

OTDK-dolgozat

2025

**SZÉCHENYI ISTVÁN EGYETEM
KAUTZ GYULA GAZDASÁGTUDOMÁNYI KAR**



**KÉSZEN ÁLLSZ A VÁLTOZÁSRA?
A SZEMÉLYES JELLEMZŐK ÉS A VEZETÉSI STÍLUS HATÁSA A
DIGITÁLIS TRANSZFORMÁCIÓS FELKÉSZÜLTSGRE**

**ARE YOU READY FOR CHANGE?
THE EFFECTS OF PERSONAL CHARACTERISTICS AND
LEADERSHIP STYLE ON DIGITAL TRANSFORMATION READINESS**
Spekhardt Fanni

Konzulens: Dr. habil. Szabó Zsolt Roland, Ph.D

Kézirat lezárásának dátuma: 2024. 11. 20.

Table of contents

INTRODUCTION.....	1
1. LITERATURE REVIEW	2
1.1 WHAT IS DIGITAL TRANSFORMATION?	2
1.1.1 Employee readiness for digital transformation	4
1.2 FACTORS INFLUENCING EMPLOYEE READINESS FOR DIGITAL TRANSFORMATION	5
1.2.1 Leadership style.....	5
1.2.2 Employee characteristics	7
1.2.3 Employee Attitudes	8
1.2.4 Employee self-efficacy	10
1.3 THE RELATIONSHIPS BETWEEN THE EXAMINED FACTORS	11
1.3.1 The effect of leadership style on employee attitudes	11
1.3.2 The effect of leadership style on employee self-efficacy	12
1.3.3 The effect of leadership style on digital transformation readiness	15
1.3.4 The effect of personal characteristics on employee attitude	16
1.3.5 The effect of personal characteristics on employee self-efficacy	18
1.3.6 The effect of personal characteristics on digital transformation readiness.....	19
1.3.7 The effect of employee attitude on digital transformation readiness	19
1.3.8 The effect of employee self-efficacy style on digital transformation readiness.....	21
1.4 SUMMARY OF THE HYPOTHESIS	23
2. METHOD.....	25
2.1 MEASURES	26
2.1.1 Demographic profile of the sample	28
3. RESULTS.....	29
3.1 VALIDITY AND CREDIBILITY	29
3.2 STRUCTURAL EQUATION MODELING (SEM)	32
3.3 HYPOTHESIS RESULTS	36
3.4 DISCUSSIONS	38
CONCLUSION	43
REFERENCES	48

INTRODUCTION

In general, the main goal of companies is to achieve profit, growth and development. To achieve this, they must undergo changes. Transformation processes can take many forms, but currently the focus is on digital transformation. Companies must keep up with these changes to remain competitive in the market.

This research analyzes the impact of critical factors, including self-efficacy, attitude, leadership style, and personal characteristics, on employee readiness for digital transformation. It delves into the existing literature on the topic, providing a comprehensive analysis of previous research, which forms the foundation for this study. Based on the international literature, nine hypotheses are defined, each examining the indirect and direct relationships between the factors under investigation. This study employs a quantitative research approach. Data was collected through interviews with 525 employees working in various Hungarian companies across different industries. To ensure the generalizability of the research findings, the sample includes respondents from a diverse range of sectors. Then the collected data was analyzed using SmartPLS software. This study aims to identify and analyze the relationships between the factors influencing employee readiness for digital transformation. It explores the nature of these relationships and how these factors interact and influence each other, including the strength and direction of these influences. By examining these complex interactions, the research seeks to determine how readiness for digital transformation can be categorized and defined, developing a framework for understanding and assessing employee readiness levels. Ultimately, this study aims to provide practical guidance for decision-makers in organizations by outlining the key factors that companies should focus on when assessing the level of digital transformation readiness among their employees. This is particularly crucial during recruitment processes to identify individuals with the necessary skills and attributes. Furthermore, this research emphasizes the critical importance of focusing on the fundamental characteristics and attitudes of employees during the recruitment process.

The findings highlight that only those employees whose mindset aligns with the demands of digital transformation will be truly prepared for the changes it brings. Therefore, organizations must prioritize the identification and selection of individuals who possess the inherent qualities and adaptability necessary to thrive in a digitally driven environment.

1. LITERATURE REVIEW

This research commences with a comprehensive review of extant literature to identify and analyze the seminal definitions of digital transformation (table 1). It then clarifies the relevance and topicality of the impact of digital transformation on employees.

Subsequently, it investigates the effects of digital transformation on employee performance, drawing on insights from prior research. Furthermore, it analyzes the interplay between these observed effects. Based on this analysis, the research establishes its hypotheses.

1.1 WHAT IS DIGITAL TRANSFORMATION?

Table 1 provides a synthesized overview of key definitions of digital transformation from the extant literature. These definitions illustrate how researchers have conceptualized digital transformation and categorized its various aspects. This overview offers valuable insights into the diverse interpretations of this multifaceted concept.

DIGITAL TRANSFORMATION DEFINITIONS

TABLE 1

Authors	Definition
Westerman, Bonnet & McAfee (2014)	<i>“The implementation of innovation and new digital technologies to effect business improvements in an organization.”</i>

Brown, Fishenden, Thompson (2014)	<i>“Digital transformation encompassing everything from the cultural and organizational changes required to the related use of new digital technologies in order to enable major improvements – such as enhancing user services, streamlining operations or creating entirely new services.”</i>
Piccinini, Hanelt, Gregory & Kolbe (2015)	<i>“Digital transformation involves leveraging digital technologies to enable major business improvements, such as enhancing customer experience or creating new business models.”</i>
Bekkhus (2016)	<i>“The use of digital technologies to radically improve the company's performance.”</i>
Gruman (2016)	<i>“The application of digital technologies to fundamentally impact all aspects of business and society.”</i>
Paavola, Hallikainen & Elbanna (2017)	<i>“The use of digital technology, in order to enable major business improvements in operations and markets such as enhancing customer experience, streamlining operations or creating new business models.”</i>
Chanias (2017)	<i>“The extended use of advanced IT, such as analytics, mobile computing, social media, or smart embedded devices, and the improved use of traditional technologies, such as enterprise resource planning (ERP), to enable major business improvements.”</i>
Van Veldhoven, Vanthienen (2019)	<i>“The continuously increasing interaction between digital technologies, business, and society, which has transformational effects and increases the change process's velocity, scope, and impact.”</i>

Geada (2021)	<i>“Digital transformation is the integration of digital technologies across all facets of a business, fundamentally altering how organizations operate and deliver value to customers. This process necessitates a structural shift where technology is central to enhancing performance, expanding reach, and achieving superior results”</i>
--------------	--

Source: own editing

Digital transformation is a multifaceted process that involves the integration of various digital technologies to innovate and optimize business processes. These technologies include big data, the Internet of Things (IoT), artificial intelligence (AI), cloud computing, virtual reality (VR), and augmented reality (AR). This integration necessitates a re-evaluation and re-design of core business processes to enhance efficiency and effectiveness, often leading to the development of novel business models. Furthermore, digital transformation prioritizes the enhancement of customer engagement, aiming to deliver a seamless and improved service experience. It also necessitates a shift in organizational culture, fostering an environment that embraces digital innovation and continuous improvement (Alloghani, Thron & Subair; 2022).

Digital transformation has profoundly impacted various sectors, compelling them to adapt to emerging technological advancements to maintain a competitive edge (Haktanır, Kahraman, Şeker & Doğan; 2022:611). While offering numerous benefits, it also presents challenges, including implementation complexities and the need for a clear strategic vision (Aghakhani, Wautelet, Dijkmans, Heng, Poelmans & Kolp; 2024:18). In conclusion, digital transformation is a comprehensive and ongoing process that leverages digital technologies to fundamentally transform business operations, enhance customer experiences, and drive organizational growth.

1.1.1 Employee readiness for digital transformation

Employee readiness for digital transformation is a pertinent topic in contemporary business discourse. This significance stems from several key factors: the drivers behind the necessity for employee readiness in digital transformation initiatives, the impact of this readiness on the

success of such endeavours, the associated challenges, and the strategies aimed at bolstering employee preparedness (Stoianova, Ivanova, Lezina, & Moskaleva; 2019:1505).

Digital transformation projects often encounter high failure rates, with human factors frequently cited as the primary contributors to these failures. While employees are widely acknowledged as pivotal to successful digital transformation, their preparation is often neglected in these initiatives. Factors necessitating employee readiness (Haktanır, Kahraman, Şeker & Doğan; 2022) include:

- Transparent and trustworthy strategic planning.
- Effective communication and collaboration.
- Incentivized participation.
- Provision of essential knowledge and skills.
- Achieving a balance between organizational structure and employee autonomy.

Employee readiness is crucial for successful digital transformation, directly influencing an organization's overall readiness for such change. Transformational leadership, perceived organizational support, and digital capability significantly enhance digital readiness and employee adaptability. Moreover, the strategic and technological dimensions of digital readiness positively impact digital transformation outcomes, particularly for small and medium-sized enterprises (SMEs) (Aghakhani & Kolp; 2024).

1.2 FACTORS INFLUENCING EMPLOYEE READINESS FOR DIGITAL TRANSFORMATION

This section synthesizes the effects of digital transformation on employees, drawing upon insights from prior research. It describes and analyzes these effects. The analysis is grounded in existing literature and aims to provide a comprehensive overview of the impact of digital transformation on the workforce.

