

## WORKFORCE AGILITY: A SYSTEMATIC LITERATURE REVIEW AND COMPARISON WITH DOMESTIC STUDIES

DOI: 10.17261/Pressacademia.2024.1936

JMML- V.11-ISS.2-2024(5)-p.101-121

Sukru Baris Hatunoglu

Marmara University, Faculty of Business Administration, Maltepe Campus, Istanbul, Turkiye.

[baris.hatunoglu@marmara.edu.tr](mailto:baris.hatunoglu@marmara.edu.tr), ORCID: 0000-0002-4956-518X

Date Received: October 5, 2024

Date Accepted: November 19, 2024



### To cite this document

Hatunoglu, S. B. (2024). Workforce agility: a systematic literature review and comparison with domestic studies. *Journal of Management, Marketing and Logistics (JMML)*, 11(2), 101-121.

Permanent link to this document: <http://doi.org/10.17261/Pressacademia.2024.1936>

Copyright: Published by PressAcademia and limited licensed re-use rights only.

### ABSTRACT

**Purpose-** This research has three main scopes and objectives. The first objective is to thoroughly examine the concept of workforce agility, delineate its boundaries, and conduct a systematic literature review. This review will report existing studies based on their objectives, methods, conceptual frameworks, and findings to identify prevailing patterns. The second objective of the research is to review the local literature, identify and analyze articles, and graduate theses focused on workforce agility within Turkey. The final objective is to review the studies from both local and international literature in a comparative manner to identify and discuss research gaps in the local literature.

**Methodology-** A comprehensive systematic literature review is conducted within the Scopus database. This review identified 36 eligible articles focused on workforce agility, which were reviewed and reported for their objectives, methodologies, and findings. Additionally, theses focused on workforce agility listed in the Council of Higher Education Thesis Center and articles by local authors listed on Google Scholar have been reviewed and discussed for their goals, methodologies, samples, and conclusions in order to enable a comparative view.

**Findings-** International studies emphasize various dimensions of workforce agility, notably proactivity, adaptability, and resilience. These studies highlight the influence of emotional intelligence, organizational structure, and digital transformation on agility. Conversely, Turkish literature remains limited in scope, mainly focusing on specific sectors like ICT and hospitality. Since the number of studies is still very low, critical gaps are identified, such as longitudinal studies and investigations into cross-cultural and cross-sectoral studies such as healthcare and education, indicating a need for broader research within Turkey.

**Conclusion-** The study concludes that while workforce agility is increasingly acknowledged as a vital competency, Turkish literature is still developing compared to global studies. Addressing gaps, such as cross-sector analysis and the influence of cultural factors, could enrich the understanding of workforce agility in Turkey. Recommendations for future research include expanding sector-specific studies and exploring workforce agility's impact on organizational capabilities and performance types in diverse Turkish industries.

**Keywords:** Workforce agility, employee agility, agile workforce, agile employee, agility

**JEL Codes:** M19, O39, J24

### 1. INTRODUCTION

The concept of agility has undergone substantial evolution, especially in the contemporary business environment after events like technological developments with Industry 4.0, digital transformation processes, and even the global COVID-19 pandemic, where the need for rapid and effective adaptation is proven to be crucial for all organizations. Initially, agility was associated with the manufacturing sector, denoting a company's capacity to alter production procedures swiftly (Sharifi and Zhang, 1999). On the other hand, as the world keeps getting increasingly complex, the concept has widened to include a more extensive set of capabilities. Currently, agility notion is seen as a vital strategic asset, allowing firms to maneuver through progressively volatile marketplaces. Businesses must exhibit agility to not only survive but also prosper during technology shocks, economic transformations, or global crises (Doz and Kosonen, 2008).

Agility fundamentally implies a company's ability to rapidly transform into environmental changes, such as emerging consumer expectations, innovations in technology, or competitive market dynamics. Agility has evolved beyond just production line versatility; it is now regarded as a comprehensive approach that includes all aspects of operational procedures and strategic decision-making (Teece et al., 2016). Consequently, agility has emerged as an important priority in both business practices and academic studies, with researchers examining how enterprises, teams, and individuals may cultivate and preserve agility (Felipe et al., 2017).

This study comprises several stages. In the initial stage, a general literature review was conducted to delineate the boundaries of the concept of agility within the literature, identifying several widely accepted definitions of the concept. The second stage involved reporting findings from systematic literature reviews found in international sources regarding the number of studies executed and types of agility focused, respectively. Additionally, statistics on the number and types of agility-focused theses completed in master's and doctoral programs at universities in Turkey are presented in order to compare the alignment between domestic and foreign studies. The third stage highlighted similarities between the types of agility studied in international literature and Turkish dissertations and provided general definitions for the most widely accepted agility types. In the fourth stage, a systematic literature review on workforce agility is conducted using the SCOPUS database. In this section, 36 articles are identified, which were subsequently reviewed in terms of their objectives, methodologies, samples, and findings. In the fifth stage, domestic studies and dissertations focused on workforce agility were identified and discussed in detail. The final stage of the research involved a comparative review of foreign and local literature studies, identifying gaps within the local literature and offering recommendations for future research.

This study is conducted to answer the following research questions.

- How has the concept of agility been examined in studies conducted in both international and local literature?
- What types of agility are most frequently focused on and researched in international and local literature?
- How are the conceptual boundaries of workforce agility defined?
- What objectives, methods, samples, and findings have been presented in local and international studies on workforce agility?
- When local and international research on workforce agility is compared, what gaps are observed in the local literature?

To address these research questions, the article sections are structured as follows. Section 2 provides a general examination of the concept of agility under three main subsections. The first part presents general definitions and characteristics of the agility concept, emphasizing the organizational variables it targets inside the companies. In the second part, a review of previous literature studies and an examination of postgraduate theses from the Council of Higher Education Thesis Center is conducted. This two-sided review identifies the types of agility that have been explored both in foreign and domestic literature. Considering this identification, the most used and studied agility types are defined, examined, and reviewed in the third part. Section 3 represents the primary focus of the research and includes information on the methodology and data of the study. Given that the study's main objective is to identify the boundaries of workforce agility in both foreign and domestic literature and to detect research gaps in domestic literature, this section provides details on the systematic literature review process applied to the concept. Section 4 reports the results of a systematic literature review conducted on workforce agility articles listed in the business and management field within the Scopus database. This section highlights the research methods used in the articles, various conceptual frameworks of workforce agility, the most influential authors, and citation counts. Furthermore, regarding the domestic literature, dissertations on workforce agility identified in the Council of Higher Education Thesis Center and articles written by Turkish authors listed on Google Scholar have been examined. These studies' purposes, methods, samples, and findings are outlined and discussed. Moreover, a comparative review is discussed regarding the gap between foreign and domestic studies in literature. In the final section, a conclusion about the gap in the foreign and domestic studies related to the workforce agility concept is presented, and further study implications are proposed.

## **2. LITERATURE REVIEW**

This section will process the literature review in three main subsections. The first subsection focuses on the concept of agility, its emergence, and its main definitions. The second subsection focuses on the types of agility encountered in the literature and their main explanations and relationships. The last subsection focuses on workforce agility and explains the definitions found in the literature to show the boundaries of the concept.

### **2.1. Concept of Agility**

The theoretical frameworks responsible for enhancing the responsiveness of companies and the efficiency level of manufacturing put together a two-volume report in the fall of 1991 called the 21st Century Manufacturing Enterprise Strategy (Sharifi and Zhang, 1999). This report came to be published through The Iacocca Institute at Lehigh University, and the concept of agility entered researchers' agendas.

In literature, numerous definitions emphasize the concept of agility in various studies. Although there is no consensus on any single definition, the definitions are not drastically different from one another. If we highlight a few of the most frequently referenced definitions that emerged close to the time when the concept was introduced, they are going to be as follows:

Sharifi and Zhang (1999) define agility as “...main issue in this new area of manufacturing management is the ability to cope with unexpected changes, to survive unprecedented threats of business environment, and to take advantage of changes as opportunities. This ability is called agility or agile manufacturing.” While Sharifi and Zhang mainly focus on the manufacturing side of the concept, their definition also suits the entire organization.

The definition presented by Goldman et al. (1995) explains organizational agility as the capability possessed by the entire firm to wholly adapt swiftly and resoundingly innovate regarding changeable business environments, which are usually unanticipated, and utilize the change to their advancement.

Lu and Ramamurthy (2011) pointed out speed and innovation as inseparable characteristics of organizational agility. Agility is, however, first identified as an organizational capability to make rapid and innovative responses to sudden and unanticipated changes in the environment in order to utilize the changes.

Zitkiene and Deksnys (2018) define agility as “an organizational ability to recognize unexpected changes in the environment and appropriately respond in a swift and efficient manner, by utilizing and reconfiguring internal resources, thus gaining competitive advantage in the process.”

Although numerous definitions in literature explain the concept of agility, when a general interpretation is made, it can be observed that many of these definitions converge on a similar or shared basis. Agility refers to the capability of firms always to be prepared for changes in the external environment and to respond to these changes as quickly as possible by utilizing their tangible, intangible, and human resources through proactive, responsive, and adaptive behavior.

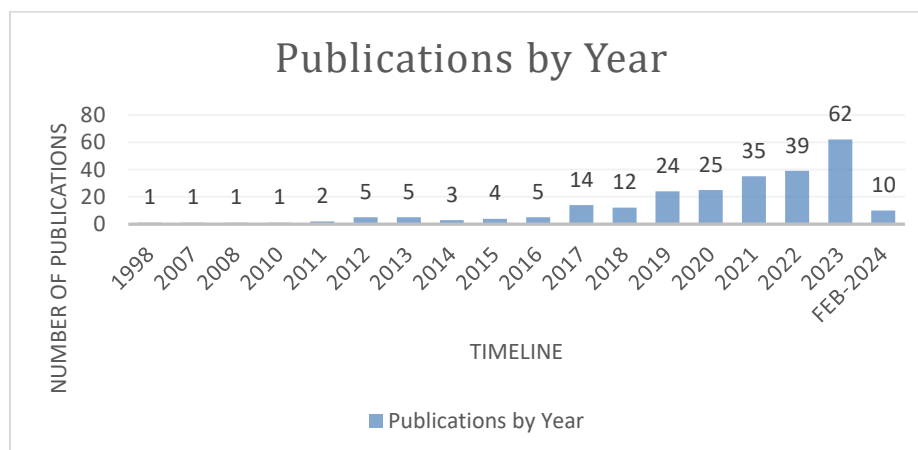
Since the study is not mainly focused on the general agility concept, no additional definitions of the concept are required to be indicated. Thus, in the following part, types of agility encountered in the literature will be mentioned briefly.

## 2.2. Types of Agility Studied in Literature

When the publications regarding the concept are examined, it can be clearly seen that researchers are studying numerous types of agility. Agility occurs in various forms, each corresponding to distinct facets of organizational responsiveness to change. For a brief introduction, before focusing on workforce agility, the most recognized and studied agility types will be defined and explained. After this part, the focus will be only on workforce agility, and the multiple gaps regarding the subject will be identified in Turkish literature.

