator in terms of studies on organizational agility is the report prepared by Nagel from the Iacocca Institute, Lehigh University, proposing the agile manufacturing system in response to the problems felt by the US economy as a result of the European Economic Community investments and the intelligent production systems introduced by Japan (Nagel, 1992, p3). The report's author emphasized that an efficient, agile system can respond quickly to the demands of an ever-changing competitive environment and a globalized economy (Nagel, 1992, p2). In the author's opinion, there are certain factors that agile organizations must rely on, which allow them to quickly create, develop, and modify their products, of which we list the most important ones: the formation of interdisciplinary project teams, a production process based on scientific knowledge and sustained by computers, equipment and production processes that are modular and reconfigurable, flexible and accessible, an extended product design that allows an extended product lifespan, based on the possibility of reconfiguring and upgrading a product and, last but not least, the ability to quickly access relevant information to be shared within the project team (Nagel, R.N., 1992, p7-8). The fact that knowledge is vital for an organization that wants to acquire strategic agility is also emphasized by Roth (1996, p.32), who considers that these organizations must renounce the status of "working machine" and become learning organizations, which produce knowledge, named by the author "Knowledge Factory." Jin-Hai, Anderson, and Harrison (2003) believe that organizations must constantly adapt to new techniques and technologies to preserve their competitive advantage, given that competition evolves over time.

The first issue of the magazine published by the Agile Manufacturing Enterprise Forum (Agility Forum) mentioned that there is no single way for an organization to transform into an agile organization. Each organization must identify the strategic objectives it wants to achieve by introducing agility and, depending on these, implement its own transformation strategy.

Literature review

Overby, Bharadwaj, and Sambamurthy (2006) define organizational (enterprise) agility as an organization's capacity to sense an environmental change and promptly respond to it. The authors consider that agility is based on other managerial concepts that allow organizations to be competitive in turbulent environments: dynamic capabilities, strategic flexibility, market orientation, and absorptive capacity. Mrugalska, B., & Ahmed, J. (2021) also identified a relationship between agility and dynamic capabilities. The authors identify agility as the dynamic capability that allows organizations to manage the changes and uncertainties that occur in the environment in which they operate. This relationship can also be found in the definition of organizational agility given by Walter (2021, p. 379), who believes that it is a learned dynamic capability, at all times at the disposal of the organization and which can be

used quickly and efficiently, to the necessary extent, to increase the performance of the organization operating in a volatile market. Dove (2005) considered the accepted definition for organizational agility as "the ability of an organization to thrive in a continuously changing, unpredictable business environment," a definition that he had already presented in his previous works but considered to be vague (Dove, 1999). The author presents its own definition, namely, "Agile systems are ones that can respond to both reactive needs and proactive opportunities - when these are unpredictable, uncertain, and likely to change" (Dove, 2005). More recent definitions of agility are given by De Smet, who considers agility to be "the ability of an organization to renew itself, adapt, change quickly, and succeed in a rapidly changing, ambiguous, turbulent environment" (De Smet & Aghina, 2015, p. 1) and by Aghina, who believe that an organization is agile when it can thrive and become stronger in the wake of change, transforming change into competitive advantage (De Smet & Aghina, 2015, p.2). van Oosterhout et al. (Desouza, 2006, pp. 53-54) link organizational agility to both the unpredictable changes that can take place in the external environment and to those that can take place inside organizations and define it as "the ability to sense highly uncertain external and internal changes, and respond to them reactively or proactively, based on the innovation of the internal operational processes, involving the customer in exploration and exploitation activities, while leveraging the capabilities of partners in the business network."

In the opinion of Werder et al. (2021), organizational agility can be either entrepreneurial agility, the changes being proactive (the organization can understand market opportunities proactively), or adaptive agility, the changes being reactive (the organization detects the market changes and responds defensively).