1.2.1 Leadership style

Leadership style refers to a leader's behavioral pattern. When a leader influences employees, he will adopt different behavioral patterns in order to achieve their goals. Leadership style is the habitual characteristics of leaders in handling affairs. Habitual leadership styles are

formed through long-term personal experience and leadership practice. And it works continuously and stably in the process of leadership, so the leadership style also has a relatively strong personality style. Because the leadership style directly depends on the leader's personal personality, the leadership styles of different leaders are also different (Bao & Ou; 2022:704).

The chosen leadership style can significantly affect organizational success, productivity, and employee motivation. Leaders who are aware of their style and its impact can better guide their teams towards achieving common goals (Helmold; 2020:57).

Effective leaders often adapt their style to fit the context and needs of their organization. There is no one-size-fits-all approach, and leaders may change their style depending on the situation.

Leadership style denotes the behavioral pattern of a leader, which bears on employee's attitude, perception about organization, manager and job satisfaction. The existence of different styles has presented leadership from diverse perspectives related to individuals' personality and behavior (Dhamija, Chiarini, & Shapla; 2023:210).

Examples of Leadership Styles:

- **Transformational Leadership:** emphasizes vision, inspiration, and change, often linked to higher employee engagement and innovation.
- **Transactional Leadership:** focuses on clear structures, rewards, and penalties to manage performance.
- **Democratic Leadership:** involves participative decision-making and encourages input from team members.

In summary, leadership style is a dynamic and context-dependent concept that plays a crucial role in shaping organizational outcomes and employee experiences. To effectively lead a digital transformation process, leaders must exhibit a range of competencies and behaviors that align with the unique demands of digitalization. Leadership competencies for digital transformation include understanding digital technologies, fostering innovation, and promoting continuous learning. These competencies are categorized into vision (why), understanding (what), and implementation (how) (Živković; 2022:237).

1.2.2 Employee characteristics

Employee characteristics encompass a wide array of attributes and traits that individuals bring to their professional roles. These characteristics significantly influence not only their individual behavior and performance but also their interactions with colleagues and their overall contribution to the organization. Understanding these characteristics is crucial for organizations to optimize their human resource strategies, foster a productive and engaging work environment, and ultimately achieve their business objectives (Scott, Brown, Shields, Long, Antoni, & Perkins; 2015:60).

These characteristics can be classified into several key domains:

- **Demographic Factors:** Factors such as age, gender, education level, prior work experience, and family structure (e.g., number of dependents) can influence employees' preferences, motivations, and behaviors in the workplace. For instance, research suggests that older employees with higher levels of education and more dependents may exhibit a preference for variable pay structures and less transparency in compensation practices (Scott, Brown & Perkins; 2015).
- **Personality Traits:** Personality traits, often assessed through frameworks like the Big Five Personality Traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism), locus of control, and self-esteem, play a pivotal role in shaping workplace behaviors and performance. Specific traits such as proactivity, a willingness to take calculated risks, and the ability to effectively network have been linked to enhanced innovative performance and intrapreneurial behavior (Matošková, Bartók & Tomancová; 2022).
- **Work-Related Preferences:** Employee characteristics can also influence their preferences regarding their physical workspace and work arrangements. For example, individuals with a higher susceptibility to distractions may prefer more segregated workspaces that minimize external stimuli. Conversely, those with less positive perceptions of flexible working arrangements may exhibit a preference for greater territoriality within their workspace (Roskams & Haynes; 2020).
- **Skills and Competencies:** The skills and competencies that employees possess, including social and communication skills, problem-solving abilities, and self-efficacy, are es-

sential for effective knowledge sharing and overall job performance. In particular, positive work-related feelings and a strong sense of self-efficacy have been identified as significant predictors of knowledge sharing behaviors among employees (Fitouri; 2023).

- **Behavioral Traits:** Employees' behavioral traits, such as their attitudes towards work, their adaptability to organizational norms and expectations, and their willingness to collaborate with colleagues, are fundamental to creating a cohesive and productive work environment. Employees who demonstrate a willingness to go above and beyond their defined roles and exhibit a strong team spirit contribute positively to the organizational culture and overall success (Matošková, Bartók & Tomancová; 2022).
- **Health and Well-being:** Employee characteristics also encompass factors related to their physical and mental health and overall well-being. Stress levels, perceptions of job insecurity, and the quality of workplace dynamics can all significantly impact employee health outcomes and job satisfaction (Roskams & Haynes; 2020).

By recognizing and understanding these diverse employee characteristics, organizations can tailor their management practices, recruitment strategies, and workplace policies to enhance employee satisfaction, foster a positive work environment, and optimize individual and organizational performance. A nuanced understanding of these attributes enables organizations to better align their strategies with the needs and preferences of their workforce, ultimately promoting a more productive, harmonious, and fulfilling work experience for all (Fitouri; 2023:321).

1.2.3 Employee Attitudes

Employee attitudes encompass the perspectives and feelings that individuals hold regarding various facets of their work environment. These encompass not only their specific job roles and responsibilities but also organizational policies, procedures, and their interactions with colleagues and management. These attitudes are of paramount importance due to their profound impact on organizational performance, employee job satisfaction, and the successful implementation of organizational change initiatives (Subramony, Krause, & Norton; 2007:2).

Employee attitudes are not merely a consequence of organizational performance; they can also be a significant antecedent, influencing customer perceptions, service quality, and overall organizational success. Positive attitudes among employees often translate into more favora-

ble customer evaluations and contribute to a thriving organizational culture. Research indicates that employees' perceptions of their organization's commitment to corporate social responsibility (CSR) positively influence their organizational commitment and job satisfaction. This relationship is mediated by the employees' perception of work meaningfulness and the level of organizational support they perceive. (Lee, Cayer & Lan; 2006)

A multitude of organizational factors contribute to shaping employee attitudes. These include the organization's customer orientation, the quality of supervisory leadership, the level of employee empowerment, the effectiveness of teamwork, and the design and implementation of performance management systems (Subramony, Krause, & Norton; 2007).

The perceived employer brand significantly influences employee attitudes, particularly in service-oriented industries. A strong and positive employer brand can enhance employee engagement and positively impact service branding and customer experiences. Employee attitudes are pivotal in navigating organizational change. Positive attitudes facilitate the successful implementation of new ideas and initiatives, fostering adaptability and resilience. Conversely, negative attitudes can create resistance to change, hindering progress and potentially undermining organizational goals (Schlager, Bodderas, Maas & Luc; 2011).

Employee attitudes extend beyond job performance and organizational commitment. They also influence behaviors such as workplace safety. Positive attitudes towards safety regulations and a commitment to complying with health and safety protocols contribute to a safer work environment. Attitudes towards emerging technologies, such as AI, can be complex and even paradoxical. Employees may simultaneously hold both positive and negative views towards these technologies (Tobór-Osadnik, Wyganowska & Manowska; 2017).

Cultivating positive employee attitudes is essential for organizations seeking to create a thriving and productive work environment. By focusing on enhancing the factors that positively influence these attitudes, organizations can achieve improved performance, increased employee satisfaction, and greater success in implementing organizational change initiatives. Addressing these key aspects allows companies to foster a more supportive and effective workplace, ultimately leading to enhanced organizational outcomes and a more fulfilling work experience for employees (Schlager, Bodderas, Maas & Luc; 2011:497).

1.2.4 Employee self-efficacy

Employee self-efficacy encompasses an individual's belief in their capacity to successfully execute tasks and achieve goals within their professional role. This concept is of paramount importance in organizational settings due to its pervasive influence on various facets of job performance, employee well-being, and organizational behavior (Tian & Huang; 2013:757).

Self-efficacy serves as a powerful motivator, particularly for behaviors that require initiative and confidence, such as voice behavior. Employees with high self-efficacy are more likely to feel empowered to express their ideas, concerns, and suggestions, contributing to a more open and communicative work environment (Tian & Huang; 2013). High levels of self-efficacy can act as a buffer against stress and burnout, particularly emotional exhaustion. By fostering a sense of control and mastery, self-efficacy enables employees to better manage workplace challenges and maintain their psychological well-being (Parent-Lamarche & Fernet; 2020).

Self-efficacy is positively associated with an enhanced quality of work life and a greater commitment to professional development. This is influenced by various factors, including emotional states, vicarious experiences (observing others' success), and verbal persuasion (receiving encouragement and positive feedback). Employees with a strong sense of self-efficacy tend to exhibit higher levels of job performance and experience greater job satisfaction. This positive relationship is partly attributed to reduced job-related anxiety and an increased sense of accomplishment (Bui & Nguyen; 2019).

Organizational commitment is also positively influenced by self-efficacy, both directly and indirectly through its impact on job satisfaction. Employees who believe in their ability to contribute meaningfully to the organization are more likely to feel a sense of belonging and commitment. In collaborative work environments, self-efficacy not only enhances individual learning but also contributes to team learning processes. This effect is moderated by team-learning behaviors, highlighting the importance of a supportive and collaborative team environment for maximizing the benefits of self-efficacy (De Clercq, Haq & Azeem; 2018).

Employee self-efficacy is a multifaceted construct with far-reaching implications for individuals and organizations. By understanding the factors that contribute to self-efficacy and its

impact on various workplace outcomes, organizations can foster a more motivated, engaged, and high-performing workforce (Bui & Nguyen; 2019:12).