Based on one of the most recent systematic literature reviews, which was studied by Nguyen et al. (2024), it can be seen that interest in the concept of agility has increased exponentially over the years. According to their research, which was executed over articles indexed under Web of Science, the distribution between the years can be seen in Figure 1. As shown in the figure, although the concept of agility has been researched in studies listed in the Web of Science database since 1998, there was no significant focus and rise until 2017.

**Figure 1: Concept of Agility Publications by Year**



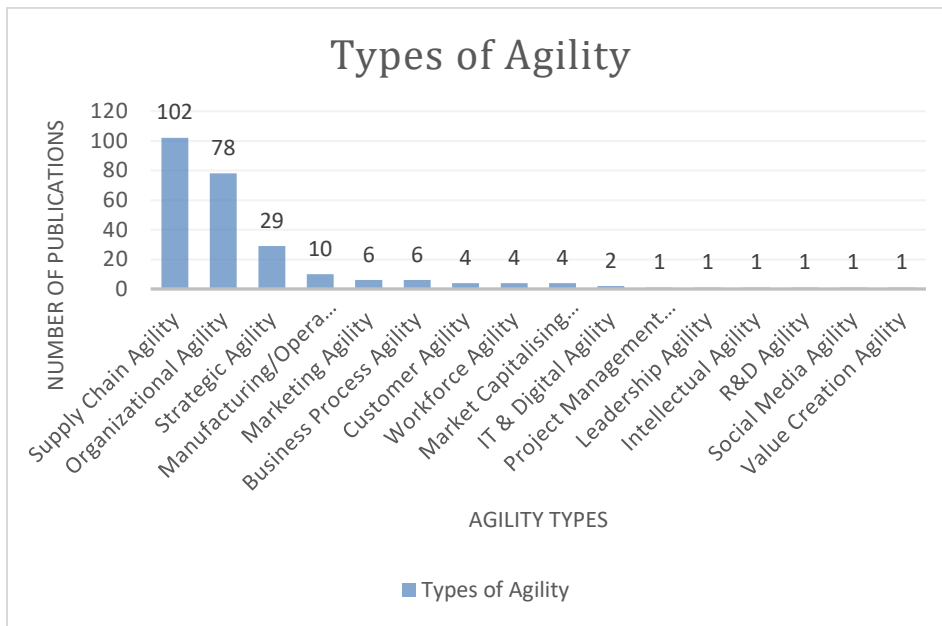
Source: Nguyen et al. (2024)

Since 2018, a continuous and rapid increase has been observed. Although it is impossible to make a definitive comment on 2024 as the data was obtained as early as February, listing 10 studies within just two months suggests that the annual count is unlikely to be low.

Furthermore, Nguyen et al. (2024) classified the types of agility being investigated in 249 empirical studies, shown in Figure 2, according to the quantity of each type of agility.

As shown in Figure 2, the data indicates that a large portion of research on agility focuses on supply chain agility (102 publications), followed closely by organizational agility (78 publications). In addition to these two main types of agility, other notable types—though with fewer publications—include strategic, manufacturing, marketing, and workforce agility (Nguyen et al., 2024).

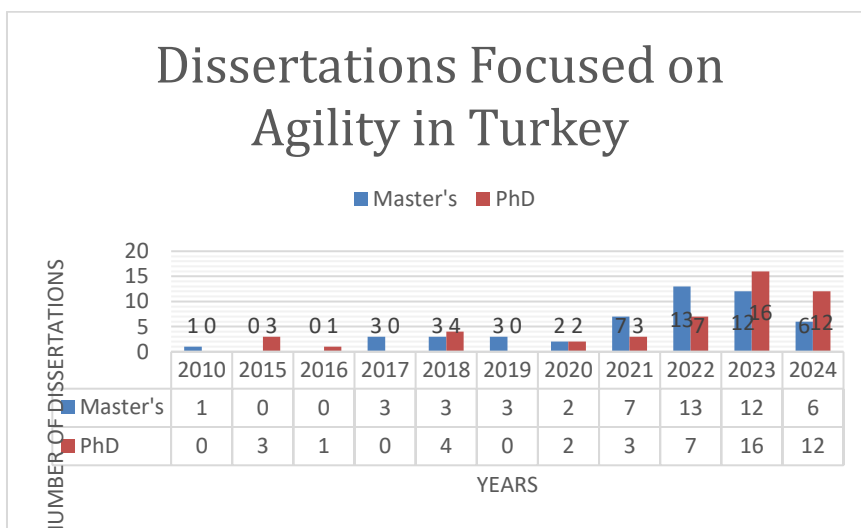
Figure 2: Types of Agility



Source: Nguyen et al. (2024)

In alignment with the study of Nguyen et al. (2024), when we observe the dissertations written between 2010 and 2024 (October) in Turkey, the Thesis Center of the Council of Higher Education (Council of Higher Education, Thesis Center) shows us quite a similar graphic which can be interpreted as research studies in Turkey regarding agility and its types are not so far behind. Figure 3 shows us the yearly distribution of 98 dissertations written by master’s and Ph.D. students in Turkey.

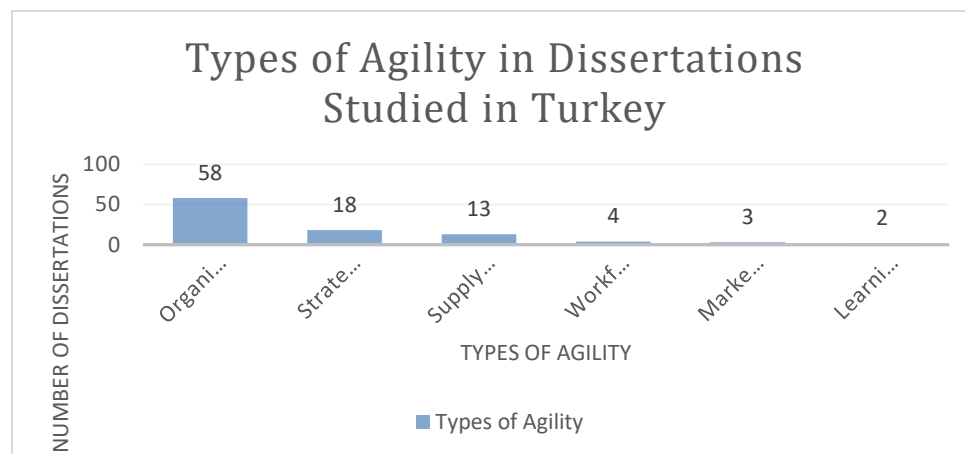
Figure 3: Dissertations Focused on Agility in Turkey



Source: Council of Higher Education Thesis Center (October, 2024)

As Figure 3 shows, the number of theses written on the concept of agility in master's and doctoral programs in business departments across universities in Turkey from 2010 to 2023 has increased rapidly in 2021, 2022, and 2023 since the topic gained its reputation aligned with foreign literature.

**Figure 4: Distribution of Agility Types Studied in Turkish Business-Related Dissertations**



Source: Council of Higher Education Thesis Center (October, 2024)

Also, similar to the systematic literature review done by Nguyen et al. (2024), domestic studies in Turkey identified agility types such as organizational agility, strategic agility, supply chain agility, workforce/employee agility, marketing agility, and learning agility. Thus, definitions of these types will be given to be in harmony with the most commonly referred agility types in business and management literature.

According to Gunasekaran (1998), organizational agility is “the capability to survive and prosper in a competitive environment of continuous and unpredictable change by reacting quickly and effectively to changing markets, driven by customer-designed products and services.” In support of this definition, Lu and Ramamurthy (2011) explain organizational agility as “a firm-wide capability to deal with changes that often arise unexpectedly in business environments via rapid and innovative responses that exploit changes as opportunities to grow and prosper.” Studies regarding organizational agility show a wide range of definitions with no agreement over a single explanation; however, none of these definitions appear to contradict one another as well. Apart from other types of agility, organizational agility tries to see the bigger picture inside the organization and act in a more generalist and strategic way, while other types mainly focus on one specialized function of the company, such as supply chain, manufacturing, marketing, or strategy. Organizational agility mainly focuses on the speed, responsiveness, competence, and flexibility of the entire organization in its ability to react to the rapid changes coming from the external environment (Sharifi and Zhang, 1999).

Operational agility, one of the foundational and most essential forms, was initially seen in the area of manufacturing. This form of agility focuses on rapidly modifying internal systems and processes to match changing needs. Corporations exhibiting operational agility can modify production techniques or reallocate resources in response to evolving client demands or marketplace conditions (Goldman et al., 1995). Operational agility is no longer limited to manufacturing; it is now essential across several sectors, including technology and retail, where timeliness and adaptability can determine an organization's competitiveness.

Supply chain agility, which was initially limited to manufacturing, has evolved to embody a complete and comprehensive answer to a great number of problems faced by firms operating in a turbulent business environment (Yauch, 2011; Zhang, 2011). Braunscheidel and Suresh (2009) use joint planning, demand response, customer responsiveness, and visibility as the first-order dimensions of the perception of agility and call firm supply chain agility a second-order construct. Supply chain agility is defined for firms by what Gligor et al. (2013) describes as “a firm's ability to quickly adjust tactics and operations within its supply chain to respond or adapt to changes, opportunities, or threats in its environment.”

Following that, strategic agility elevates this flexibility to an advanced tier. Operational agility is linked to the fundamental mechanics of a company's operations, whereas strategic agility involves an organization's capability to foresee market fluctuations and adjust its long-term strategies appropriately (Doz and Kosonen, 2008). Strategically agile companies foresee crises and are prepared to maneuver ahead of their competitors. This type of agility necessitates innovative management and a culture that is adaptive to change. The focus is strategically preparing the business to benefit from emerging

opportunities rather than enduring the most recent turbulence (Teece et al., 2016). Strategic agility is crucial in rapidly changing industries, such as technology and telecommunications, enabling organizations to prosper even in turbulent settings (Weber and Tarba, 2014). According to Doz and Kosonen (2010), strategic agility refers to a firm's capacity to constantly reinvent itself without losing the ability to be flexible while still being efficient. It has also been claimed that strategic agility is managing multiple dynamic capabilities, enabling a firm to enrich variety in its products, processes, and services across the business model (Weber and Tarba, 2014).

Furthermore, marketing agility is closely tied to a similar idea by focusing on an organization's ability to sense shifts in customer needs and respond quickly. Market agility is critical for staying competitive in today's fast-moving business world. Market-agile organizations know how to read customer signals, adapt their product or service ranges accordingly, and engage consumers meaningfully. For example, companies in industries such as e-commerce must be ready to adjust marketing strategies, tweak product designs, or shift pricing models to meet rapidly changing consumer demands (Cao et al., 2005). Companies can quickly lose relevance in a saturated marketplace without this kind of agility.

Another crucial type is learning agility, which deals with an organization's ability to learn and apply new knowledge in real time (DeRue et al., 2012). In industries that are always on the cutting edge, like information technology, companies need to be filled with employees who are eager and able to learn new skills continuously. Learning agility is one of the main predictors of long-term success because it helps organizations stay ahead of the curve. Businesses that encourage a culture of constant learning are often better equipped to deal with new challenges and opportunities (Lombardo and Eichinger, 2000).