Dove (1999) considers that two key factors enhance agility: knowledge management and change proficiency (the organization's ability to apply knowledge effectively, whether it is knowledge related to the market, competition, skills, processes, or technologies). Building on this idea, Dove and Palmer (2004) consider that, in order to become an agile one, an organization should have both the physical capacity to act (response-ability) and the intellectual capacity to identify how to act (knowledge management). Based on this assumption, the authors define agility as "the ability to manage and apply knowledge effectively, providing the potential for an organization to thrive in a continuously changing, unpredictable business environment" (Dove & Palmer, 2004). Referring to an organization's physical and intellectual capacity to become agile, Overby, Bharadwaj, and Sambamurthy (2006) consider that the response-ability represents the response component of the organization (enterprise) agility, and knowledge management represents the sensing one. Subsequently, the paper published by Dove (2004) highlighted a third essential element for enabling organizational (enterprise) agility: value propositioning skills. If knowledge management shows the organization that a change should be made and the response-ability represents the ability to change business processes as a response to the environmental changes, value propositioning skills allow the organization "to prioritize among competing changes and competing response-alternatives to those changes" (Dove, 2004). Research undertaken by Cegarra-Navarro, Soto-Acosta, and Wensley (2016) highlighted the mediating effect of organizational agility between knowledge application and firm performance, emphasizing that organizational performance is based on both organizational agility and knowledge management that supports knowledge acquisition, conversion, and application.

The transformation of an organization into an agile one faces three challenges: the costs of transformation, different speeds of adoption of different organizational units (impacting especially larger organizations), and intra-organizational tensions, which generally appear when some sub-units are proactive and others reactive (Werder et al., 2021). Regarding the costs involved in transforming the organization into an agile organization, Reed (2021) concludes, following the research carried out, that the more strategically agile an organization becomes, it will perform better in turbulent conditions and worse in stable conditions, precisely because of the transformation costs involved, which, perhaps, under certain conditions, are not necessary. Therefore, many authors recommend that, before starting the process of transforming an organization into an agile organization, an analysis should be undertaken on the opportunity of this transformation and the directions to be followed to make this transformation as cost-effective and efficient as possible.

Munteanu (2019, p. 340) considers that human resources contribute definitively to the transformation of an organization into an agile organization, making it impossible for an organization to become agile without an agile workforce that reacts and makes decisions quickly, ensuring the creativity and innovative spirit necessary to maintain the competitive advantage. Research conducted by Bratianu, Vatamanescu, Anagnoste, and Dominici (2019) shows that by integrating emotional and spiritual knowledge in the decision-making process, managers and other decision-makers can make better and faster decisions, contributing to organizational agility. According to Harsch and Festing (2020, p.47), talent management can influence organizational agility. The authors consider that to benefit from the talents that already exist inside, the organizations must pay attention to skills-matching, thus allowing talent to have a faster ability to adapt and therefore modify the organization's resources, which will have the possibility to respond to internal and external changes (Jooss, Collings, McMackin, & Dickmann, 2024, p. 142).

To benefit from an agile workforce, organizations must pay special attention to those employees who can quickly identify both threats and opportunities on the market, quickly reallocate resources where they are necessary to maintain competitiveness, accept to be quickly reallocated to another job when it becomes a priority, to collaborate spontaneously with the other members of the organization, to have an innovative spirit and to have the ability to learn quickly and permanently (Dyer & Shafer, 1998, p.16). In the opinion of De Smet and Aghina (2015, p.2), agile organizations offer employees, on the one hand, a constant structure to give them the idea of constancy and belonging. However, at the same time, they perfect the mechanisms that allow them, when necessary, to face challenges or take advantage of opportunities, to quickly create teams that have the necessary talents. The authors believe that true agility is represented by maintaining a stable structure within which one operates based on a dynamic model, speed, and flexibility (De Smet & Aghina, 2015, pp. 3-4). The importance of the workforce for achieving strategic agility is also highlighted by Roth (1996, pp. 35-36). The author considers that there is a need for a skilled workforce that can use the organization's resources, to communicate for knowledge sharing. Bratianu (2023) states that organizations are disseminating knowledge through internal communication. However, the author notes that knowledge sharing relies heavily on individuals and their willingness to disseminate their expertise and experience. Emotional intelligence is considered to be essential for

knowledge sharing by Bratianu and Bejinaru (2019); the authors consider socialization and the creation of communities of practice as beneficial to encourage knowledge sharing.

The first author to use the concept of strategic agility was Roth (1996). The term was used in a manufacturing context, and this was defined as "the capability to create the right products at the right place at the right time at the right price" (Roth, 1996, p. 30). Weber and Tarba (2014, p. 7) consider that strategic agility represents the permanent ability of an organization to adapt to change in such a way that it can maintain its competitive advantage and define it as "the ability of management to constantly and rapidly sense and respond to a changing environment by intentionally making strategic moves and consequently adapting the necessary organizational configuration for successful implementation." Doz and Kosonen (2010, p. 371) define strategic agility as a "thoughtful and purposive interplay" of three "meta-capabilities," respective strategic sensitivity, leadership unity and resource fluidity. In later research, Doz (2020) renamed leadership unity as collective commitment. The company's age negatively influences strategic agility, but there is no negative link between strategic agility and the organization's size (Reed, 2021, p. 42).