1.3 THE RELATIONSHIPS BETWEEN THE EXAMINED FACTORS

1.3.1 The effect of leadership style on employee attitudes

Leadership style has been investigated from a variety of perspectives. Indeed, myriad theories exist attempting to describe leadership and ultimately to explain how leadership influences employee attitudes and behaviors (Lee, Martin, Thomas, Guillaume & Maio; 2015:910).

The leadership style distresses the transformation of follower's beliefs, values, needs, and capabilities. It is the procedure of influencing the main transformation in the attitudes and behaviors of the subordinates and building commitment for the organization's mission and objectives. The subordinates are motivated to implement the organization's mission as their own. The good leadership style communicates a vision that motivates and inspires individuals to achieve something extraordinary and unexpected (Karam & Tasmin; 2020:42).

Leadership styles and employee attitudes are the fundamental elements affecting and influencing overall performance and effectiveness of the organization. Positive relation is between benevolence and morality with organizational commitment while negative with authoritarian. Jeanquart Miles and Mangold (2002) claimed that effective supervisory interactions with subordinates also facilitate the employee's attitude. Supervisors are viewed as competent, by employees, when the supervisor makes an engaging work environment, mutual will power and employment levels are satisfactory (Mitterer, 2018; Wong & Laschinger, 2013).

Furthermore, the psychological contract between the employee and the organization plays a crucial role in shaping employee attitudes. A strong psychological contract, characterized by mutual trust and obligations, is more likely to foster positive attitudes and behaviors among employees. When employees perceive that their organization is fair and supportive, they are more likely to be committed to their work and go the extra mile (Khuwaja, Ahmed, Abid, G., & Adeel; 2020).

Different leadership styles can have varying effects on employee attitudes and behaviors. Transformational leaders, for example, who inspire and motivate their followers to go beyond their own self-interests, are often associated with higher levels of employee satisfaction,

commitment, and performance. Charismatic leaders, who possess exceptional communication and persuasion skills, can also have a powerful influence on employee attitudes. However, it is important to note that charismatic leaders can also be manipulative and self-serving. Democratic leaders, who involve their employees in decision-making processes, are often associated with higher levels of employee job satisfaction and motivation. However, democratic leadership may not be appropriate in all situations, such as those that require quick decision-making or where there is a clear need for strong leadership (Mitterer; 2017). In addition to leadership style, the relationship between leadership behavior and employee performance is also complex. While effective leadership can certainly contribute to positive employee outcomes, other factors, such as individual differences, team dynamics, and organizational culture, also play a significant role.

Leadership development programs can play a crucial role in helping individuals to develop the skills and competencies necessary for effective leadership. These programs can provide leaders with opportunities to learn new leadership approaches, develop their self-awareness, and enhance their interpersonal skills (Jeanquart & Mangold; 2002).

In conclusion, the relationship between leadership style and employee attitudes is complex and multifaceted. While numerous studies have highlighted the positive impact of supportive and empowering leadership styles on employee outcomes, it is important to acknowledge that the effectiveness of a particular leadership style can depend on a variety of factors, including the specific context, the characteristics of the employees, and the nature of the tasks being performed.

Based on the above mentioned I formulate the following hypothesis:

H1a: Leadership style has a positive effect on attitude.

1.3.2 The effect of leadership style on employee self-efficacy

The intricate relationship between leadership style and employee self-efficacy has been a subject of extensive research and scholarly debate. Self-efficacy, a cornerstone of individual motivation and performance, is profoundly influenced by the behaviors, decisions, and communication styles of leaders (Seltzer, Numerof & Bass; 1989).

Leadership style directly shapes employee self-efficacy through various mechanisms. One of the most potent avenues is through feedback. Constructive, positive feedback reinforces

es employees' beliefs in their abilities, boosting their self-confidence and self-efficacy. Conversely, negative, personalized feedback can erode self-esteem and diminish self-efficacy (Kagan; 1994).

Delegation is another pivotal tool in the leadership arsenal for enhancing self-efficacy. By entrusting employees with appropriate tasks, leaders provide them with opportunities to demonstrate their skills, gain experience, and achieve success. These accomplishments reinforce their belief in their capabilities, leading to increased self-efficacy. Recognition and appreciation play a vital role in fostering self-efficacy. When employees feel valued and acknowledged for their contributions, their self-esteem and confidence soar. This positive reinforcement strengthens their belief in their abilities and motivates them to strive for excellence.

Leadership support and trust are essential for enhancing self-efficacy. When leaders demonstrate confidence in their employees' abilities, it reinforces the employees' own belief in themselves. This trust and support create a positive work environment where employees feel empowered to take on challenges and succeed (Liu & Gumah; 2020).

Autonomy, the freedom to make decisions and exercise control over one's work, is another critical factor influencing self-efficacy. When employees are granted autonomy, they feel empowered and capable of achieving their goals. This sense of agency strengthens their self-belief and drives them to perform at their best (Fackler & Malmberg; 2016:185).

Leadership style plays a critical role in shaping the behaviors and self-efficacy of followers. The feedback provided by leaders, in particular, exerts a profound influence on how followers perceive themselves and their capabilities. As Fackler and Malmberg (2016) emphasize, the style a leader adopts has a significant impact on followership behaviors and self-perceptions, including self-efficacy.

Self-efficacy, as defined by Bandura (2010), refers to an individual's belief in their ability to accomplish a given task and reliably predict their job performance. Effective leaders recognize the importance of fostering self-efficacy in their followers. By providing appropriate feedback, delegating tasks, offering recognition, and demonstrating support, leaders can significantly enhance their followers' self-belief and motivation.

Good leaders, as described by Seltzer (1989), are those who broaden and elevate the interests of their followers, inspire commitment to the organization's mission, and enable subordinates

to transcend their own self-interests for the greater good. Such leaders create a positive and empowering work environment that fosters self-efficacy and encourages followers to reach their full potential.

Transformational leaders, in particular, have been shown to have a significant impact on follower self-efficacy. Their visionary and creative leadership style inspires employees to make independent decisions and develop their skills. While transformational leadership is often associated with positive outcomes, it is important to note that it can also be linked to employee burnout and stress (Nielsen & Munir, 2009). However, by balancing the demands of the role with opportunities for rest and recovery, transformational leaders can mitigate the negative effects of their leadership style.

Mentoring relationships are another avenue through which leaders can influence follower self-efficacy. One important function of supervisory mentoring is to help subordinates learn about organizational life and prepare them for advancement opportunities. A desire to learn is a key factor in the mentoring process (Kagan, 1994). By providing guidance, support, and opportunities for growth, mentors can help followers develop their skills and increase their self-confidence. Furthermore, mentoring relationships can foster a sense of belonging and connection to the organization, which can further enhance self-efficacy.

The development of self-efficacy is a dynamic and ongoing process. It is influenced by a variety of factors, including individual characteristics, past experiences, and social support. By creating a supportive and challenging work environment, leaders can help their followers develop the self-belief and resilience necessary to overcome obstacles and achieve their goals (Bandura; 2010:2)

In conclusion, leadership style plays a pivotal role in shaping follower self-efficacy. By understanding the mechanisms through which leadership influences self-efficacy, leaders can develop strategies to foster a positive and empowering work environment. Investing in the development of followers' self-efficacy is not only beneficial for individual employees but also for the organization as a whole.

From the aforementioned points, I deduce the following hypothesis:

H1b: Leadership style has a positive effect on self-efficacy.

1.3.3 The effect of leadership style on digital transformation readiness

The impact of leadership style on digital transformation readiness is a multifaceted topic. Transformational leadership has a significant association with digital transformation readiness. It influences employees' adaptability and organizational support, which enhances readiness for digital transformation. A study in Indonesia revealed that transformational leadership and perceived organizational support enhance digital capability and employees' adaptability, supporting organizations' readiness for digital transformation (Nuaimi, Singh, Ren, Budhwar & Vorobyev; 2022: 636)

Agile leadership is a driving force for successful digital transformation (Muduli & Choudhury; 2024). It is characterized by fast decision loops, continuous participation in digital transformation activities, and evolutionary and revolutionary practices, making the organization leaner and more efficient. Altro-centric leadership, which focuses on soft skills like empathy and humility, is also important in the context of digital transformation. This style emphasizes understanding digital technology and leveraging AI for managerial tasks, while managers focus on coaching and empowering employees.

One challenge in implementing different leadership styles for digital transformation readiness is the need for leaders to adopt multiple roles and behaviors (Rialti & Filieri; 2024). The changes associated with digital transformation make leadership more complex, resulting in new challenges for companies and leaders. A study on transformational leadership and employee performance in the context of digital communication in Australian SMEs explores how transformational leadership is affected by digital communication in the new era impacted by digital transformation, addressing inconsistencies in previous studies (Hargitai & Bencsik; 2023)

In conclusion, the impact of leadership style on digital transformation readiness is complex and evolving. Transformational leadership is a significant factor in enhancing digital transformation readiness, along with agile and altro-centric leadership styles. The challenges in implementing different leadership styles revolve around the complexity of leadership roles in the face of changes associated with digital transformation.

Drawing on the previous analysis, I formulate the following hypothesis:

H1c: Leadership style has a positive digital transformation readiness.