Finally, cognitive agility is about how quickly individuals within a company can adapt their thinking to new situations. Although changing strategies or organizational processes are vital from the organizational level perspective, it's also quite critical to be adaptive to new mindsets and perspectives at an individual level. Good and Yeganeh (2012) define cognitive agility as "an individual's capacity to flexibly operate with openness and focused attention." Cognitive agility allows employees to remain innovative, solving problems creatively and effectively even when the ground is shifting beneath them. It is crucial in knowledge-driven fields, where fresh ideas and new approaches are crucial (Hodgkinson and Healey, 2011). When employees can think quickly and adapt their mental models, the whole organization benefits, becoming more agile and better able to navigate complex environments (Dyer and Ericksen, 2006).

All these different types of agility are interconnected. Companies that excel at operational agility are often better positioned to develop market agility because they can adjust their processes to meet customer needs more quickly (Overby et al., 2006). Similarly, strategic agility often leads to greater cognitive agility within the organization, as employees are encouraged to think flexibly and creatively approach problems. Ultimately, the most successful organizations are those that cultivate multiple forms of agility, using them together to create a more adaptive and resilient business (Weber and Tarba, 2014).

### **2.3. Concept of Workforce Agility**

In this section, several of the most used definitions of workforce agility will be explained, and different aspects of the notion will be discussed. In the second part of the section, a systematic literature review table will be presented, prepared using the Scopus Database and business and management-related articles.

Among the various classifications of agility in literature, workforce agility stands out as a critical component in the evolution of the agility concept. Contemporary business environments are frequently described as VUCA — volatile, uncertain, complex, and ambiguous — demanding that people and teams react to evolving situations (Bundtzen and Hinrichs, 2021). Workforce agility emphasizes employees' ability to immediately adapt, adopt novel advances, and respond to evolving expectations of the external environment. This adaptability level is essential in rapidly evolving sectors, such as technology or finance. In its absence, enterprises may encounter difficulties in maintaining pace (Dyer and Ericksen, 2006). Workforce agility fundamentally surpasses basic technical skills; it involves building a more versatile culture where employees continuously learn, adapt, and are prepared to confront forthcoming challenges (Sherehiy et al., 2007).

In recent years, the focus on workforce agility has grown significantly. As organizations recognize the need for employees who can adapt quickly to new challenges, the ability to foster an agile workforce has become a key priority. Workforce agility indicates the collective capacity of the firm's personnel to swiftly adapt to evolving circumstances. As the uncertainty level of the market conditions increases exponentially, adjustment levels demanded by the external environment also increase rapidly. Therefore, building up an agile workforce is one of the primary criteria for staying in the business and sustaining the company's competitive power (Felipe et al., 2017). Like most of the agility types in the literature, workforce agility also refers to the ability to proactively identify upcoming market changes and prepare necessary contingency action plans accordingly to decrease the dependency level and retain the competitive advantage (Teece et al., 2016).

An agile workforce is inherently flexible and able to adjust as needed. Agile workers tend not to be restricted by rigid job roles or constrained by inadequate explanations of responsibilities. Instead, they are advised to welcome fresh challenges, shift

occupations as needed, and collaborate among teams (Sherehiy et al., 2007). Cross-functional teams—where people from several company departments interact to solve problems or start innovative projects—are often the foundation of agile teams. This form of collaboration fosters creativity by introducing people to several points of view and ideas. This kind of workforce agility can provide an essential edge over others in fields where adaptability is crucial, such as technology or consumer goods (Boehm and Turner, 2004).

Workforce agility can sometimes be mentioned as employee agility in literature, which is equally critical on an individual basis. Workers who are agile are able to pick up new tasks fast, adjust to different situations, and generally like change. Having the ability to quickly adapt to new situations and technology is essential in fast-paced workplaces where individuals are frequently expected to acquire fresh expertise on the spot (Verma, 2024). Employees who are agile not only accept but also embrace challenges. They're quick to pick up new information and are pioneers when it comes to trying out cutting-edge technology (Pulakos et al., 2000). Employees with the capability of being agile support increasing businesses' innovativeness, encounter and solve interruptions, and keep the firm's advantage in the market (DeRue et al., 2012).

As the fourth industrial revolution came into our lives, digital transformation has been a major factor in increasing workforce agility. Employees' capacity to absorb and utilize new technological knowledge and skillsets is becoming increasingly crucial as more enterprises integrate technological advancements into their everyday activities. Personnel not only require basic expertise about technological changes and new complex devices, but they also demand to know how to use it to their advantage for increased productivity and creativity (Overby et al., 2006). To stay effective in sectors undergoing digital transformation, firms must have an agile workforce (Bharadwaj et al., 2013). Employees who can learn faster and use the latest technology are vital to companies because they are capable of solving difficult challenges in novel ways.

However, technological and occupational agility aren't the only parts of an agile workforce; emotional and cognitive agility are similarly essential. The capacity to control one's emotions, keep one's cool under pressure, and adjust to new situations are all components of emotional agility (Cameron and Green, 2019). This agility becomes critical in fast-paced workplaces where workers are expected to maintain their concentration and output in the face of formidable obstacles. Emotionally agile workers are crucial in dynamic and chaotic workplaces because they can better deal with uncertain circumstances. Employees who are cognitively agile show qualities such as high levels of adaptiveness and flexibility, can alter their point of view, and face challenges from multiple aspects, thus enabling creativity and novel ideas (Hodgkinson and Healey, 2011).

The global COVID-19 pandemic emphasized the significance of an agile and flexible workforce as businesses were forced to respond rapidly to changes in customer needs, working conditions, supply chain interruptions, and remote labor (Dirani et al., 2020). It can arguably be said that the criticality of workforce agility is no longer open for discussion since companies with agile workforces performed superior in transitioning to huge changes in circumstances. Emotional agility was just as important as cognitive agility during the pandemic when workers were forced to deal with anxiety and unpredictability as they adjusted to new technology and working situations (Cameron and Green, 2019). The ability to quickly adapt to changing market conditions has become crucial for numerous companies (Felipe et al., 2017).

For long-term stability in the economy's unpredictable and dynamic environment today, the workforce's agility is an essential requirement. A further consideration is that an increase in workforce agility improves the firm's chances of withstanding disruptions and leveraging new opportunities. As for Sherehiy et al. (2007), such workforces, in this case, both employees and management, are inventive and capable of accommodating alterations, providing even further competitive advantage to an organization in a challenging environment. However, it seems that in the foreseeable future, industries will continue to transform their workforces to remain successful in the marketplace (Tece et al., 2016).

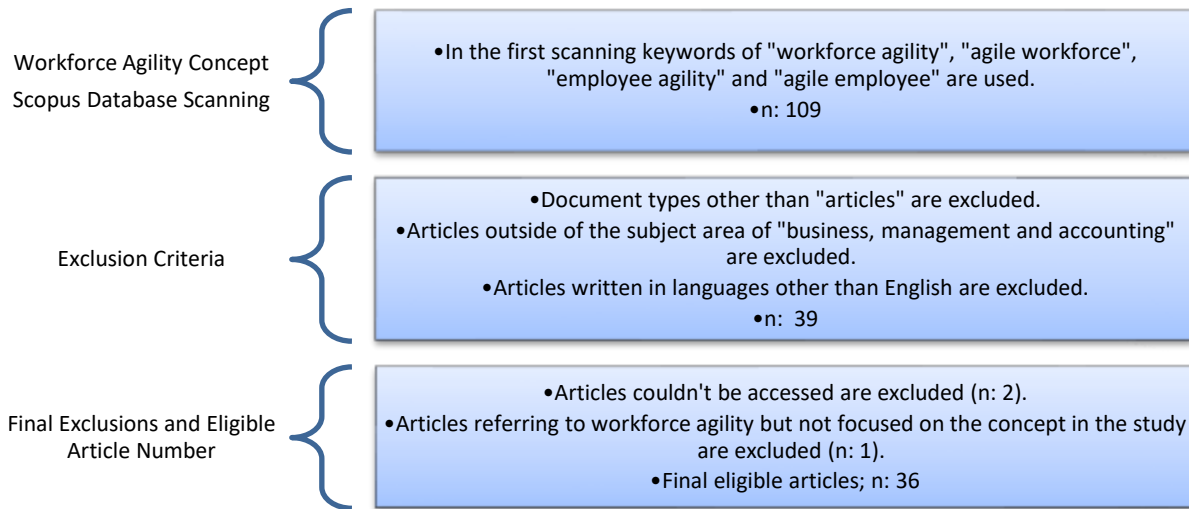
### **3. DATA AND METHODOLOGY**

In this section, the concept of workforce agility is examined from two main perspectives. The first aspect is based on the information obtained through a systematic literature review concerning the studies listed in the Scopus Database. The second aspect is based on the information provided from domestic research, such as dissertations and articles published in Turkey.

#### **3.1. Systematic Literature Review for Workforce Agility**

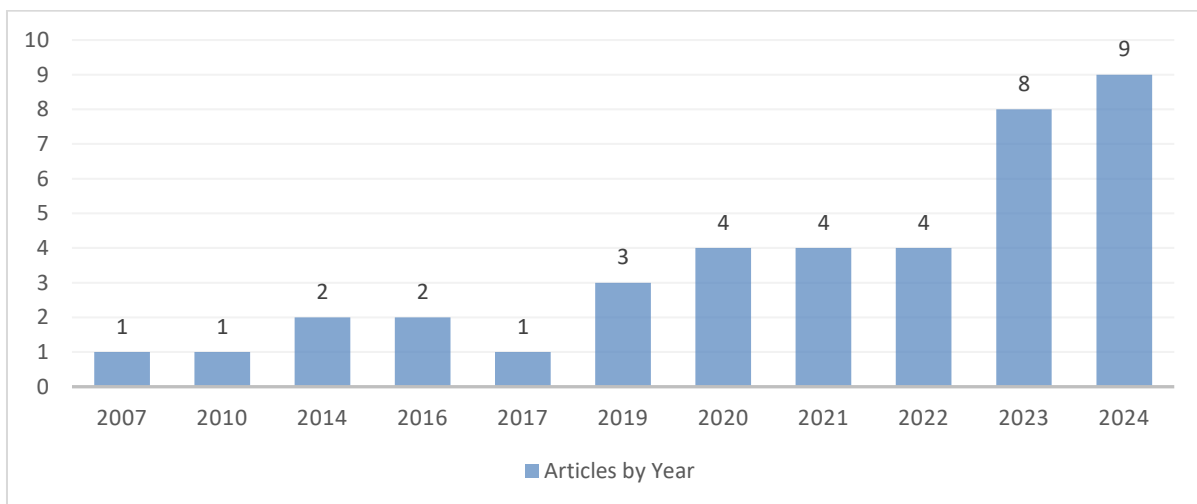
Figure 5 shows the phases of selecting eligible publications for the systematic literature review. The first step is to choose the database to reach high-quality sources. For this study, the Scopus database is chosen for its vast sources and high citation indexing. After the selection of the source database, the first scanning is executed with the following keywords: "workforce agility", "agile workforce", "employee agility", and "agile employee." Although the primary focus of the study is about workforce agility, workforce and employee words can be used interchangeably for this concept in literature.