Methodology

The article's objective is to capture the specific traits of "organizational agility," the evolution of this concept in the specialized literature, and the relationships that authors identified between this topic and related concepts. We performed a bibliometric analysis using VOSviewer, version 1.6.19, and articles indexed in Scopus to achieve this goal.

We envisioned that the results of this study would respond to the following research questions:
R.Q.1: What is the conceptual distribution of organizational agility literature in the Scopus database?
R.Q.2: What are the main concepts that influence or are influenced by organizational agility?
R.Q.3: What are the challenges and the opportunities for an organization to implement an agile attitude?

The research term (organizational agility) has been searched within "All fields." For search documents, we used both "organizational agility" and "organizational agility" to identify all works related to this concept. Scopus returned 8.084 papers approaching the researched concept. In order to refine the search results and to identify the papers that are relevant to our research, the following query was used, and 7.059 papers were identified to be used for our bibliometric analysis:
(ALL ("organizational agility") OR ALL ("organisational agility")) AND (LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "COMP") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "DECI") OR LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "MULT") OR LIMIT-TO (SUBJAREA , "NEUR")) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "cp") OR LIMIT-TO (DOCTYPE , "ch") OR LIMIT-TO (DOCTYPE , "bk")) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-

TO (LANGUAGE , "French") OR LIMIT-TO (LANGUAGE , "Romanian") OR LIMIT-TO (LANGUAGE , "Moldovan") OR LIMIT-TO (LANGUAGE , "Moldavian"))

"Co-occurrence" was used as the "Type of analysis" and "All keywords" as the "Unit of analysis." Of the 21.383 keywords, 1.884 met the threshold of 5 for the minimum number of occurrences. The number of keywords was considered too difficult to manage, so we increased the minimum number of occurrences to 50. The software identified 141 keywords that met the conditions.

We remove the keywords without interest for our research: names of countries (China), names of research methods (case studies, empirical analysis, surveys, systematic literature review, pls-sem), keywords defining specific domains (sales, commerce, software design) or types of organizations (SMEs) and other keywords which we considered to be of no importance for research. We used the "Thesaurus" option to remove keywords from multiple writing formats and keywords present in both singular and plural forms. After performing this operation, 86 keywords of interest for our research remained.

Results and discussion

We analyzed the number of papers published yearly that approached organizational agility topic. Their evolution confirms the growing interest in this concept and the fact that it remains a topical topic (Figure 1).

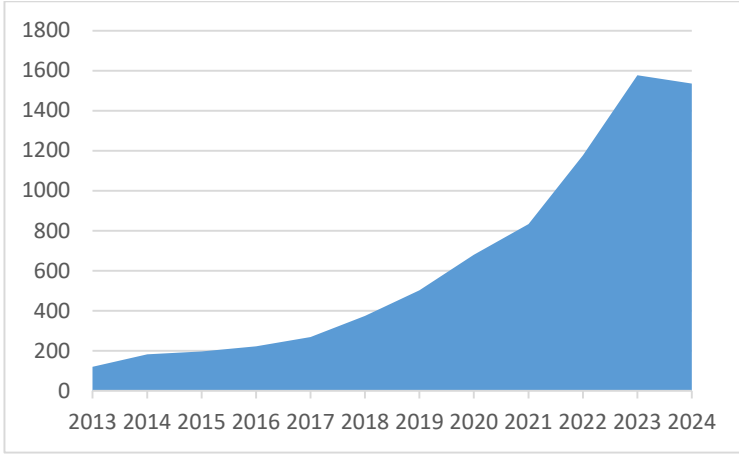

Figure 1. Yearly distribution of the published papers having as subject organizational agility (Authors' research)

The countries where most papers on this concept have been published are the United States (1.153), China (1.063), the United Kingdom (690), India (675), Germany (534) and Australia (500).