1.3.4 The effect of personal characteristics on employee attitude

The characteristics or personality traits, abilities, and attitudes of employees have a significant impact on how they relate to their work. This effect is not only direct, but also takes place in many indirect ways, and it profoundly affects the quality of work, efficiency, and the general functioning of the organization. Capabilities, the knowledge, skills, and abilities possessed by an individual, also have a significant impact on attitudes towards work. When a person feels that they have the necessary skills to complete a task, they will perform it with greater confidence and commitment. The sense of competence, the belief that one can meet the expectations related to work, also positively influences the attitude towards work (Rubenstein, Zhang, Morrison & Jorgensen; 2019).

Most employee attitudes and behaviors are determined by both personal and situational characteristics. Studies on person–organization fit (POF), which is defined as the congruence between individual and organizational values, also support this assumption. Employees who perceive high POF have high positive work attitudes and low intention to leave (Saraç, Meydan & Efil; 2017:1081).

Christiansen, Sliter, and Frost (2014) showed that employees tended to be less satisfied at work when performing job tasks incongruent with their dispositions. Although such moderation tests yield important insights into the bounded nature of these relationships, it is also important to understand the explanatory processes underlying trait-attitude effects. Indeed, even if all employees in a sample are performing the same work (i.e., holding the job constant), there still often exists appreciable variance in work environment perceptions, implying that such variability is, to a meaningful extent, person-driven (Brown, Pierce, & Crossley; 2014:35).

Social characteristics describe perceptions of work environments that facilitate positive interpersonal relationships between an employee and others within and outside an organization. As argued by Humphrey (2007), social work design can improve employee attitudes largely because affiliation with others, or “getting along”, is a fundamental human need, and fulfilling this need can buffer against work stress, improve motivation, and facilitate goal achievement (Chiaburu & Harrison; 2008:93).

Understanding the characteristics of employees is crucial for effective human resource management. Organizations must create a work environment in which employees can develop their abilities and where positive attitudes can develop. Beyond the factors mentioned above, several other personal characteristics can influence employee attitudes and behaviors. These include:

- **Personality traits:** Personality traits, such as conscientiousness, agreeableness, extraversion, openness to experience, and neuroticism, can significantly impact how employees approach their work. For example, conscientious employees are generally more motivated, reliable, and organized, while agreeable employees tend to be more cooperative and team-oriented (Christiansen, Sliter & Frost; 2014).
- **Values:** Employees' personal values can influence their attitudes towards work and their motivation to achieve goals. For example, employees who value achievement and recognition may be more driven to succeed, while employees who value helping others may be more motivated by social impact (Saraç, Meydan & Efil; 2017).
- **Work-life balance:** Employees' attitudes towards work can be influenced by their work-life balance. When employees feel overwhelmed by work demands and unable to balance their personal and professional lives, their job satisfaction and motivation may suffer (Humphrey, Nahrgang & Morgeson; 2007).
- **Job fit:** The extent to which an employee's skills, interests, and values align with the demands of their job can also impact their attitudes and behaviors. When employees feel that their job is a good fit for them, they are more likely to be engaged, motivated, and satisfied (Christiansen, Sliter & Frost; 2014).

In conclusion, the characteristics of employees play a multifaceted role in shaping their attitudes and behaviors at work. By understanding the various factors that influence employee attitudes, organizations can create work environments that foster positive outcomes and maximize employee performance.

Given the preceding arguments, I hypothesize the following:

H2a: Characteristics has a positive effect on attitude.

1.3.5 The effect of personal characteristics on employee self-efficacy

Employee characteristics significantly influence the relationships between independent variables (innovation, proactivity, risk-taking, networking, and opportunity recognition) and dependent variables (Fitouri; 2023:321-343).

Individuals possessing higher levels of general self-efficacy tend to exhibit more pronounced tendencies toward innovation, proactivity, and risk-taking. This is attributable to their strong belief in their capabilities to successfully execute tasks and overcome challenges. Consequently, they are more likely to generate novel ideas, initiate actions, and embrace ventures that carry a degree of uncertainty. Moreover, employees with high self-efficacy often possess extensive networks and are adept at recognizing opportunities. Their confidence empowers them to build and nurture relationships that can facilitate knowledge sharing, resource acquisition, and the pursuit of new ventures (Oldham; 2011).

Subordinates with higher levels of general self-efficacy tend to feel less anxious and more comfortable in situations than those with lower levels of general self-efficacy because the former perceive themselves as more competent and more confident than the latter. (Pan, Sun & Chow; 2011:267). This enhanced sense of self-efficacy can be attributed to a multitude of factors, including past experiences of success, supportive social environments, and positive self-talk. When employees possess a strong belief in their abilities, they are more likely to approach challenges with a growth mindset, seeking out opportunities for learning and development. As a result, they are better equipped to adapt to change and overcome setbacks.

In contrast, employees with low self-efficacy may exhibit behaviors that hinder their performance. They may be more prone to avoidance and procrastination, as they doubt their ability to succeed. Additionally, they may be less likely to seek feedback or take on new responsibilities. The interplay between self-efficacy and employee behaviors has significant implications for organizations, as it can impact factors such as innovation, productivity, and job satisfaction. By fostering a culture that supports and develops employee self-efficacy, organizations can create a more engaged and resilient workforce.

From the above analysis, the following hypothesis can be derived:

H2b: Characteristics has a positive effect on self-efficacy.

1.3.6 The effect of personal characteristics on digital transformation readiness

The impact of personal characteristics on digital transformation readiness is a multifaceted topic encompassing various psychological, behavioral, and attitudinal aspects. Research suggests that personal resources such as proactive personality and growth mindset positively influence employees' digital readiness. Self-efficacy, positive attitude, and transformational leadership also significantly affect employees' readiness for digital transformation (Durs, Davila, Foli & Cheng; 2023).

Employees' beliefs about personal ability and situational resources influence their engagement in digital transformation initiatives (Solberg, Traavik & Wong; 2020). Human characteristics such as critical thinking, adaptability, and creativity are essential for successful digital transformation (Saengsith & Suntraruk; 2022).

Organizational culture, change management capabilities, and employee attitudes towards innovation significantly impact an organization's readiness for digital transformation (8). In summary, the impact of personal characteristics on digital transformation readiness is a complex interplay of psychological, behavioral, and attitudinal factors, including proactive personality, growth mindset, self-efficacy, leadership, digital mindsets, and human characteristics. These can be measured through surveys and modeling techniques. Additionally, technostress, change management competency, and organizational culture contribute to digital transformation readiness.

Taking into account the previous findings, I propose the following hypothesis:

H2c: Characteristics has a positive effect on digital transformation.

1.3.7 The effect of employee attitude on digital transformation readiness

Digital transformation, which is the transformation associated with the rapid development of technology, is one of the most important economic and social processes of our time. The success of this complex process is influenced by many factors, among which the employees play a prominent role. The attitude and skills of the employees are decisive in the extent to which an organization is able to adapt to new technologies and business models.

Employee attitudes towards digital transformation significantly influence their readiness to accept and engage with digital initiatives (Varshney; 2020:89). Negative attitudes and

resistance to change among employees can derail digital transformation efforts, underscoring the need for enhanced change management and training programs. Finally, organizational culture shapes the values, norms, and beliefs of an organization, affecting its receptivity to digital shifts (Elsbach & Stigliani; 2018:44).

Attitudes may be either positive or resistant to change through the external manifestations of the person giving the attitude. If employees have a positive attitude toward digital transformation, they tend to be more receptive to the forthcoming change, and this will increase their digital engagement and readiness (Muehlburger; 2022:26).

Behaviors of employees in responding to organizational changes toward digital transformation become crucial.

Choi (2011) explained constructs representing employees' attitudinal reactions specific to organizational change are readiness for change, commitment to change, openness to a difference, and cynicism about an organizational change. In another study, the authors found that Dunham (1989) study specifically made instruments that directly measure attitudes toward organizational change. Employees with a positive attitude are generally open to new ideas, willing to learn and develop themselves. They tend to proactively seek solutions and adapt flexibly to changing circumstances. In this way, they contribute to strengthening the organization's innovation capacity and gaining a competitive advantage. Employees with a negative attitude tend to resist change, harbor fears about new technologies, and find it difficult to adapt to new work methods. This kind of attitude can hinder the organization's digital transformation and have a negative impact on work, teamwork and organizational culture.

Digital transformation is an ongoing process that requires employees to constantly learn and adapt. Organizations must create a culture in which openness to learning and development are among the most important values. Furthermore, organizations need to provide employees with the necessary training and resources to support their digital transformation journey. This includes investing in technology infrastructure, offering digital skills training, and creating opportunities for employees to experiment with new technologies. Additionally, organizations should foster a culture of innovation and experimentation, encouraging employees to take risks and try new things (Fahmi, Tjakraatmadja & Ginting; 2023).

When employees feel empowered to embrace digital transformation, they are more likely to be engaged and productive. They are also more likely to be motivated to develop

new skills and contribute to the organization's success. Therefore, it is essential for organizations to prioritize employee engagement and well-being throughout the digital transformation process. By cultivating a positive and supportive environment for employees, organizations can create a strong foundation for successful digital transformation. This involves fostering a culture of innovation, providing adequate training and resources, and promoting employee engagement and well-being (Elsbach & Stigliani 2018).

In conclusion, the following hypothesis is put forward:

H3a: Attitude has a positive effect on digital transformation readiness.