**Figure 5: Process of Resource Selection for Systematic Literature Review**



In the first scanning, 109 documents are found and examined for eligibility and relativeness for the systematic literature review. In the next step, the following criteria are chosen for further filtering; “Business, Management and Accounting” category for the subject area, English for the language filtering, and “article” for the document type. After the final filtering, 36 articles are found eligible for the review. In the following figures and tables, additional information, such as the number of articles published through the years, their subject areas, and distribution between the countries, can be found.

**Figure 6: Articles by Year**



Source: Scopus Database (October, 2024)

As can be seen in Figure 6, articles indexed in the Scopus Database regarding workforce or employee agility concepts have dramatically increased in the last two years, which can be interpreted as researchers' recognition of the topic's criticality.

**Table 1: Articles by Subject Area**

Subject Area	No. of Articles
Business, Management and Accounting	39
Decision Sciences	9
Social Sciences	6
Engineering	5



Subject Area	No. of Articles
Computer Science	3
Psychology	3
Economics, Econometrics and Finance	1
Physics and Astronomy	1

Source: Scopus Database (October, 2024)

Table 1 presents the distribution of articles on workforce agility written in English across various areas. Although it is evident from the table that workforce agility is most frequently studied in business, management, and accounting as the primary discipline, it also can be seen that the topic is also examined in fields such as decision sciences, social sciences, engineering, and computer science. Thus, it can be easily said that the concept can be examined and interpreted in multiple different contexts.

**Table 2: Articles by Country/Territory**

Country/Territory	No. of Articles
India	20
China	7
Iran	3
Pakistan	3
South Africa	3
United Kingdom	3
Germany	2
Ghana	2
Malaysia	2
Norway	2

Source: Scopus Database (October, 2024)

Table 2 highlights the countries where workforce agility articles in the Scopus database are listed. As the table clearly shows, more than half of the articles found eligible for this research are listed from India, followed by China.

**Table 3: Detailed Information for 36 Eligible Articles Regarding Authors, Goal, Methodology, Framework, Additional Variables, Sample and Findings**

Authors	Goal	Methodology	Workforce Agility Framework	Other Variables in the Research Model	Sample	Findings
Iravani and Krishnamurthy (2007)	Investigate workforce management in repair/maintenance contexts by cross-trained workmen.	A numerical study is used based on multiple different scenarios for test cases.	No dimensions	-	-	Static machine-priority rules minimize system downtime; hidden symmetry improves repair environments.
Qin and Nembhard (2010)	Examine how to promote workforce agility in uncertain production environments using real options.	The real options valuation technique is used for workforce planning during the product lifecycle.	No dimensions	-	-	The real options approach significantly improves agility in high-demand volatility scenarios.
Alavi et al. (2014)	Investigate the impact of organizational structure and learning on workforce agility.	Structural Equation Modeling	Proactivity, Adaptability, Resilience	Organizational Learning, Organic Structure	Iranian SMEs, n: 161	Decentralization, flat structure, and organizational learning positively affect workforce agility.
Al-Faouri et al. (2014)	Analyze the effect of the agility of the workforce on declarative and procedural organizational memory.	Hierarchical Multiple Regression Analyses	Proactivity, Adaptability, Resilience	Organizational Memory	Mobile communications companies in Jordan, n: 430	Proactive workforce improves both declarative and procedural memory.

Alavi (2016)	Analyze the ways in which the agility of the workforce may affect external manufacturing flexibility within SMEs.	Structural Equation Modeling	Proactivity, Adaptability, Resilience	External Manufacturing Flexibility	Iranian SMEs, n: 161	Workforce agility significantly enhances new product, mix, and volume flexibility.
Muduli (2016)	Examine organizational practices that support the agility of the workforce and the mediating effect of psychological empowerment.	Multiple Regression Analyses	No dimensions	Organizational Practices, Psychological Empowerment	Manufacturing and Service Companies in India N: 344	Teamwork and reward system have the greatest influence on workforce agility; psychological empowerment mediates organizational practices and agility.
Muduli (2017)	Examine how organizational practices and psychological empowerment contribute to workforce agility.	Multivariate Regression Analysis	No dimensions	Organizational Practices, Psychological Empowerment	Manufacturing and Service Companies in India N: 524	Teamwork has the highest influence on agility; psychological empowerment also plays a crucial role.
Patil and Suresh (2019)	Identify and frame the factors that influence workforce agility in IoT-enabled projects.	Total interpretive structural modeling (TISM) of IoT project environments.	Workforce Agility Enablers	Workforce Agility Enablers	IoT Organizations in India N: 25 (Interviews)	Employee proactivity, innovativeness, and resiliency are key enablers of agility in IoT projects.
Rani et al. (2019)	Investigate the impact of holacracy on organizational performance and employee agility.	Conceptual analysis of holacratic management and its impact on organizations.	No dimensions	Organizational Performance	Interview with high-level officers of five manufacturing companies in India	Holacracy enhances employee performance by reducing hierarchical levels and increasing decision-making flexibility.
Pitafi et al. (2020)	Examine the impact of enterprise social media (ESM) on employees' agility with focus on IT skills and experience in the workplace.	Hierarchical Regression Analysis	Proactivity, Adaptability, Resilience	ESM Usage, Work Expertise, IT Proficiency	Two-wave data from 306 employees in Chinese organizations using ESM.	ESM usage enhances employee agility, especially among those with high work expertise; IT proficiency is not a significant moderator.
Storme et al. (2020)	Investigate psychological traits that predict workforce agility and build an inventory to measure agility potential.	Qualitative interviews and quantitative testing of psychometric properties (Structural Equation Method)	No dimensions	Psychological Traits	N1: 11 Professionals for qualitative study N: 808 workers for a quantitative study.	Traits such as job curiosity, ambiguity tolerance, and risk-taking predict workforce agility.
Tamtam and Tourabi (2020)	Create a model for assessing employee agility in Moroccan manufacturing based on fuzzy logic.	Applied fuzzy logic to assess workforce agility enablers.	No dimensions	Workforce Agility Enablers	Moroccan manufacturing company.	Key enablers include engagement, knowledge sharing, and self-motivation.
Varshney and Varshney (2020)	Explore how emotional intelligence influences workforce performance with workforce agility as a mediator.	Survey data from small entrepreneurial firms in India were analyzed using statistical methods.	No dimensions	Emotional Intelligence, Workforce Performance	Six entrepreneurial companies in India. N: 256	Workforce agility mediates emotional intelligence and performance.
Abrishamkar et al. (2021)	Examine how workforce agility impacts the growth of high-tech firms, with innovation as a mediator.	Logistic regression analysis of data from high-tech firms in Iran.	Proactivity, Adaptability, Resilience	High-Growth Firms, Innovation	High-tech manufacturing firms in Iran. N:169	Workforce agility significantly increases the likelihood of firms becoming high growth, mediated by product innovation.

Almahmeed and Salih (2021)	Validate workforce agility attributes for performance development in Royal Bahraini Armed Depots.	Exploratory and confirmatory factor analysis	Flexibility, Adaptability, Motivation, Training, Participation, Empowerment	Performance Development	Royal Bahraini Armed Depots. N:300	Agility attributes are valid for measuring performance development.
Tessarini Jr. And Saltorato (2021)	Conduct a systematic literature review on workforce agility and propose a research agenda.	Systematic literature review of articles from three databases.	-	-	Web of Science, Scopus, Science Direct N: 31 articles	Agility has four key dimensions: proactivity, flexibility, resilience, and competence.
Thayyib and Khan (2021)	Investigate the role of demographic variables in determining the relative employee agility levels among tax practitioners.	Descriptive statistics.	Responsiveness, Flexibility and Adaptability, Up-skilling, Collaboration, Speed, Proactiveness, Informativeness	Demographics	Survey of tax professionals in Bangalore N:220	Demographic factors such as age and experience influence agility scores.
Ajgaonkar et al. (2022)	Identify drivers of workforce agility from a dynamic capability perspective in IT companies.	Interviews and qualitative analyses	Drivers of Workforce Agility	Drivers of Workforce Agility	Qualitative interviews with senior IT professionals and managers. N:19	Sensing, seizing, and continual renewal are key drivers of workforce agility.
Franco and Landini (2022)	Understand how agility within employees is to contribute to innovation in organizations.	Analysis of a large sample of firms across 28 countries using survey data.	Time Agility, Task Agility	Firm Innovation	ECS Data.	Task agility is particularly important for process innovation, while time agility has a lesser impact.
Salmen and Festing (2022)	Conduct a systematic literature review of employee agility resources focusing on the theoretical and measurement approaches used.	Systematic literature review of academic databases on employee agility.	Learning Agility, Innovative Work Behavior	Job Demands Flexibility-Promoting HR practices	Web of Science N:61 articles	Employee agility is under-researched, especially in terms of HRM's role; proposes a new framework for future research.
AlAbood and Mohammedsmail (2023)	Examine how innovative work behavior is explained by the agility of the workforce, organizational identity, and solidarity.	Structural Equation Modelling	Proactivity, Adaptability, Resilience	Organizational Identification Organizational Solidarity Innovative Work Behavior	Survey of respondents from various industries in Saudi Arabia. N: 364	Workforce agility, organizational identity, and solidarity are positively related to innovative work behavior.
Das et al. (2023)	Explore how workforce agility can result in firm performance and reputation among IT firms in India.	Structural Equation Modelling	Proactivity, Adaptability, Resilience	Transformational Leadership, Talent Management, Firm Size, IT hub, Financial and non-financial performance, Corporate Reputation	Middle-level executives from IT firms. N: 225	Workforce agility enhances firm performance and corporate reputation; transformational leadership and talent management are key enablers.
Hanu et al. (2023)	Assess the influence of work-based learning on employee agility, ambidexterity, and goal-generating in the context of Ghana.	Structural Equation Modelling	No dimensions.	Work Based Learning, Supportive Organizational Culture, Proactive Goal Generation, Employee Ambidexterity	Cross-sectional survey in Ghana. N: 443	Work-based learning positively impacts agility, ambidexterity, and proactive goal generation, with agility having the strongest effect.