After performing the bibliometric analysis, using VOSviewer, version 1.6.19., we obtained a number of 6 clusters: cluster 1 (red) with “innovation” as the strongest node, cluster 2 (green) with “agility” as the strongest node, cluster 3 (blue) with “information systems” as the strongest node, cluster 4 (yellow) with “organizational agility” as the strongest node, cluster 5 (azure) with “dynamic capability” as the strongest node and cluster 6 (blue) with “decision making” as the strongest node (Figure 2).

We are interested in analyzing only three of the six clusters, considering that clusters 3, 5, and 6 present low interest for our research. However, we will notice that concepts of interest for our study present high link strengths with some topics included in cluster 3. We will analyze the significance of these links.

In cluster 1 (red), together with "strategic agility," we found together concepts that authors had analyzed together in their works. As expected, these concepts are:

- concepts that sustain strategic agility:
    - innovation, digital innovation
    - leadership
    - organizational culture
    - technology, technological adoption, and technological development
    - digitization, digitalization, digital technologies, digital transformation, artificial intelligence
- concepts that are sustained by strategic agility:
    - sustainability, sustainable development
    - performance
    - business development
    - competitiveness

The strongest link was identified between strategic agility and dynamic capability, but the link strength is only 14. This result was expected, given that dynamic capability/dynamic capabilities are generally connected in the literature with organizational agility.

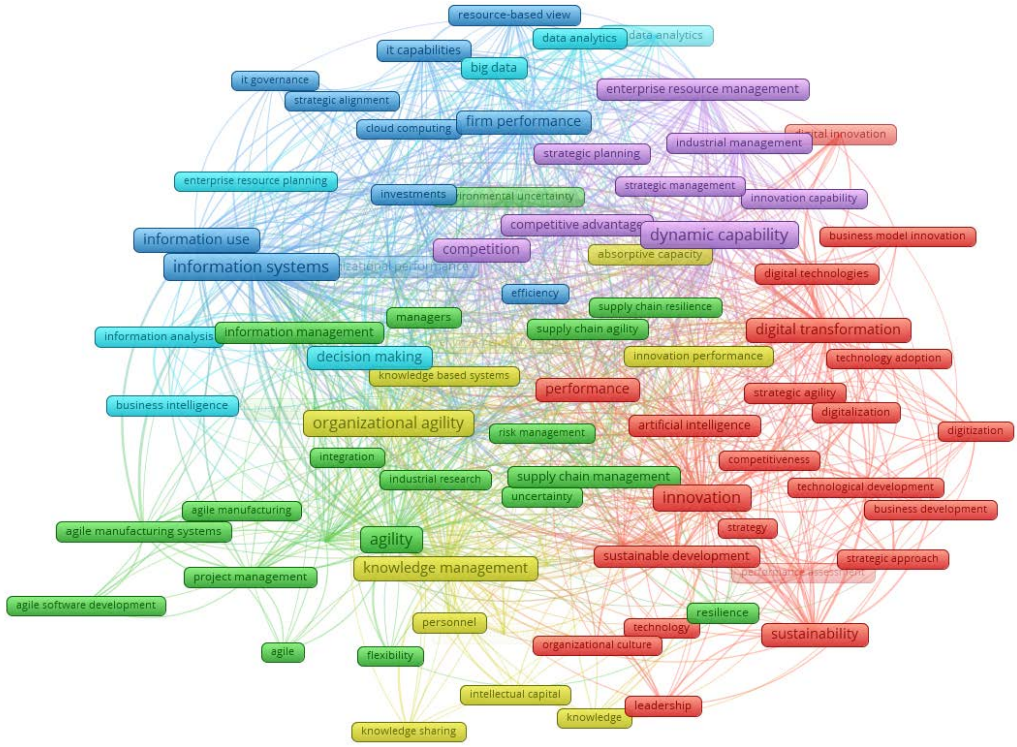

Figure 2. Network visualization – using VOSviewer, version 1.6.19. (Authors' research)

We analyzed the strongest link strengths identified between "agility" as the strongest node of cluster 2 and related topics. The results are presented in Table 1.

Table 1. Link strengths and occurrences between agility and related concepts (Source: Authors' research)

	Link strength	Total link strength	Occurrences
information systems	55	1564	609
organizational agility	41	896	494
dynamic capability	40	1413	561
innovation	26	951	441
flexibility	25	108	61
information use	24	1009	331
agile manufacturing systems	21	264	92
competition	20	1063	291
knowledge management	19	774	338
performance	18	496	217

It is important to note that agility presents a relatively strong link strength with knowledge management and that in cluster 2, agility appears together with human resource management. This fact is supported by literature, authors considering that for agile development, organizations need a skilled workforce that is able and has the conditions to communicate for knowledge sharing. Information systems that facilitate information use and information use support agility by facilitating the identification of changes and opportunities.