1.3.8 The effect of employee self-efficacy style on digital transformation readiness

The arrival of the digital age is radically transforming the world of work. Companies increasingly rely on digitization and automation, which presents new challenges to employees. Self-efficacy plays a key role in this process, as it determines how open an employee is to new things, how well they can adapt to changes, and how confident they are in being able to learn new digital skills. In essence, it shapes their digital readiness, influencing their ability to thrive in this evolving environment (Muehlburger, Krumay, Koch & Curre; 2022).

Self-efficacy is the first antecedent influencing whether employees are ready for the digital transformation. Self-efficacy refers to an individual's perception of his or her capacity to perform specific tasks or efficiently use technology advancements. In other words, digital transformation self-efficacy refers to an individual's subjective belief that digital technology can be utilized easily, giving employees confidence that they and the company can do digital transformation (Ormrod; 2023:72).

High self-efficacy will direct one's focus to the situation's demands and motivate one to exert greater efforts to overcome obstacles. Consequently, self-efficacy is also positively associated with job performance (Matsunaga; 2021:15).

This connection between self-efficacy and job performance is particularly crucial in the context of digital transformation. Employees with a strong belief in their ability to navigate the digital landscape are more likely to embrace new technologies and processes, leading to increased productivity and efficiency (Ahmed, Aziz, Haque, Senathirajah & Qazi; 2024). Employee self-efficacy is very important for successful organizational change since it enables them to support any organizational change by making them self-confident. Thus, the role of

transformational leadership and employee self-efficacy may be considered two important antecedents of digital transformation. Employee self-efficacy is critical for firms, especially when faced with obstacles and change. Only if employees have confidence in their abilities and believe that they can achieve the expected results will they make an effort to overcome these obstacles and take an active role in the change process. While employees with high self-efficacy have a positive attitude toward change and take responsibility, employees with low self-efficacy avoid taking responsibility and may even resist change (Gun, Turkcan & Ince; 2024:3,4).

This proactive approach to change driven by self-efficacy is essential for organizations undergoing digital transformation. By fostering a culture of self-belief and providing employees with the necessary support, companies can empower their workforce to become active participants in the transformation process, rather than passive bystanders. Continuous learning is essential in the digital world. Due to the rapid development of new technologies, employees must constantly adapt. Self-efficacious people are more open to new knowledge and learn it more easily. After all, if someone believes in his own abilities, he feels that he can learn anything (Varshney, 2020).

This continuous learning mindset is a defining characteristic of digitally ready individuals. They are not intimidated by the prospect of acquiring new skills or mastering new technologies; instead, they view it as an opportunity for growth and development. Organizations can further encourage this by providing access to training programs, online resources, and mentorship opportunities that cater to different learning styles and needs. Digital transformation comes with many challenges that can cause stress for employees. Self-efficacious individuals are better able to manage stress because they feel they can cope with adversity. And stress tolerance is essential for someone to successfully navigate the storm of changes (Matsunaga; 2021)

Resilience in the face of challenges is a crucial component of digital readiness. Self-efficacious individuals are less likely to become overwhelmed or discouraged by setbacks, viewing them instead as learning opportunities. Organizations can help build this resilience by creating a supportive environment where employees feel comfortable seeking assistance and taking calculated risks without fear of failure.

Digital transformation not only brings with it new technologies, but also requires a new way of thinking. Creative solutions are key for companies to gain a competitive advantage. Self-efficacious people are more open to new ideas and dare to experiment. This ability to think outside the box and embrace innovative solutions is a hallmark of digitally ready employees. They are not afraid to challenge the status quo and explore new possibilities, contributing to a culture of innovation within the organization. To foster this, companies should encourage experimentation, provide platforms for idea sharing, and recognize and reward creative contributions. Digital projects are often the result of teamwork. Self-efficacious individuals not only perform their own tasks well, but are also able to collaborate with others and contribute to the team's success. Self-confidence helps the individual not to be afraid to share his ideas and opinions (Matsunaga; 2021). Effective collaboration is crucial in the digital age, as projects often require diverse skill sets and perspectives. Self-efficacious individuals are more likely to contribute actively to team discussions, share their knowledge, and work effectively with others to achieve common goals. Organizations can facilitate this by promoting a culture of open communication, providing collaborative tools and platforms, and encouraging team-building activities.

In conclusion, self-efficacy is a critical factor in determining an employee's digital readiness. By fostering self-belief, providing opportunities for continuous learning, encouraging resilience, promoting innovation, and facilitating collaboration, organizations can empower their employees to thrive in the digital age and contribute to the success of the digital transformation journey.

Given the preceding arguments, I hypothesize the following:

H3b: Self-efficacy has a positive effect on digital transformation readiness.

1.4 SUMMARY OF THE HYPOTHESIS

Table 2 describes the research hypotheses and their codes.

TABLE 2

HYPOTHESIS

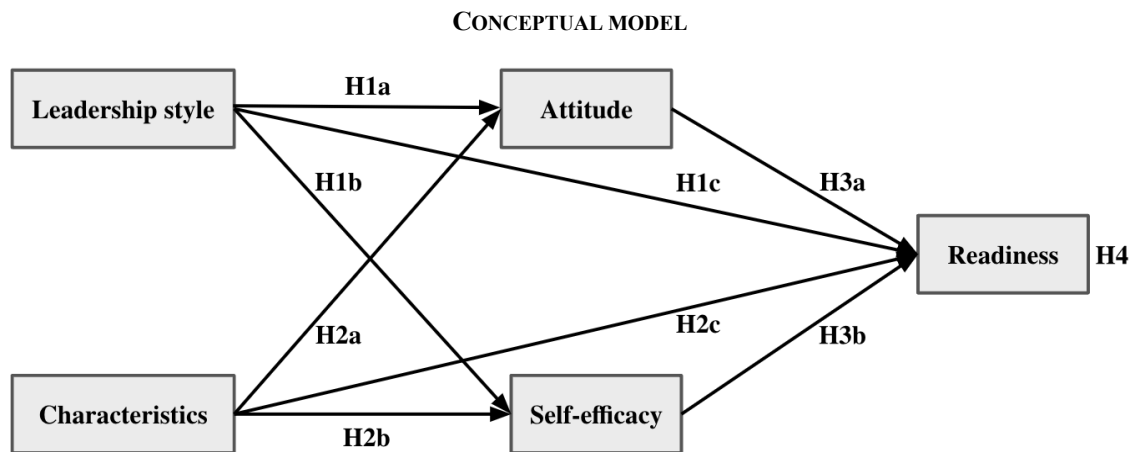
Code	Hypothesis
<i>H1a</i>	<i>Leadership style has a positive effect on attitude.</i>

H1b	<i>Leadership styles has a positive effect on self-efficacy.</i>
H1c	<i>Leadership style has a positive digital transformation readiness</i>
H2a	<i>Characteristics has a positive effect on attitude.</i>
H2b	<i>Characteristics has a positive effect on self-efficacy.</i>
H2c	<i>Characteristics has a positive effect on digital transformation.</i>
H3a	<i>Attitude has a positive effect on digital transformation readiness.</i>
H3b	<i>Self-efficacy has a positive effect on digital transformation readiness.</i>
H4	<i>The level of readiness for digital transformation can be defined and categorized.</i>

Source: own editing

The conceptual model is structured in such a way that it includes the investigated factors, leadership style, characteristics, attitude, self-efficacy and readiness for digital transformation. They are connected by arrows, and the hypothesis codes are written on them (Figure 1).

FIGURE 1



Source: own editing

The conceptual model and the hypotheses are built (Table 2, Figure 1) on the basis of the international literature written so far. The model specifically shows the hypothesis codes that measure the employee's readiness for digital transformation.

2. METHOD

The study used quantitative research, interviewing 525 employees working in different companies. To ensure the generalizability of the research in the sample, I collected respondents from several industries (sectors of the economy, as well as manufacturing and service industries).

A digital transformation took place in the examined companies, mostly in the areas of service and production, it was going quite quickly. So, these are the area's most in need of investigation. To ensure that employees really feel and understand the essence of the research, as well as completely objective evaluation of the thesis should be digital transformation theme, only the results of employees are included in the data table who have been working for at least one year. The study was conducted by submitting an online survey on Google form titled "Employee readiness for digital transformation". After finishing the survey, the study conducted screening and processed the data using SmartPLS software.

I used international literature to formulate my hypotheses and validated scales to develop my questions. The validated scales that I used for the examined factors:

- Self-efficacy (SE) → Ormrod; 2006
- Attitude (AT) → Altmann; 2008
- Leadership style (LS) → Nguyen & Broekhuizen; 2022
- Characteristics (CT) → Rogers; 2003
- Readiness (RD) → Armenakis et al.; 1993

After that, I analyzed the data from the cleaned data table in SmartPLS software. I prepared my figures and tables, the values came out and I will analyze them in the rest of the thesis. I examine the validity of each hypothesis and value separately, as well as the relationships between the analyzed factors (leadership style, attitude, characteristics, self-efficacy, readiness).

When evaluating, I also take into account the difference in the effect of indirect and direct relationships. In addition, I also cover those effects that, regardless of my hypotheses, extend to other relationships between factors. With all this, my own hypotheses regarding the structure and logic of the model were strengthened.