Janani and Vijayalakshmi (2023)	Propose an arts-based process of improving the workforce agility in Indian companies.	Conceptual model using intermodal arts-based intervention (IABI) to enhance epistemic curiosity and manage ruminative thoughts.	No dimensions.	Intermodal Arts-Based Intervention, Epistemic Curiosity, Reflective Pondering, Brooding, Trait Joy	-	Arts-based interventions can enhance agility by fostering curiosity and adaptive behaviors.
Pitafi et al. (2023)	Examine how ESM visibility affordance impacts employee agility through knowledge transfer.	Structural Equation Modelling	Proactivity, Adaptability, Resilience	ESM Affordance Knowledge Transfer, Task Interdependence	Two-wave data collection from employees in China and the U.S. N: 682	Visibility affordances of ESM (message transparency, network translucence) positively affect employee agility via knowledge transfer.
Rasheed et al. (2023)	Explore the relationship between ESM and employee creativity with the degree of employee agility and degree of communication visibility as moderator variables.	Statistical analyses. PROCESS macros in SPSS.	No dimensions.	ESM Usage Communication Visibility, Employee Creativity	Multi-wave study with data from employees in China and the U.S. N: 448	Employee agility mediates the relationship between ESM usage and creativity, moderated by communication visibility.
Talwar et al. (2023)	Examine how ESM affordances impact employee agility via social networking ties.	Structural Equation Modelling	Proactivity, Adaptability, Resilience	Enterprise Social Media Affordance Networking Ties	Data collected from Chinese professionals using ESM in workplaces. N: 318	ESM affordances (e.g., microblogging, PDAs) positively affect agility through instrumental and expressive social networking ties.
Sameer (2024)	Analyze the impact of digitalization and organizational support regarding workforce agility and task achievement.	Multiple linear regression analysis	No dimensions.	Perceived Usefulness of Digitalization, Task Performance, Perceived Organizational Support	Survey of managers in Indian public sector organizations N: 201	Digitalization enhances agility, which in turn improves task performance; organizational support has a limited direct role.
Chong and Zainal (2024)	Analyze the role of employee agility in the relationships between vitality, digital literacy, transformational leadership and job performance.	Smart PLS Predictive Analysis	Proactivity, Adaptability, Resilience	Employee Vitality, Digital Literacy, Transformational Leadership, Job Performance	Survey of HR professionals in Malaysian manufacturing companies. N: 300	Employee agility mediates the positive relationships between vitality, digital literacy, transformational leadership, and job performance.
Muduli and Choudhury (2024)	Evaluate the role of workforce agility in adoption and outcomes of digital technologies in Indian banking sector.	Structural Equation Modelling	No dimensions.	Digital Technology Adoption, Digital Technology Outcome	Survey of banking executives in India. N: 185	Workforce agility mediates the relationship between digital technology adoption and digital technology outcomes.
Naim et al. (2024)	Investigate how empowering leadership influences employee agility, with a focus on psychological safety and knowledge sharing.	Structural Equation Modelling	Proactivity, Adaptability, Resilience	Empowering Leadership, Psychological Safety, Knowledge Sharing	Survey of employees in India's IT sector. n: 924	Empowering leadership fosters employee agility through psychological safety and knowledge-sharing behaviors.
Panda (2024)	Study how ambidexterity impacts employee agility, moderated by organizational tenure.	Structural Equation Modelling	Proactivity, Adaptability, Resilience	Employee Ambidexterity, Employee Organizational Tenure	Survey of bank managers in India. N: 202	Employee ambidexterity is a strong predictor of agility, with tenure moderating this relationship.

Sackey et al. (2024)	Examine how internal marketing orientation affects innovative behavior through workforce agility and psychological empowerment.	Hierarchical regression is used.	No dimensions.	Internal Marketing Orientation, Psychological Empowerment, Employee Innovative Behavior	Survey of hospitality employees in Ghana. N: 731	Workforce agility mediates the relationship between marketing orientation and innovative behavior, moderated by psychological empowerment.
Sharma et al. (2024)	Examine the mediating role of readiness to change in the relationship between agility and digital transformation.	Structural Equation Modelling	No dimensions.	Readiness to Change, Digital Transformation	A two-wave survey from Indian organizations. N: 161	Workforce agility positively influences readiness to change, which mediates digital transformation outcomes.
Srigouri and Muduli (2024)	Find out how performance coaching and employee agility affect training transfer in Indian MSMEs.	Structural Equation Modelling	No dimensions.	Performance Coaching, Training Transfer	Survey of MSME employees in India. N: 411	Employee agility mediates the relationship between performance coaching and training transfer.
Yang et al. (2024)	Study how developmental HR practices impact employee agility, with thriving at work as a mediator and workplace spirituality as a moderator.	Structural Equation Modelling	Initiative, Adaptability, Resilience	Developmental Human Resource Practices, Thriving at Work, Workplace Spirituality	Survey of employees in China. N: 428	Developmental HR practices enhance agility, mediated by thriving at work and moderated by workplace spirituality.

#### 4. FINDINGS AND DISCUSSIONS

Upon examining the detailed information in Table 3, identified patterns regarding the research methods are as follows: Structural Equation Modeling (SEM) was used in 14 of the 36 studies (Alavi et al., 2014; Alavi, 2016; Storme et al., 2020; AlAbood and Mohammedsmaail, 2023; Das et al., 2023; Hanu et al., 2023; Pitafi et al., 2023; Talwar et al., 2023; Muduli and Choudhury, 2024; Naim et al., 2024; Panda, 2024; Sharma et al., 2024; Srigouri and Muduli, 2024; Yang et al., 2024), while regression analysis was applied in 8 studies (Al-Faouri et al., 2014; Muduli, 2016; Muduli, 2017; Pitafi et al., 2020; Varshney and Varshney, 2020; Abrishamkar et al., 2021; Sameer, 2024; Sackey et al., 2024). Systematic literature reviews were conducted in 2 studies (Tessarini Jr. and Saltorato, 2021; Salmen and Festing, 2022), and a conceptual approach was used in 2 studies (Rani et al., 2019; Janani and Vijayalakshmi, 2023). Various other methods were used in the remaining studies such as a fuzzy logic approach (Tamtam and Tourabi, 2020), EFA and CFA for a scale generation (Almahmeed and Salih, 2021), a qualitative approach (Storme et al., 2020; Ajgaonkar et al., 2022), and a real options valuation technique (Qin and Nembhard, 2010).

Of the 36 studies, 28 are based on survey data, while qualitative data was obtained in only two studies (Storme et al., 2020; Ajgaonkar et al., 2022). The sample size of the studies is also stated in Table 5 (if available) for respective studies, so it will not be repeated in this part.

When examining the conceptual frameworks of workforce agility used in the studies, it is observed that 13 of the 36 studies utilize the subdimensions of proactivity, adaptivity, and resilience (Alavi et al., 2014; Al-Faouri et al., 2014; Alavi, 2016; Pitafi et al., 2020; Abrishamkar et al., 2021; AlAbood and Mohammedsmaail, 2023; Das et al., 2023; Pitafi et al., 2023; Talwar et al., 2023; Chong and Zainal, 2024; Naim et al., 2024; Panda, 2024; Yang et al., 2024). Additionally, some studies used alternative frameworks for workforce agility such as time agility and task agility (Franco and Landini, 2022), learning agility and innovative work behavior (Salmen and Festing, 2022), and alternative dimensions like flexibility, adaptability, motivation, training, participation, empowerment, responsiveness, up-skilling, collaboration, speed, proactiveness and informativeness (Almahmeed and Salih, 2021; Thayyib and Khan, 2021). Furthermore, there are 14 studies in which workforce agility is specified as a single dimension (or not specified at all) in the research model.

Table 3 shows the variables included in the same model with workforce agility and their relationships in a detailed perspective, indicating the variables that show a significant effect highlighted in the findings column.

Upon examination of Table 3 in detail, the goals, methodologies, workforce agility frameworks used in the research, other variables in the research models, sample size, and findings are compiled and highlighted in the following part. Additionally, the most frequently cited articles among those included in the systematic literature review are listed in Table 4. Out of the

36 articles included in the study, 30 received a total of 932 citations, while six articles received none. The top 5 most-cited articles among those included in the study are as follows.

**Table 4: Top 5 High-Cited Publications in Scopus about Workforce Agility**

Author and Publication Year	Publication Name	Scopus Citation	%
Alavi et al. (2014)	"Organic structure and organisational learning as the main antecedents of workforce agility"	149	16
Patil and Suresh (2019)	"Modelling the Enablers of Workforce Agility in IoT Projects: A TISM Approach"	123	13,20
Muduli (2016)	"Exploring the facilitators and mediators of workforce agility: an empirical study"	82	8,80
Muduli (2017)	"Workforce agility: Examining the role of organizational practices and psychological empowerment"	82	8,80
Pitafi et al. (2020)	"Employee agility and enterprise social media: The Role of IT proficiency and work expertise"	61	6,54
Total		497	53,34

Source: Scopus Database (October 2024)

According to Table 4, the top 5 most-cited articles constitute 53% (497 citations) of the total citations received by the 36 articles. The most-cited study, with 149 citations, is Alavi et al.'s (2014) research examining the impact of organic structure and organizational learning on workforce agility. This is closely followed by Patil and Suresh's (2019) publication, which investigates workforce agility enablers in IoT projects, with 123 citations. In third and fourth places are Muduli's studies, both with 82 citations: the 2016 study examining the facilitators and mediators of workforce agility and the 2017 study evaluating its relationships with organizational practices and psychological empowerment. In fifth place, with 61 citations, is Pitafi et al.'s (2020) study, which examines the role of IT proficiency and work expertise in the relationship between employee agility and enterprise social media.

Furthermore, the numbers shown in Table 5 are extracted when examining the number of publications by authors on this concept and the total citations per author.

**Table 5: Number of Publications and Citations Per Author**

Author	Number of Publications	Number of Citations
Muduli, Ashutosh	4	164
Pitafi, Abdul Hameed	3	92
Rasheed, Muhammad Imran	3	92
Alavi, Somaieh	2	177
Mishra, Shreya	2	33

Source: Scopus Database (October, 2024)

When looking at the individual data in Table 5, Muduli is observed to have made the highest contribution within the sample, with four studies. Pitafi and Rasheed follow Muduli with three studies each. Alavi and Mishra are also in the top 5, each with two studies. Based on Scopus data, the remaining authors included in this study have each contributed with 1 study to the concept of workforce agility. On the other hand, although Muduli is one of the most-cited authors with 164 citations, this number falls below the 177 citations received by Alavi, who contributed with only two studies.

#### 4.1. Domestic Studies Regarding Workforce Agility: Dissertations and Articles

This section focuses on the domestic studies conducted in Turkey with a detailed discussion of their goal, samples, and findings. The highest number of publications by academicians and graduate students in Turkey regarding workforce and employee agility were found via Google Scholar and the YÖK Thesis Center. According to the search conducted on the database of YÖK Thesis Center, five thesis studies on workforce agility were found that were conducted in the field of business administration, as shown in Table 6. Furthermore, a search through Google Scholar of the domestic studies dealing with workforce agility returned a total of only six studies, which is demonstrated in Table 7.

In his dissertation work, Karalar (2015) assessed how reward management influences organizational identification and workforce agility in the hospitality sector, specifically in five-star hotels in the Istanbul context. Therefore, the study aims to determine and measure the relationship between reward management and the level of satisfaction, as well as the middle-

and upper-level managers working in a highly competitive environment. The study utilized correlations and regression analysis and tested the linkages between the three variables in administering the measured survey: reward management, organizational identification, and workforce agility. Through the administration of the questionnaire, data was collected from a sample of 308 managers, and the results obtained suggest that there is a positive correlation and regression between reward management practices and organizational identification and between intrinsic rewards and proactivity. However, key socio-demographic factors such as gender, age, and years of service seem to have significantly impacted the respondents' perceptions and response patterns, thus impacting the perceptions of rewards received and their level of agility. In Karalar's study, he emphasizes the importance of reward management as a tool that increases employees' organizational identification and agility levels in competitive areas of service provision (Karalar, 2015).