In cluster 4, we found organizational agility along with other concepts with which they are in a semantic connection. These topics contribute to the possibility that an organization can transform itself into an agile organization:

- knowledge-related topics: knowledge, knowledge management, knowledge-based systems, knowledge sharing, organizational learning, absorptive capacity
- human resources-related topics: personnel, intellectual capital
- innovation-related topics: technological innovation, innovation performance, open innovation

In the same cluster, we found environmental dynamism, which is the main factor determining organizations' decisions to become agile to maintain their competitive advantage.

We analyzed the strongest link strengths identified between “organizational agility” and related topics. The results are presented in Table 2.

Table 2. Link strengths and occurrences between organizational agility and related concepts (Source: Authors’ research)

	Link strengths	Total link strength	Occurrences
information systems	79	1564	609
dynamic capability	48	1413	561
agility	41	736	410
information use	37	1009	331
knowledge management	36	774	338
competition	28	1063	291
digital transformation	26	752	381
enterprise resource management	25	757	184
innovation	24	951	441
organizational performance	23	341	143

The strong link strengths between organizational agility and the above-mentioned topics were expected. The transformation of an organization into an agile one is based on knowledge management, innovation, and a quick and flexible allocation of resources. Information systems and information are used to support the transformation process. A competitive and ever-changing environment are the main factors that determine an organization to become agile and the increase in agility determines an increase in organizational performance.

Conclusions

Although the literature on organizational agility is very extensive, researchers have not unanimously agreed on the definition so far. An organization is generally considered agile when it can respond to changes in the environment in which it operates to thrive and maintain its competitive advantage.

The transformation of organizations into agile organizations is increasingly necessary to allow them to face the challenges induced by the increasingly rapid change of the external environment in which they operate. At the same time, however, organizations must also take into account the realities induced by a workforce that is increasingly interested in adopting new technologies, eager to continuously develop and receive feedback on the activity done, to be recognized and rewarded for their efforts, as well as their professional well-being. Also, organizations must learn to quickly reallocate their material and human resources so that they can be used according to external challenges, given that resources are increasingly limited and more expensive.

We consider that this paper contributes to the theoretical clarification of organizational agility by performing literature research based on the evolution in time of its definitions, implementation needs, and relations. Our study concluded that the strongest relationships of organizational agility are with information systems, dynamic capability/dynamic capabilities, information use, competition, innovation, and knowledge management. We identified organizational agility in the same cluster as knowledge, knowledge management, knowledge-based systems, knowledge sharing, organizational learning, absorptive capacity, personnel, intellectual capital, technological innovation, innovation performance, and open innovation. At the same time, strategic agility presents semantic connections with innovation, digital innovation, leadership, organizational culture, technology, technological adoption and technological development, digitization, digitalization, digital technologies, digital transformation, and artificial intelligence.

A limitation of the research could be that the bibliometric analysis was performed only on a limited number of articles (indexed in Scopus).

References

Agile Manufacturing Enterprise Forum. (1992). *Agility Forum*, 1(1).

Bratianu, C. (2023). Knowledge Dynamics: Exploring its Meanings and Interpretations. *Management Dynamics in the Knowledge Economy*, *11*(2), 100–111. https://doi.org/10.2478/mdke-2023-0007

Bratianu, C., & Bejinaru, R. (2019). The Theory of Knowledge Fields: A Thermodynamics Approach. *Systems*, *7*(2), 20. https://doi.org/10.3390/systems7020020

Bratianu, C., Vătămănescu, E.-M., Anagnoste, S., & Dominici, G. (2020). Untangling knowledge fields and knowledge dynamics within the decision-making process. *Management Decision*, *59*(2), 306–323. https://doi.org/10.1108/MD-05-2019-0559

Brown, J. L., & Agnew, N. M. (1982). Corporate agility. *Business Horizons*, 25(2), 29-33. https://doi.org/10.1016/0007-6813(82)90101-x

Cegarra-Navarro, J.-G., Soto-Acosta, P., & Wensley, A. K. P. (2016). Structured knowledge processes and firm performance: The role of organizational agility. *Journal of Business Research*, *69*(5), 1544–1549. https://doi.org/10.1016/j.jbusres.2015.10.014