2.1 MEASURES

All validated measures utilized a 5-point Likert scale spanning from “strongly disagree” (1) to “strongly agree” (5). See more details in table 3.

TABLE 3

CONSTRUCT DEFINITION AND MEASUREMENT SCALES

Construct	Definition	Scale	Code
Self-efficacy (SE) (Ormrod; 2006)	Self-efficacy in digital transformation refers to the belief in one's ability to successfully use digital technologies to achieve desired outcomes. This concept is crucial in various contexts, including education, business, and personal development.	I know and use the term digital transformation.	SE1
		I think I can achieve results that are important to me by using digital technologies.	SE2
		I think I can handle the changes that come with digital transformation.	SE3
		I am confident that I can effectively perform a variety of tasks using digital technologies.	SE4
		I consciously adapt my career path to digital change.	SE5
Attitude (AT) (Altmann; 2008)	Attitude in digital transformation refers to the mindset and behaviors that individuals and organizations adopt to effectively navigate and leverage digital technologies. This concept is crucial for the successful implementation of digital transformation initiatives.	I always support digital transformation.	AT1
		I think digital transformation is a good idea.	AT2
		I feel proud to be a part of the digital transformation.	AT3
Leadership style (LS)	Digital transformation involves significant changes in	Managers are very consistent with digital transformation.	LS1

(Nguyen & Broekhuizen; 2022)	processes, business models, domains, and organizational culture. The leadership style adopted during this transformation is crucial for its success.	Managers fully and clearly communicate about the enterprise's digital transformation.	LS2
		My managers always encourage me to participate in digital transformation.	LS3
		Corporate management team are actively involved with the changes.	LS4
		Our department's senior managers pay sufficient attention to the e personal consequences that the changes could have for their staff members.	LS5
Characteristics (CT) (Rogers, 2003)	Digital transformation significantly impacts personal characteristics within organizations, necessitating a blend of digital skills, mindsets, and leadership qualities.	I am eager to acquire new knowledge.	CT1
		I am open-minded, ready to adapt and change.	CT2
		I am not afraid to ask for help or admit to needing help adapting to digital transformation.	CT3
		I find the change refreshing.	CT4
Readiness (RD) (Armenakis et al.; 1993)	Readiness for digital transformation involves multiple dimensions and factors that ensure an organization can effectively implement and benefit from digital technologies.	I am excited about digital transformation activities.	RD1
		I am ready to face difficulties.	RD2
		I have the knowledge and other resources to adapt to digital transformation.	RD3
		I attend trainings to expand my knowledge about digitization.	RD4
		I believe I am ready for digital transformation.	RD5

Source: own editing

2.1.1 Demographic profile of the sample

Table 4 presents the demographic profile of the research participants. As can be seen, the gender distribution is balanced, allowing for generalization of the findings. Similarly, the workplaces represented include both intellectual and physical labor.

The majority of respondents are between 18 and 25 years old, indicating that the experiences and attitudes of recent entrants to the workforce are captured in the data. Furthermore, in addition to general observations, the research includes responses from employees not only at small and medium-sized enterprises (SMEs) but also at large companies with over 5 000 employees. This enhances the generalizability of the research findings to larger organizations.

TABLE 4

DEMOGRAPHIC PROFILE

Demographic Variables	Categories	Frequency	Ratio (%)
Gender	Female	266	50,67%
	Male	259	49,33%
Age	18-25 years old	228	43,43%
	26-35 years old	79	15,05%
	36-45 years old	60	11,43%
	46-55 years old	126	24,00%
	>= 56 years old	32	6,10%
Work experience	1-3 years	211	40,19%
	4-9 years	78	14,86%
	10-15 years	48	9,14%
	16-20 years	52	9,90%
	20+ years	136	25,90%
Type of work-place	Intellectual	347	66,10%
	Physical	178	33,90%
Industry	Manufacturing	250	47,62%
	Service	218	41,52%
	Education	36	6,86%
	IT	21	4,00%
Workplace size	1-50 person	160	30,48%

	51-100 person	51	9,71%
	101-200 person	33	6,29%
	201-500 person	43	8,19%
	501-1000 person	37	7,05%
	1001-5000 person	57	10,86%
	>= 5000 person	144	27,43%

Source: own editing

3. RESULTS

In the following section, the results will be presented. First, the validity and credibility of the research will be examined. This will be followed by the presentation and evaluation of the SEM model. Finally, the discussion will be provided.

3.1 VALIDITY AND CREDIBILITY

Table 5 presents the data reliability parameters. Cronbach's Alpha is a traditional reliability indicator, the composite reliability index is more commonly used for analysis by the PLS-SEM method. Cronbach's alpha is a measure of the internal consistency or reliability between several items, measurements or ratings. In other words, it estimates how reliable are the responses of a questionnaire (or domain of a questionnaire), an instrumentation or rating evaluated by subjects which will indicate the stability of the tools. The value of Cronbach's alpha ranges from zero to one with the higher values implying the items are measuring the same dimension. In contrary, if the Cronbach's alpha value is low (near to 0), it means some or all of the items are not measuring the same dimension (Bujang, Omar & Baharum; 2018:85).

The average variance extracted (AVE) index is also an important indicator to evaluate data. The AVE value describes the variance or diversity of the manifest variables that can be owned by the latent construct. Thus, the greater the variance or diversity of the manifest variables that can be contained by the latent construct, the greater the representation of the manifest

variable on the latent construct. Fornell and Larcker (1981) in Ghazali (2014:45) and Yamin and Kurniawan (2011:18) recommend the use of AVE for a criterion in assessing convergent validity. An AVE value of at least 0.5 indicates a good measure of convergent validity.

Data are reliable when Cronbach's Alpha and Composite Reliability is greater than 0.7, and AVE is greater than 0.5, so the data analyzed here are to ensure the necessary reliability. Other analytical parameters of the model also ensure the following statistical requirements (Thuy & Thanh & Ngoc & Si; 2023:231).

The green color in the tables means that all the values correspond and proves that there is a correlation between the examined factors.

TABLE 5

CONSTRUCT RELIABILITY AND VALIDITY - OVERVIEW

	Cronbach's alpha	Composite reliability	Average variance ex- tracted (AVE)
AT	0.881	0.927	0.808
CT	0.884	0.920	0.742
LS	0.918	0.939	0.754
RD	0.840	0.888	0.619
SE	0.893	0.924	0.712

Source: own editing

The discriminant validity in table 6 is guaranteed when all values in a column are less than the value on the corresponding diagonal or all values in the corresponding diagonal. Values of heterotrait-monotrait ratio (HTMT) have no value greater than 0.9.

TABLE 6

RELIABILITY OF SCALES

	AT	CT	LS	RD	SE
AT1	0.930				

AT2	0.884				
AT3	0.882				
CT1		0.892			
CT2		0.928			
CT3		0.781			
CT4		0.837			
LS1			0.865		
LS2			0.877		
LS3			0.886		
LS4			0.881		
LS5			0.831		
RD1				0.731	
RD2				0.820	
RD3				0.876	
RD4				0.866	
RD5				0.894	
SE1					0.811
SE2					0.915
SE3					0.907
SE4					0.892
SE5					0.855

Source: own editing

According to Henseler and Chin (2010), the scale's validity is also expressed by the convergent and discriminant validity. The study found that AVEs of attitude, self-efficacy, leadership style, employee characteristics and readiness are all greater than 0.5. Thus, the scale has ensured the requirement of convergence value, according to Fornell and Larcker. In addition, Fornell and Larcker in 1981 also made a requirement to ensure the discriminant of the factors that the square root of the variance extracted for each individual factor must be greater than all the coefficients of correlation with other factors. The results show that the square root

of the variance extracted for each factor is greater than all the correlation coefficients of that factor, proven to ensure the discriminant validity of the scale. Discriminant validity is guaranteed when all values in a column are less than the value on the corresponding diagonal. The values in table 7 ensure the conditions set forth.

TABLE 7

FORNELL-LARCKER CRITERION

	AT	CT	LS	RD	SE
AT	0.899				
CT	0.654	0.861			
LS	0.538	0.406	0.868		
RD	0.734	0.729	0.557	0.787	
SE	0.742	0.651	0.535	0.757	0.844

Source: own editing

Table 8 presents the VIF values of the variables of the PLS-SEM model. The VIF values need to be less than 5 to ensure that the problem of multicollinearity does not occur.

TABLE 8

VIF VALUES OF VARIABLES

	AT	CT	LS	RD	SE
AT				2.226	
CT	1.198				1.198
LS	1.198				1.198
RD					
SE				2.226	

Source: own editing

3.2 STRUCTURAL EQUATION MODELING (SEM)

The path coefficient quantifies the magnitude and direction of the linear relationship between variables. A positive value signifies a direct relationship, where an increase in one variable predicts a corresponding increase in the other. Conversely, a negative value indicates an inverse relationship, where an increase in one variable predicts a decrease in the other. The absolute value of the coefficient reflects the strength of this association, with higher values denoting a stronger effect (table 9).

TABLE 9

PATH COEFFICIENTS

	Path coefficients
AT → RD	0.384
CT → AT	0.521
CT → SE	0.568
LS → AT	0.327
LS → SE	0.204
SE → RD	0.472

Source: own editing

In this model, personality characteristics exert the most substantial influence on both attitude ($\beta = 0.521$) and self-efficacy ($\beta = 0.568$). This suggests that an individual's inherent disposition significantly shapes their approach to tasks and their belief in their capabilities. For instance, individuals with optimistic and extroverted traits are more likely to exhibit a positive attitude and higher self-efficacy compared to those with pessimistic and introverted tendencies.