**Table 6: Dissertations Written in Turkey About Workforce Agility**

Author and Year	Dissertation Name	Program
Karalar (2015)	Ödül yönetiminin örgütsel özdeşleşme ile işgücü atikliği üzerine etkisi ve bir araştırma	Ph.D.
Özbay (2017)	Örgütsel sinizm ve işgücü atikliği arasındaki ilişki ve bir araştırma	Master's
Aktaş (2019)	Mahalli idarelerde politik beceriler iş gücü atikliği ve liderlik stili arasındaki ilişkilerin incelenmesi	Master's
Demirler (2023)	Dijital örgüt kültürü bağlamında işgücü çevikliği, yabancılaşma ve psikolojik güçlendirme ilişkisi	Ph.D.
Hacıoğlu (2024)	İnsan kaynakları yönetimine yönelik yapay zeka algısının çalışanların çeviklik performansı ve işe bağlanması üzerindeki etkisi	Master's

Source: Council of Higher Education, Thesis Center (October 2024)

Özbay (2017) addresses the interrelatedness of organizational cynicism and workforce agility from the Turkish energy sector employees' perspective. The critical focus is determining the effect of cynicism in organizations on workers' agility, particularly the variations resulting from demographic variables. In the process of evaluation, the data obtained from existing scales of Sherehiy's Workforce Agility Scale (2008) and Brandes et al.'s Organizational Cynicism Scale (1997), as reproduced in Turkish by Karacaoğlu and İnce (2012) are employed. Overall, results show that there is an inverse relationship between the levels of organizational cynicism and the employees' workforce agility. It had been anticipated that gender, age, and tenure would also affect agility levels, and the results support this anticipation. It is found that men tend to be more agile while younger women with shorter tenures have higher levels of cynicism especially. This means that there is a clear need, and most importantly, a practical application of finding ways of decreasing cynicism in order to increase agility, which is an important commodity in today's fast-moving economic environment (Özbay, 2017).

Aktaş (2019) focuses on the relationship between political skills, workforce agility, and leadership styles in the local government. The purpose of this research is to find out how political skills and leadership styles affect agility, particularly in municipal administrations. Incorporating a survey method, Aktaş initiated a survey of 33 local government mayors and 109 local government private secretaries in Turkey and analyzed the data collected through correlation and factor analysis. The study shows that the leaders' political skills and leadership styles, as perceived by these leaders, have significant relationships with workforce agility. Political skills, as well as political-type leadership, were found to influence employees' perceptions of their leaders' styles and were found to affect workforce agility. In other words, management staff who want to create an agile workforce in public administration should pay attention to these issues (Aktaş, 2019).

As part of the PhD dissertation evaluation, Demirler (2023) focuses on digital cultures: workforce agility, alienation, and psychological empowerment. The dissertation sheds light on the paradox that the strain of digital organizational cultures can engender alienation but suggests that workforce agility and psychological empowerment may alleviate the problem. Using a mix of methods, including bibliometric analysis, content analysis, and field study interviews of nine bank managers and a survey of 317 bank staff from Manisa, Turkey, Demirler employed a field approach. The results of this study found that alienation and workforce agility have a negative relationship and that situational psychological empowerment, which is a sense of meaningful work, has a moderating effect. This means that empowering strategies can lower alienation in staff and, at the same time, enhance digital organizational cultures, affording and retaining agility (Demirler, 2023).

Finally, Hacıoğlu (2024), one of the contributors from Turkey, investigates AI's impact on employees' attitudes toward work engagement and workforce agility in Human Resource Management. It specifically seeks to evaluate the ability of AI-powered HRM to increase the level of agility and engagement that is core to the organization's overall performance. The quantitative survey method applied in the study reveals positive relationship regression analyses between employees' perception of AI in HRM practices and engagement and agility. These outcomes point to the potential of AI-integrated HRM strategies to enhance organizational outcomes by promoting dedicated and agile teams (Hacıoğlu, 2024). Studies conducted concerning

further processes on workforce agility in Turkey contribute to a better understanding of the other sectors and the determinants of the process at the individual and organizational layers.

**Table 7: Articles Written in Turkey About Workforce Agility**

Author and Year	Article Name
Demir and Yaşar (2018)	Ödül Yönetiminin İşgücü Atıklığı Üzerine Etkisi: Kahramanmaraş İli Tekstil Sektöründe Bir Araştırma
Aktaş and Ülgen (2021)	Yenilikçi İnsan Kaynakları Yönetim Uygulamalarının Örgütsel Çeviklik Üzerindeki Etkisi: Savunma Sanayi İşletmelerinde Bir Araştırma
Demirler and Oral Ataç (2022)	İşgücü Çevikliği Literatürünün Bibliyometrik Analizi
Çömlekçi and Bozkurt (2024)	Dijital Liderlik ve Bireysel Yenilikçilik İlişkisinde İşgücü Çevikliğinin Rolü
Düger (2023)	İşgücü Çevikliğinin Öncülleri ve Etkilerini Belirlemeye Yönelik Sistemik Bir Analiz
Gerçek (2023)	İnsan Kaynakları Yönetimi (İKY) için "Çevik" Ne Anlama Geliyor? İKY ve Çeviklik Kavramına İlişkin Bir Sistemik Derleme Çalışması

Source: Google Scholar (October 2024)

When the studies indicated in Table 7 are examined, it can be seen that several studies on workforce agility in Turkey are empirical, meaning that they collect and analyze primary data to establish correlations and impacts within various spheres of activity. For example, Demir and Yaşar (2018) questioned reward management and its relations with workforce agility within the supply chains of the textile sector. The research encompassed the collection of data from 132 employees. It targeted surveys to determine how structured reward systems can maximize employee agility in responding to changes in the environment. This increased agility is most needed in business sectors such as textile manufacturing, in which a fast-changing market and production processes need employees who can withstand alteration (Demir and Yaşar, 2018). Like that, Aktaş and Ülgen (2021) conducted empirical research in the defense industry, collecting data on 498 white-collar employees and their managers. The authors examined the role of innovative HR practices on organizational agility and confirmed a statistically valid link between agile HR practices and higher organizational ability of adaptiveness (Aktaş and Ülgen, 2021).

Different empirical research embraced by Çömlekçi and Bozkurt (2024) investigated the information and communication technology (ICT) sector. They gathered a sample of 200 employees in order to test the mediating effect of workforce agility on the relationship between digital leadership and individual innovativeness. It was suggested that digital leadership directly improves workforce agility and innovation, making agility critical in the fast-changing ICT sectors (Çömlekçi and Bozkurt, 2024).

Even though these studies focus on some very strong empirical bases via industries such as textile, defense, and ICT, there are other studies, such as those of Demirler and Oral Ataç (2022), Düger (2023) and Gerçek (2023) that even though are not empirical provide good reviews of the literature and analysis. In their article, Demirler and Oral Ataç (2022) reported the results of a bibliometric study of 52 selected articles on the topic of workforce agility, which made it possible to look at the history of the development of this field from much broader perspectives in the past two decades. The authors mention several trends, and after 2018, there has been a growing interest in individual characteristics of workforce agility (Demirler and Oral Ataç, 2022). In the same vein, Gerçek (2023) performed a systematic literature review on human resource management (HRM) and its relationship with agility, which describes how introducing agile HRM approaches strengthens organizational performance (Gerçek, 2023).

Furthermore, Düger's (2023) goal is to evaluate the factors affecting the agility of the workforce and the outcomes of having a workforce within organizations, considering that it can serve as a competitive advantage in fast-paced environments. Employee agility, which is the skill of responding to sudden changes, has become one of the workplace's must-have requirements. A systematic review is employed which incorporates the features of Tranfield et al. (2003), planning, doing, and reporting approach. Using Web of Science, Scopus, and Google Scholar as databases, Düger found 39 studies out of 195 publications on the research topic with inclusion and exclusion criteria like method focusing on quantitative, case studies about the agility of the workforce and quality of the studies.

The sample includes studies from diverse sectors, such as technology, manufacturing, and services, predominantly from countries like China, Iran, and the U.S., though research from Turkey remains limited. Findings reveal that workforce agility is driven by individual factors like emotional intelligence, team dynamics such as collaboration, and organizational enablers like learning culture and flexible structures. The study concludes that agile workforces enhance organizational performance, innovation, and adaptability, highlighting workforce agility as a critical factor for organizational success in uncertain environments.



## **4.2. Encountered Gaps in the Turkish Literature about the Concept**

Despite the valuable contributions of these studies, several gaps remain in the Turkish literature on workforce agility when compared with foreign publications. Initially, the number of empirical studies was still relatively low. Sector-level studies emphasize sectors such as textile, defense, and ICT. However, other significant sectors, such as health, education, public administration, and agriculture, have been given little attention. Such research could provide insight into the varieties of workforce agility across several industries and how these industries operate as a whole.

Another critical area that lacks attention is the style of management, which integrates the digital transformation and operation of the tools to drive agility. Even though studies such as Çömlekçi and Bozkurt (2024) point out that digital leaders have been vitally important in encouraging workforce agility, further studies are required to investigate the link, such as the traditional sectors that deal with the digital tools impact. Moreover, the organizational and managerial practices that affect workforce agility have been adequately covered, but additional studies on the individual level of the influence of such factors have not been done. For example, Demirler and Oral Ataç (2022) have stated that cognitive, emotional, and psychological flexibility is critical for workforce agility.

In addition, most of the studies available use a cross-sectional design, measuring workforce agility at a particular point in time. No such studies establish how agility grows over the years or perhaps as a response to external events such as recessions or pandemics. Such studies would shed light on the sustainability and growth of workforce agility over time in organizations. Also, most studies have concentrated on larger organizations, leaving a gap in the hows of workforce agility in small and medium-sized enterprises (SMEs), which are essential in Turkey's economy.

Finally, the existing literature does not adequately investigate Turkey's cultural and institutional settings. For instance, national labor laws or corporate culture may shape the work ethics associated with Turkish organizations in a way that differs from those of the rest of the world, which may affect workforce agility. With these dynamics being understood, the applicability of the study's findings within the context of Turkey may be more straightforward. There is also a notable gap in the literature on the influence of workforce agility on employee well-being, especially on job satisfaction and work-related stress.

## **5. CONCLUSION AND FURTHER IMPLICATIONS**

The notion of agility has been gaining notable attention in the organizational literature, as it has been termed an essential competency for companies to survive in fast-moving and unpredictable markets. Initially associated with manufacturing tasks (Sharifi and Zhang, 1999), agility now encompasses strategic, operational, and workforce aspects that allow organizations to respond flexibly to changes in the market and other instabilities (Doz and Kosonen, 2008). This ability to be responsive, especially during critical times such as COVID-19 times, has been regarded as a vital determinant (Teece et al., 2016).

Among the different types of organizational agility, workforce agility is a unique form of organizational agility that has been recognized as a key driver of organizational resilience and flexibility. Sherehiy et al. (2007) refer to workforce agility as employees' ability, which is defined as the readiness to learn new things, modify behavior, or apply fresh new ideas. This kind of culture makes employees active and encourages development in order to be more flexible. With the inexorably complicated evolution of the markets, employees fulfill a significant part of the organization's competitive advantage (Felipe et al., 2017).