Desouza, K. (2006). *Agile Information Systems* (0 ed.). Routledge. https://doi.org/10.4324/9780080463681

De Smet, A., & Aghina, W. (2015). The keys to organizational agility. *McKinsey & Company*. Retrieved September 13, 2024, from https://www.mckinsey.com/business-functions/organization/our-insights/the-keys-to-organizational-agility

Dove, R. (1999). Knowledge management, response-ability, and the agile enterprise. *Journal of Knowledge Management*, *3*(1), 18–35. https://doi.org/10.1108/13673279910259367

Dove, R. (2004). Enterprise agility—What is it and what fuels it? *Working Paper*. Retrieved September 13, 2024, from https://www.researchgate.net/publication/266270212_Enterprise_Agility-What_Is_It_and_What_Fuels_It

Dove, R. (2005). Agile Enterprise Cornerstones: Knowledge, Values, and Response Ability. In R. L. Baskerville, L. Mathiassen, J. Pries-Heje, & J. I. DeGross (Eds.), *Business Agility and Information Technology Diffusion* (Vol. 180, pp. 313–330). Kluwer Academic Publishers. https://doi.org/10.1007/0-387-25590-7_20

Dove, R., & Palmer, L. M. (2004). Response Ability: The Language, Structure, and Culture of the Agile Organization. *INSIGHT*, *6*(2), 41–41. https://doi.org/10.1002/inst.20046241

Doz, Y. L., & Kosonen, M. (2010). Embedding Strategic Agility. *Long Range Planning*, *43*(2–3), 370–382. https://doi.org/10.1016/j.lrp.2009.07.006

Doz, Y. L. (2020). Fostering strategic agility: How individual executives and human resource practices contribute. *Human Resource Management Review*, 30, 100693.

Dyer, L., & Shafer, R. A. (1998). *From human resource strategy to organizational effectiveness: Lessons from research on organizational agility* (CAHRS Working Paper No. WP 98-12). Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies.

Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organizational agility—A qualitative exploration. *Human Resource Management*, *59*(1), 43–61. https://doi.org/10.1002/hrm.21972

Iacocca Institute. (1992). *21st century manufacturing enterprise strategy*. Lehigh University, Bethlehem, PA.

Jin-Hai, L., Anderson, A. R., & Harrison, R. T. (2003). The evolution of agile manufacturing. *Business Process Management Journal*, *9*(2), 170–189. https://doi.org/10.1108/14637150310468380

Jooss, S., Collings, D. G., McMackin, J., & Dickmann, M. (2024). A skills-matching perspective on talent management: Developing strategic agility. *Human Resource Management*, *63*(1), 141–157. https://doi.org/10.1002/hrm.22192

Mrugalska, B., & Ahmed, J. (2021). Organizational Agility in Industry 4.0: A Systematic Literature Review. *Sustainability*, *13*(15), 8272. https://doi.org/10.3390/su13158272

Munteanu, A.-I. (2019). A review of organizational agility concept and characteristics. *The Annals of the University of Oradea*, *Tom XXVIII*(1), 335-341.

Nafei, W. A. (2016). Organizational Agility: The Key to Improve Organizational Performance. *International Business Research*, *9*(3), 97. https://doi.org/10.5539/ibr.v9n3p97

Overby, E., Bharadwaj, A., & Sambamurthy, V. (2006). Enterprise agility and the enabling role of information technology. *European Journal of Information Systems*, *15*(2), 120–131. https://doi.org/10.1057/palgrave.ejis.3000600

Reed, J. (2021). Strategic Agility in the SME: Use It Before You Lose It. *Journal of Small Business Strategy*, *31*(3). https://doi.org/10.53703/001c.29734

Roth, A. V. (1996). Achieving strategic agility through economies of knowledge. *Strategy & Leadership*, 24(2), 30-36.

Walter, A.-T. (2021). Organizational agility: Ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, *71*(2), 343–391. https://doi.org/10.1007/s11301-020-00186-6

Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art. *California Management Review*, 56(3), 5-12.

Werder, K., Richter, J., Hennel, P., Dreesen, T., Fischer, M., & Weingarth, J. (2021). A Three-Pronged View on Organizational Agility. *IT Professional*, *23*(2), 89–95. https://doi.org/10.1109/MITP.2020.3016488