While leadership style also impacts attitude and self-efficacy, its effect is less pronounced than that of personality characteristics. This implies that leadership behaviors can modulate, but not entirely override, the influence of inherent traits on these variables. Supportive and inspiring leadership may foster a more positive attitude and enhance self-efficacy, whereas authoritarian and critical leadership may have a detrimental effect.

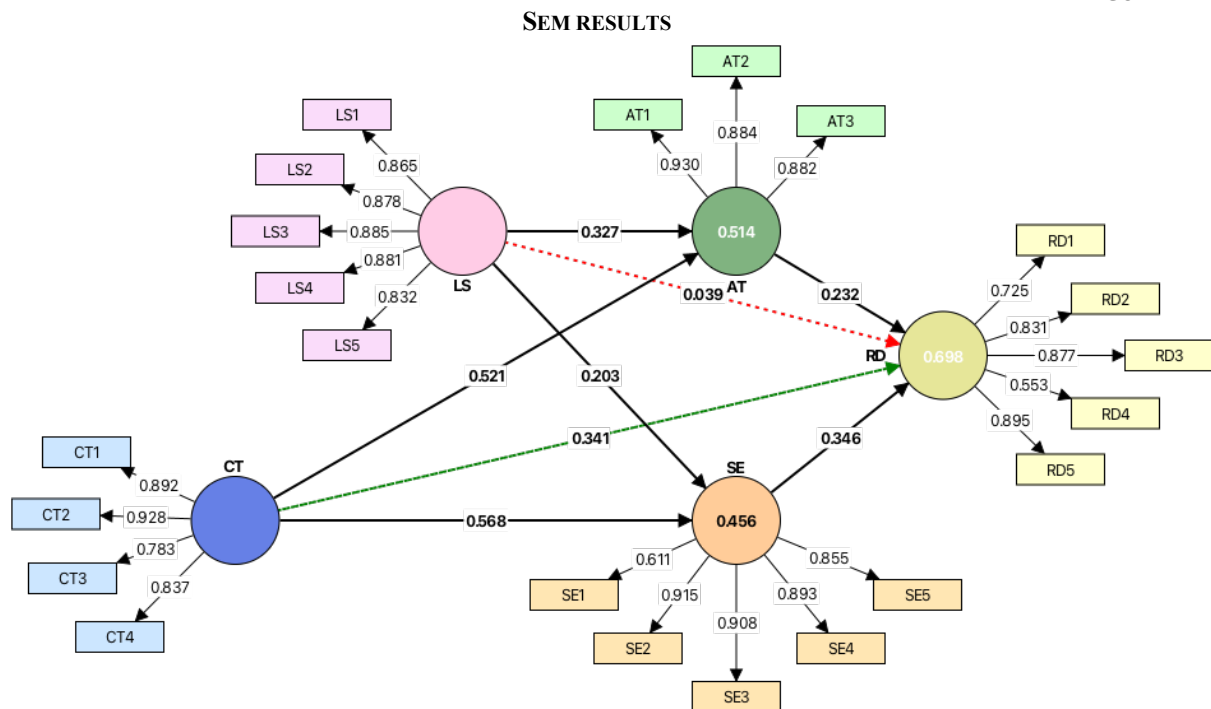
Readiness, the dependent variable in this model, represents an individual's perceived preparedness to undertake a task. The analysis reveals that both attitude ($\beta = 0.384$) and self-efficacy ($\beta = 0.472$) directly and positively predict readiness. Consequently, individuals with a more positive attitude and a stronger belief in their abilities are more likely to feel equipped to confront challenges.

The relationship between leadership style and self-efficacy is the weakest among the examined relationships ($\beta = 0.204$). This suggests that, while still statistically significant, leader-

ship style has the least impact on an individual's self-belief relative to the influence of personality characteristics.

The relationship between leadership style and attitude ($\beta = 0.327$) can be characterized as moderate. This indicates that leadership behavior does influence employee attitude, but other factors, such as individual personality traits, exert a more substantial effect.

FIGURE 2



Source: own editing

This path model elucidates the interrelationships between several key variables, providing insights into their reciprocal influences (figure 2).

Personality characteristics exert the most substantial impact on both attitude ($\beta = 0.521$) and self-efficacy ($\beta = 0.568$). This finding indicates that an individual's inherent traits fundamentally shape their disposition towards their work and their confidence in their capabilities. Individuals characterized by extroversion, enthusiasm, and optimism are more likely to cultivate positive attitudes and higher self-efficacy.

Leadership style primarily exerts a direct effect on attitude ($\beta = 0.327$), thereby indirectly influencing self-efficacy and readiness. This suggests that leadership behaviors can shape em-

ployee performance by modulating their attitude towards their work. For instance, a supportive and inspiring leader can foster a more positive work environment, leading to increased self-efficacy and enhanced task performance among employees.

Readiness, as the model's output variable, is directly influenced by both attitude and self-efficacy. This highlights the importance of an individual's psychological state in their preparedness to undertake tasks. Individuals with a positive attitude and strong self-efficacy are more likely to perceive themselves as equipped to overcome challenges.

These findings align with the notion that individuals are active agents in their own lives, shaping their behaviors based on their expectations and environmental cues. The concept of self-efficacy is intrinsically linked to this perspective, as individuals are more likely to successfully accomplish tasks when they possess confidence in their capabilities.

Furthermore, the model's results are consistent with motivational theories positing that individuals are driven by the desire to fulfill needs and gain recognition. A positive attitude and strong self-efficacy can enhance motivation, thereby contributing to improved performance.

Finally, the observed influence of leadership style on employee attitudes and performance supports the tenets of transformational leadership theory, which emphasizes the leader's role in inspiring and motivating employees to achieve higher levels of performance.

In the presented SEM model, the red and green arrows represent direct effects that appear weaker in magnitude compared to the indirect effects represented by black arrows. However, the term "weak" should be interpreted within the context of the model and does not necessarily imply that these direct effects are negligible or statistically insignificant.

The standardized path coefficients associated with the colored arrows are indeed smaller than those associated with the majority of the black arrows, indicating that the relationships between the variables in the model are primarily mediated. Specifically, the influence of leadership style and personality characteristics on digital readiness is largely channeled through the mediating variables of attitude and self-efficacy.

The green arrow depicts a notable direct effect of personality characteristics on digital readiness ($\beta = 0.341$). While this direct effect is substantial, the overall impact of personality characteristics is amplified when considering the indirect effects mediated through attitude and self-efficacy. Conversely, the direct effect of leadership style on digital readiness (red ar-

row) is positive but relatively weak ($\beta = 0.039$), suggesting that the influence of leadership style on readiness is primarily exerted indirectly.

Indirect effects are crucial for comprehending the complexity of relationships within the model. They demonstrate that variables not only influence each other directly but also interact through intermediary variables. This intricate interplay of influences mirrors the complexities observed in real-world phenomena, where multiple factors interact in multifaceted ways.

While indirect effects hold significant weight in this model, direct effects also contribute to the overall understanding of the relationships. These direct effects signify a direct causal link between variables. For instance, leadership style can directly influence readiness by establishing clear expectations and providing necessary resources, independent of the mediating effects of attitude and self-efficacy.

The analysis of this model reveals that the influence of leadership style and personality characteristics on digital readiness is primarily mediated by attitude and self-efficacy, although direct effects are also evident. This underscores the multifaceted nature of digital readiness, highlighting the interplay of various factors in its development. The examination of indirect effects provides a more nuanced understanding of these relationships and offers valuable insights for developing targeted interventions aimed at enhancing digital readiness.

3.3 HYPOTHESIS RESULTS

The results of the hypothesis testing are presented in Table 10.

TABLE 10

HYPOTHESIS RESULTS

Code	Hypothesis	Status
<i>H1a</i>	<i>Leadership style has a positive effect on attitude.</i>	accepted
<i>H1b</i>	<i>Leadership styles has a positive effect on self-efficacy.</i>	accepted
<i>H1c</i>	<i>Leadership style has a positive digital transformation readiness</i>	was not validated
<i>H2a</i>	<i>Characteristics has a positive effect on attitude.</i>	accepted
<i>H2b</i>	<i>Characteristics has a positive effect on self-efficacy.</i>	accepted
<i>H2c</i>	<i>Characteristics has a positive effect on digital transformation.</i>	accepted
<i>H3a</i>	<i>Attitude has a positive effect on digital transformation readiness.</i>	accepted

H3b	<i>Self-efficacy has a positive effect on digital transformation readiness.</i>	accepted
H4	<i>The level of readiness for digital transformation can be defined and categorized.</i>	accepted

Source: own editing

The quantitative results of the structural equation model (SEM) analysis, along with the detailed examination of the hypotheses, provide compelling evidence supporting the theoretical framework and confirm the validity of all proposed hypotheses. Consequently, it can be definitively concluded that digital readiness is a measurable construct that can be effectively operationalized and categorized.

To assess an employee's level of digital readiness, a comprehensive evaluation encompassing all components of the model is necessary. This involves examining the influence of leadership style on both attitude and self-efficacy, and subsequently, how these factors contribute to digital readiness. Furthermore, it is essential to consider the employee's individual characteristics and their impact on attitude and self-efficacy, which in turn shape their overall digital readiness.