The systematic literature review on workforce agility discusses several dimensions that are considered critical, such as proactivity, adaptability, and resilience (Alavi et al., 2014; Das et al., 2023). It also notes the role of emotional and digital intelligence as important factors (Overby et al., 2006; Varshney and Varshney, 2020). Important schemas explain how organizational practices and structures, including psychological empowerment and leadership styles, help to achieve the agileness of the workforce (Muduli, 2016; Abrishamkar et al., 2021). Moreover, studies in parts like technology, health care service, and services provide some context in terms of the different enablers and barriers to developing agility (Verma, 2024).

In Turkey, the reviewed literature on workforce agility, including theses and journal articles, pays attention to multiple workforce contexts. For instance, the thesis by Karalar (2015) investigates the role of the reward management system in workforce agility within the Turkish hospitality sector. Other interesting issues include the moderation effect of organizational cynicism, political skills, and digital leadership on an understanding of workforce agility (Özbay, 2017; Aktaş and Ülgen, 2021; Çömlekçi and Bozkurt, 2024). It should be noted that even though some of these studies do advance our understanding of workforce agility in the context of Turkey, they tend to be in sectors such as defense, hospitality, and ICT. However, these sectors are certainly in the minority of the broader picture as limited work has been done in public administration, health care, or education, pointing out a discussion for expansion of the construct of the workforce to these areas.

A particularly interesting finding that comes out when comparing studies from abroad with domestic studies is that while foreign literature considers workforce agility in multiple national and industrial settings, the majority of Turkish studies seem to be more focused on the particular and rather empirical investigations of the industry. For example, whereas foreign studies look at cross-cultural determinants of agility (Pitafi et al., 2020; Muduli and Choudhury, 2024), Turkish studies are rather concerned about specific traits of individual nuance within specific organizations. However, such insights are still valuable, and it should be noted that Turkish literature has not delved into wider, intersectoral, or temporally broader studies on workforce agility thus far.

Several voids can be identified in Turkish literature. First, many of the available domestic studies are cross-sectional in nature and, therefore, can depict only a picture of agility at a particular moment. Considering how fast the workforce's demands for agility are, a change over time longitudinal analysis is needed to gauge the context that forces agility in expanding across economic cycles. Furthermore, Turkish literature does not adequately examine individual traits, particularly cognitive and emotional agility, concerning workforce agility. Finally, the relationship between workforce agility and organizational health is rarely studied. Hence, the interplay concerning job satisfaction, stress, and retention of employees remains unaddressed.

In order to overcome these deficits, Turkish researchers, in particular, could carry out prospective research focusing on how agility is shaped over time, especially in the context of less developed sectors such as health, public administration, and education. At the same time, studying the importance of cognitive and emotional agility in particular industries in Turkey can provide a better understanding of agility at the individual level. Future research can also examine workforce agility among micro, small, and medium-sized enterprises and family-owned businesses, which are crucial for the Turkish economy but have a different level of partnership and ownership structure and a lower level of agility than more prominent companies. Finally, Turkish researchers can conduct cross-cultural research on the workforce agility of Turkish organizations and organizations in other countries to learn how the contextual factors vary the manifestations of agility and how Turkish organizations can adapt their agility strategies to specific features of Turkey's social and institutional environment.

## REFERENCES

- Abrishamkar, M. M., Abubakar, Y. A., & Mitra, J. (2021). The influence of workforce agility on high-growth firms: The mediating role of innovation. *The International Journal of Entrepreneurship and Innovation*, 22(3), 146–160. <https://doi.org/10.1177/1465750320973896>
- Ajgaonkar, S., Neelam, N. G., & Wiemann, J. (2022). Drivers of workforce agility: a dynamic capability perspective. *International Journal of Organizational Analysis*, 30(4), 951–982. <https://doi.org/10.1108/ijoa-11-2020-2507>
- Aktaş, İ. (2019). Mahalli idarelerde politik beceriler, iş gücü atikliği ve liderlik stili arasındaki ilişkilerin incelenmesi (Master's thesis). İstanbul Sabahattin Zaim Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Aktaş, B. N., & Ülgen, B. (2021). Yenilikçi insan kaynakları yönetim uygulamalarının örgütsel çeviklik üzerindeki etkisi: Savunma sanayi işletmelerinde bir araştırma. *Anadolu İktisat ve İşletme Dergisi*, 5(1), 49-73.
- AlAbood, A., & Manakkattil MohammedIsmail, S. (2023). Workforce agility, organizational identity and solidarity as antecedents of innovative work behaviour – an examination using structural equation modelling. *Benchmarking: An International Journal*. <https://doi.org/10.1108/bj-07-2022-0458>
- Alavi, S. (2016). The influence of workforce agility on external manufacturing flexibility of Iranian SMEs. *International Journal of Technological Learning, Innovation and Development*, 8(1), 111-127. <https://doi.org/10.1504/ijtliid.2016.075185>
- Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organisational learning as the main antecedents of workforce agility. *International Journal of Production Research*, 52(21), 6273–6295. <https://doi.org/10.1080/00207543.2014.919420>
- Al-Faouri, A. H., Al-Nsour, M. M., & Al-Kasasbeh, M. M. (2014). The impact of workforce agility on organizational memory. *Knowledge Management Research & Practice*, 12(4), 432–442. <https://doi.org/10.1057/kmrp.2013.19>
- Almahmeed, G., & Salih, A. A. (2021). Validity of the workforce agility (WFA) attributes for measuring the performance development "Exploratory and Confirmatory Factor Analysis". *Academy of Strategic Management Journal*, 20(2), 1-10.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital Business Strategy: Toward a Next Generation of Insights. *MIS Quarterly*, 37(2), 471–482. <https://doi.org/10.25300/misq/2013/37:2:3>
- Boehm, B., & Turner, R. N. (2003). *Balancing agility and discipline: A guide for the perplexed*. Addison-Wesley Professional.
- Brandes, P. M. (1997). *Organizational cynicism: Its nature, antecedents, and consequences*. (Doctoral dissertation). University of Cincinnati, Ohio, US.
- Braunscheidel, M. J., & Suresh, N. C. (2008). The organizational antecedents of a firm's supply chain agility for risk mitigation and response. *Journal of Operations Management*, 27(2), 119–140. <https://doi.org/10.1016/j.jom.2008.09.006>

- Bundtzen, H., & Hinrichs, G. (2021). The Link Between Organizational Agility And VUCA – An Agile Assessment Model. *SocioEconomic Challenges*, 5(1), 35–43. [https://doi.org/10.21272/sec.5\(1\).35-43.2021](https://doi.org/10.21272/sec.5(1).35-43.2021)
- Cameron, E., & Green, M. (2019). *Making sense of change management: A complete guide to the models, tools and techniques of organizational change*. Kogan Page Publishers.
- Cao, M., Zhang, Q., & Seydel, J. (2005). B2C e-commerce web site quality: an empirical examination. *Industrial Management & Data Systems*, 105(5), 645–661. <https://doi.org/10.1108/02635570510600000>
- Chong, Y. K., & Zainal, S. R. M. (2024). Employee agility's mediating role on the link between employee vitality, digital literacy and transformational leadership with job performance: an empirical study. *Cogent Business & Management*, 11(1), 2337447. <https://doi.org/10.1080/23311975.2024.2337447>
- Çömlekçi, M. G., & Bozkurt, S. (2024). DİJİTAL LİDERLİK VE BİREYSEL YENİLİKÇİLİK İLİŞKİSİNDE İŞGÜCÜ ÇEVİKLİĞİNİN ROLÜ. *Akademik Hassasiyetler*, 11(24), 75–97. <https://doi.org/10.58884/akademik-hassasiyetler.1384580>
- Das, K. P., Mukhopadhyay, S., & Suar, D. (2023). Enablers of workforce agility, firm performance, and corporate reputation. *Asia Pacific Management Review*, 28(1), 33–44. <https://doi.org/10.1016/j.apmr.2022.01.006>
- Demir, S., & Yaşar, F. (2018). Ödül Yönetiminin İşgücü Atıklığı Üzerine Etkisi: Kahramanmaraş İli Tekstil Sektöründe Bir Araştırma. *Ordu Üniversitesi Sosyal Bilimler Enstitüsü Sosyal Bilimler Araştırmaları Dergisi*, 8(3), 691-705.
- Demirler, S. (2023). *Dijital örgüt kültürü bağlamında işgücü çevikliği, yabancılaşma ve psikolojik güçlendirme ilişkisi* (Doctoral dissertation). Manisa Celal Bayar Üniversitesi Sosyal Bilimler Enstitüsü, Manisa.
- Demirler, S., & Oral Ataç, L. (2022). Bibliometric Analysis of the Literature on Workforce Agility. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 13(30), 251–272. <https://doi.org/10.21076/vizyoner.1143315>
- DeRue, D. S., Ashford, S. J., & Myers, C. G. (2012). Learning Agility: In Search of Conceptual Clarity and Theoretical Grounding. *Industrial and Organizational Psychology*, 5(3), 258–279. <https://doi.org/10.1111/i.1754-9434.2012.01444.x>
- Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garza, R. C., Gunasekara, N., Ibrahim, G., & Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic. *Human Resource Development International*, 23(4), 380–394. <https://doi.org/10.1080/13678868.2020.1780078>
- Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long range planning*, 43(2-3), 370-382. <https://doi.org/10.1016/j.lrp.2009.07.006>
- Doz, Y., & Kosonen, M. (2008). The Dynamics of Strategic Agility: Nokia's Rollercoaster Experience. *California Management Review*, 50(3), 95–118. <https://doi.org/10.2307/41166447>
- Düger, Y. S. (2023). İşgücü çevikliğinin öncülleri ve etkilerini belirlemeye yönelik sistematik bir analiz. In G. Örmeci Güney (Ed.), *Ekonomi, sürdürülebilir kalkınma ve işletme alanında akademik çalışmalar* (pp. 19-34). Gazi Kitabevi.
- Dyer, L., & Ericksen, J. (2006). Dynamic organizations: Achieving marketplace agility through workforce scalability. *Academy of Management Perspectives*, 20(4), 53-73.
- Felipe, C., Roldán, J., & Leal-Rodríguez, A. (2017). Impact of Organizational Culture Values on Organizational Agility. *Sustainability*, 9(12), 2354. <https://doi.org/10.3390/su9122354>
- Franco, C., & Landini, F. (2022). Organizational drivers of innovation: The role of workforce agility. *Research Policy*, 51(2), 104423. <https://doi.org/10.1016/j.respol.2021.104423>
- Gerçek, M. (2023). What is the Meaning of “Agile” for Human Resource Management? A Systematic Review on HRM and Agility. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 25(2), 708–739. <https://doi.org/10.16953/deusosbil.1260274>
- Gligor, D. M., Holcomb, M. C., & Stank, T. P. (2013). A Multidisciplinary Approach to Supply Chain Agility: Conceptualization and Scale Development. *Journal of Business Logistics*, 34(2), 94–108. <https://doi.org/10.1111/jbl.12012>
- Goldman, S. L., Nagel, R. N., & Preiss, K. (1995). *Agile competitors and virtual organizations: strategies for enriching the customer* (Vol. 8). New York: Van Nostrand Reinhold.
- Good, D., & Yeganeh, B. (2012). Cognitive agility: adapting to real-time decision making at work. *OD Practitioner*, 44(2), 13-17.
- Gunasekaran, A. (1998). Agile manufacturing: Enablers and an implementation framework. *International Journal of Production Research*, 36(5), 1223–1247. <https://doi.org/10.1080/002075498193291>
- Hacıoğlu, B. N. (2024). İnsan kaynakları yönetimine yönelik yapay zeka algısının çalışanların çeviklik performansı ve işe bağlanması üzerindeki etkisi (Master's thesis). Gebze Teknik Üniversitesi Lisansüstü Eğitim Enstitüsü, Gebze.
- Hanu, C., Amegbe, H., Yawson, M. D. T. A., & Mensah, P. (2023). Differential impact of work-based learning on employee agility, ambidexterity and proactive goal generation. *Journal of Workplace Learning*, 35(1), 92–111. <https://doi.org/10.1108/jwl-01-2022-0005>

- Hodgkinson, G. P., & Healey, M. P. (2011). Psychological foundations of dynamic capabilities: reflexion and reflection in strategic management. *Strategic Management Journal*, 32(13), 1500–1516. <https://doi.org/10.1002/smi.964>
- Iravani, S. M. R., & Krishnamurthy, V. (2007). Workforce Agility in Repair and Maintenance Environments. *Manufacturing & Service Operations Management*, 9(2), 168–184. <https://doi.org/10.1287/msom.1060.0132>
- Janani, M., & Vijayalakshmi, V. (2023). An arts-based process to build Workforce agility. *Journal of Organizational Change Management*, 36(6), 917–931. <https://doi.org/10.1108/jocm-03-2023-0092>
- Karalar, S. (2015). *Ödül yönetiminin örgütsel özdeşleşme ile işgücü atikliği üzerine etkisi ve bir araştırma (Doctoral dissertation)*. Trakya Üniversitesi Sosyal Bilimler Enstitüsü, Edirne.
- Karacaoğlu, K., & İnce, F. (2012). Brandes, Dharwadkar ve Dean'in (1999) örgütsel sinizm ölçeği Türkçe formunun geçerlilik ve güvenilirlik çalışması: Kayseri Organize Sanayi Bölgesi örneği. *Business and Economics Research Journal*, 3(2), 77-92.
- Lombardo, M. M., & Eichinger, R. W. (2000). High potentials as high learners. *Human Resource Management*, 39(4), 321–329. [https://doi.org/10.1002/1099-050x\(200024\)39:4<321::aid-hrm4>3.0.co;2-1](https://doi.org/10.1002/1099-050x(200024)39:4<321::aid-hrm4>3.0.co;2-1)
- Lu, Y., & K. (Ram) Ramamurthy. (2011). Understanding the link between information technology capability and organizational agility: An empirical examination. *MIS quarterly*, 931-954. <https://doi.org/10.2307/41409967>
- Muduli, A. (2016). Exploring the facilitators and mediators of workforce agility: an empirical study. *Management Research Review*, 39(12), 1567–1586. <https://doi.org/10.1108/mrr-10-2015-0236>
- Muduli, A. (2017). Workforce agility: Examining the role of organizational practices and psychological empowerment. *Global Business and Organizational Excellence*, 36(5), 46–56. <https://doi.org/10.1002/joe.21800>
- Muduli, A., & Choudhury, A. (2024). Digital technology adoption, workforce agility and digital technology outcomes in the context of the banking industry of India. *Journal of Science and Technology Policy Management*. <https://doi.org/10.1108/jstpm-01-2024-0018>
- Naim, M. F., Sahai, S., & Elembilassery, V. (2023). Does empowering leadership enhance employee agility? A serial mediation model. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 12(3), 666–682. <https://doi.org/10.1108/ebhrm-08-2022-0197>
- Nguyen, T., Le, C. V., Nguyen, M., Nguyen, G., Lien, T. T. H., & Nguyen, O. (2024). The organisational impact of agility: a systematic literature review. *Management Review Quarterly*, 1-49. <https://doi.org/10.1007/s11301-024-00446-9>
- 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>
- Özbay, D. (2017). *Örgütsel sinizm ve işgücü atikliği arasındaki ilişki ve bir araştırma (Master's thesis)*. Bahçeşehir Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Panda, S. (2024). The role of employee ambidexterity on employee agility: a moderation analysis with employee organizational tenure. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*. <https://doi.org/10.1108/ebhrm-07-2023-0178>
- Patil, M., & Suresh, M. (2019). Modelling the Enablers of Workforce Agility in IoT Projects: A TISM Approach. *Global Journal of Flexible Systems Management*, 20(2), 157–175. <https://doi.org/10.1007/s40171-019-00208-7>
- Pitafi, A. H., Rasheed, M. I., Islam, N., & Dhir, A. (2023). Investigating visibility affordance, knowledge transfer and employee agility performance. A study of enterprise social media. *Technovation*, 128, 102874. <https://doi.org/10.1016/j.technovation.2023.102874>
- Pitafi, A. H., Rasheed, M. I., Kanwal, S., & Ren, M. (2020). Employee agility and enterprise social media: The Role of IT proficiency and work expertise. *Technology in Society*, 63, 101333. <https://doi.org/10.1016/j.techsoc.2020.101333>
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4), 612–624. <https://doi.org/10.1037/0021-9010.85.4.612>
- Qin, R., & Nembhard, D. A. (2010). Workforce agility for stochastically diffused conditions—A real options perspective. *International Journal of Production Economics*, 125(2), 324–334. <https://doi.org/10.1016/j.ijpe.2010.01.006>
- Rani, P. U., Cynthia, A. R., Priyanka, S., & Kandaswamy, K. M. (2019). A flat organization model for agile workforce with reference to holacracy. *International Journal of Recent Technology and Engineering*, 8(2), 1525-1527. <https://doi.org/10.35940/ijrte.b1096.0882s819>
- Rasheed, M. I., Pitafi, A. H., Mishra, S., & Chotia, V. (2023). When and how ESM affects creativity: The role of communication visibility and employee agility in a cross-cultural setting. *Technological Forecasting and Social Change*, 194, 122717. <https://doi.org/10.1016/j.techfore.2023.122717>
- Sackey, B. B., Yang, J., Quansah, P. E., Ekumah, C. A., Arboh, F., & Boadu, B. (2024). Internal marketing orientation and employee innovative behaviour: the mediating role of workforce agility and moderating role of psychological empowerment. *Journal of Hospitality and Tourism Insights*. <https://doi.org/10.1108/jhti-01-2024-0063>
- Salmen, K., & Festing, M. (2021). Paving the way for progress in employee agility research: a systematic literature review and framework. *The International Journal of Human Resource Management*, 33(22), 4386–4439. <https://doi.org/10.1080/09585192.2021.1943491>

- Sameer, S. K. (2024). The Interplay of digitalization, organizational support, workforce agility and task performance in a blended working environment: evidence from Indian public sector organizations. *Asian Business & Management*, 23(2), 266–286. <https://doi.org/10.1057/s41291-022-00205-2>
- Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organisations: An introduction. *International Journal of Production Economics*, 62(1–2), 7–22. [https://doi.org/10.1016/s0925-5273\(98\)00217-5](https://doi.org/10.1016/s0925-5273(98)00217-5)
- Sharma, K., Nigam, N., Jha, J. K., & Xu, X. (2024). Role of Readiness to Change in the Relationship Between Workforce Agility and Digital Transformation. *Journal of Global Information Management*, 32(1), 1–22. <https://doi.org/10.4018/jgim.345241>
- Sherehiy, B. (2008). Relationships between agility strategy, work organization and workforce agility. University of Louisville.
- Sherehiy, B., Karwowski, W., & Layer, J. K. (2007). A review of enterprise agility: Concepts, frameworks, and attributes. *International Journal of Industrial Ergonomics*, 37(5), 445–460. <https://doi.org/10.1016/j.ergon.2007.01.007>
- Srigouri, V. V., & Muduli, A. (2024). Performance coaching and training transfer in micro, small and medium enterprises of India: examining the mediating role of employee agility. *Journal of Management Development*, 43(4), 556–570. <https://doi.org/10.1108/jmd-12-2023-0360>
- Storme, M., Suleyman, O., Gotlib, M., & Lubart, T. (2020). Who is agile? An investigation of the psychological antecedents of workforce agility. *Global Business and Organizational Excellence*, 39(6), 28–38. <https://doi.org/10.1002/joe.22055>
- Talwar, S., Luqman, A., Kaur, P., Srivastava, P., & Mishra, S. (2023). How social networking ties mediate the associations between enterprise social media affordances and employee agility? *Technological Forecasting and Social Change*, 195, 122759. <https://doi.org/10.1016/j.techfore.2023.122759>
- Tamtam, F., & Tourabi, A. (2020). A Framework for Measuring Workforce Agility: Fuzzy Logic Approach Applied in a Moroccan Manufacturing Company. *Advances in Science, Technology and Engineering Systems Journal*, 5(3), 411–418. <https://doi.org/10.25046/aj050352>
- Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy. *California Management Review*, 58(4), 13–35. <https://doi.org/10.1525/cmr.2016.58.4.13>
- Tessarini Junior, G., & Saltorato, P. (2021). Workforce agility: a systematic literature review and a research agenda proposal. *Innovar*, 31(81), 155–167. <https://doi.org/10.15446/innovar.v31n81.95582>
- Thayyib, P. V., & Khan, M. A. (2021). Do demographics influence workforce agility score of tax professionals in Bangalore, India? *Global Business and Organizational Excellence*, 40(4), 34–49. Portico. <https://doi.org/10.1002/joe.22084>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- Varshney, D., & Varshney, N. K. (2020). Workforce agility and its links to emotional intelligence and workforce performance: A study of small entrepreneurial firms in India. *Global Business and Organizational Excellence*, 39(5), 35–45. <https://doi.org/10.1002/joe.22012>
- Verma, A. (2024). Agile Leadership in the VUCA World: Combating Challenges of the COVID-19 Pandemic. *VUCA and Other Analytics in Business Resilience, Part A*, 267–285. <https://doi.org/10.1108/978-1-83753-902-420241013>
- Weber, Y., & Tarba, S. Y. (2014). Strategic Agility: A State of the Art Introduction to the Special Section on Strategic Agility. *California Management Review*, 56(3), 5–12. <https://doi.org/10.1525/cmr.2014.56.3.5>
- Yang, C., Tang, C., Xu, N., & Lai, Y. (2024). Developmental human resource practices, thriving at work, and employee agility: The moderating role of workplace spirituality. *Journal of Management & Organization*, 1–16. <https://doi.org/10.1017/jmo.2024.15>
- Yauch, C. A. (2011). Measuring agility as a performance outcome. *Journal of Manufacturing Technology Management*, 22(3), 384–404. <https://doi.org/10.1108/17410381111112738>
- Yükseköğretim Kurulu Ulusal Tez Merkezi. (n.d.). Ulusal Tez Merkezi. <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Zhang, D. Z. (2011). Towards theory building in agile manufacturing strategies—Case studies of an agility taxonomy. *International Journal of Production Economics*, 131(1), 303–312. <https://doi.org/10.1016/j.ijpe.2010.08.010>
- Zitkiene, R., & Deksnys, M. (2018). Organizational Agility Conceptual Model. *Montenegrin Journal of Economics*, 14(2), 115–129. <https://doi.org/10.14254/1800-5845/2018.14-2.7>