The model highlights the importance of considering both direct and indirect relationships between the variables. The analysis reveals that digital readiness is more accurately captured and categorized when accounting for the mediating effects of attitude and self-efficacy. In other words, the sequential influence of leadership style and personality characteristics on attitude and self-efficacy, which subsequently impact digital readiness, provides a more robust and nuanced understanding than examining these factors in isolation. This is clearly illustrated in the SEM diagram, where direct effects are represented by colored arrows, while indirect effects are depicted by black arrows. The model highlights the importance of considering both direct and indirect relationships between the variables. The analysis reveals that digital readiness is more accurately captured and categorized when accounting for the mediating effects of attitude and self-efficacy. In other words, the sequential influence of leadership style and personality characteristics on attitude and self-efficacy, which subsequently impact digital readiness, provides a more robust and nuanced understanding than examining these factors in isolation. This is clearly illustrated in the SEM model, where direct effects are represented by colored arrows, while indirect effects are depicted by black arrows.

The confirmation of hypotheses H1(a, b), H2(a, b, c) and H3(a, b), coupled with the positive path coefficients observed in the model, provides strong support for the successful fulfillment and verification of hypothesis H4. The corroboration of these findings further validates the theoretical framework and its applicability.

3.4 DISCUSSIONS

Table 11 presented the effects results.

EFFECTS RESULTS

TABLE 11

Indirect effects	Results	Explanation
LS » AT » RD	Result	Effective leadership fosters a positive employee attitude ($\beta = 0.327$), which in turn contributes to greater readiness for digital transformation ($\beta = 0.232$). This suggests that a positive work environment cultivated by strong leadership plays a crucial role in preparing employees for digital change.
	In practice	Cultivating a positive employee attitude through effective leadership is instrumental in achieving digital readiness within an organization. By fostering a supportive and encouraging environment, leaders can empower employees to embrace digital transformation initiatives, facilitating their adaptation to new technologies and processes. This proactive approach to leadership, focused on nurturing a positive mindset, enables employees to effectively navigate the challenges and complexities associated with digital change, ultimately contributing to a successful organizational transition.
LS » SE » RD	Result	The analysis revealed that leadership style significantly influences employee self-efficacy ($\beta = 0.203$), which, in turn, strongly predicts digital readiness ($\beta = 0.346$). These findings highlight the indirect effect of leadership style on digital read-

		iness, mediated by employee self-efficacy.
	In practice	By fostering a supportive and empowering leadership style, organizations can cultivate employee self-efficacy, leading to increased confidence and a proactive approach to digital transformation. This heightened self-efficacy enables employees to embrace new technologies and adapt to evolving work processes, ultimately contributing to a smoother and more successful digital transformation journey. Leaders who inspire and empower their teams play a crucial role in equipping employees with the necessary skills and mindset to navigate the challenges and opportunities presented by the digital era.
CT » AT » RD	Result	The analysis reveals a strong positive relationship between employee characteristics and attitude ($\beta = 0.521$), indicating that personality traits significantly influence individuals' disposition towards their work and the organizational environment. Furthermore, employee characteristics indirectly affect digital readiness through their impact on attitude ($\beta = 0.232$).
	In practice	These findings emphasize the importance of considering individual characteristics when assessing digital readiness. Employees with personality traits such as openness, conscientiousness, and extraversion are more likely to exhibit a positive attitude towards change and a willingness to adapt to new technologies and processes. By fostering a work environment that values and supports diverse personality traits, organizations can encourage a positive attitude towards digital transformation and ultimately enhance employees' readiness for the challenges and opportunities that lie ahead. Recognizing and

		appreciating the diverse characteristics within the workforce can contribute to a more successful and inclusive digital transformation journey.
CT » SE » RD	Result	Employee characteristics have a substantial positive impact on self-efficacy ($\beta = 0.568$), which in turn significantly predicts digital readiness ($\beta = 0.346$). This suggests that individual personality traits play a crucial role in fostering self-efficacy, which subsequently contributes to a greater preparedness for digital transformation.
	In practice	These findings underscore the importance of recognizing and leveraging individual strengths in promoting digital readiness. Employees with characteristics such as openness to experience, conscientiousness, and emotional stability are more likely to possess high self-efficacy, enabling them to confidently approach new technologies and adapt to evolving work environments. By fostering a culture that values individual differences and provides opportunities for personal and professional growth, organizations can cultivate a workforce that is not only equipped to embrace digital transformation but also thrives in the face of technological advancements. This, in turn, contributes to a more successful and adaptable organization in the digital age.
Direct effects	Results	Explanation

LS » RD	Result	The analysis indicates that leadership style has a small, albeit positive, direct effect on digital readiness ($\beta = 0.039$). This suggests that while leadership behaviors do play a role in fostering digital readiness, their influence is primarily indirect and mediated through other factors, such as employee attitude and self-efficacy.
	In practice	While leadership style may not directly dictate digital readiness, it remains a crucial factor in shaping the organizational environment and fostering the necessary conditions for successful digital transformation. It is absolutely necessary to consider other factors during a transition process between leadership style and readiness for digital transformation.
CT » RD	Result	The analysis revealed a significant positive direct effect of employee characteristics on digital readiness ($\beta = 0.341$). This indicates that personality traits have a substantial influence on an individual's preparedness for digital transformation.
	In practice	Employee characteristics exert a substantial direct influence on digital readiness, highlighting the importance of individual traits in navigating the complexities of technological advancements and organizational change. Traits such as openness to experience, adaptability, and a growth mindset can equip individuals with the necessary skills and psychological resources to embrace new technologies and thrive in evolving work environments. This direct impact underscores the inherent capacity of individuals with these characteristics to readily adapt to and engage with digital transformation initiatives. However, it is important to note that the overall influence of employee characteristics on digital readiness is further ampli-

		fied when considering their indirect effects through factors such as self-efficacy and attitude.
--	--	--

Source: own editing

The research findings highlight the multifaceted nature of digital readiness, emphasizing the interplay of various factors in shaping an individual's preparedness for digital transformation. The model reveals a complex network of relationships, starting with leadership style and individual characteristics as initial influences. These factors, in turn, affect both self-efficacy and attitude, which ultimately contribute to an individual's overall digital readiness.

This intricate interplay underscores the importance of a holistic approach to fostering digital readiness within organizations. While nurturing existing employees' self-efficacy and positive attitudes remains crucial, the recruitment process offers a strategic opportunity to proactively enhance the organization's overall digital readiness. By prioritizing candidates who demonstrate inherent traits conducive to digital adaptability, such as openness to experience, growth mindset, and resilience, organizations can cultivate a workforce inherently equipped to navigate the complexities of digital transformation.

The model further demonstrates that while individual characteristics exert a significant direct effect on digital readiness, their impact is further amplified when complemented by strong self-efficacy and a positive attitude. This suggests that selecting individuals with a predisposition towards these attributes can create a workforce that not only readily adapts to digital changes but also thrives in the face of technological advancements. Therefore, by strategically focusing on these key factors during recruitment, organizations can proactively build a digitally resilient workforce and foster a smoother transition into the digital age.

CONCLUSION

This study embarked on a journey to understand the complexities of employee readiness for digital transformation, a phenomenon increasingly critical for organizational success in today's rapidly evolving technological landscape. It aimed to unravel the intricate web of factors that contribute to an individual's preparedness to embrace and thrive amidst the challenges and opportunities presented by digital change within organizations.

Literature review

The foundation of this research was laid by a comprehensive literature review, which painted a vivid picture of digital transformation as a multifaceted and pervasive force reshaping the business world. Digital transformation is not merely about adopting cutting-edge technologies like artificial intelligence, the Internet of Things, and cloud computing; it represents a fundamental shift in how organizations operate, deliver value, and interact with their customers. It necessitates a reimagining of core business processes, a renewed focus on customer experience, and a cultural metamorphosis that embraces innovation and agility. This transformation transcends industry boundaries, impacting sectors as diverse as manufacturing, healthcare, finance, education, and beyond, compelling organizations to adapt swiftly to maintain their competitive edge. The literature review also underscored the pivotal role of human capital in navigating this digital revolution. Employees are not just passive recipients of technological change; they are active agents who must possess the necessary skills, knowledge, and adaptability to embrace new technologies and processes. This emphasis on employee readiness as a key determinant of organizational success in the digital age provided the impetus for this research.

Factors influencing employee readiness for digital transformation

To delve deeper into the concept of employee readiness, the study meticulously examined the meaning and significance of four key factors: leadership style, employee characteristics, attitude, and self-efficacy. Leadership style, encompassing various approaches such as transformational, transactional, and democratic leadership, plays a crucial role in shaping employee perceptions, motivations, and behaviors. Employee characteristics, encompassing a wide

array of attributes including personality traits, skills, competencies, and demographic factors, contribute to the unique perspectives and capabilities that individuals bring to their roles. Attitude, reflecting an individual's disposition towards their work, the organization, and digital transformation initiatives, can significantly influence their willingness to embrace change and adapt to new technologies. Self-efficacy, representing an individual's belief in their ability to successfully execute tasks and achieve goals in the digital realm, is a powerful driver of motivation and resilience in the face of technological challenges.

The relationships between the examined factors

Having established the significance of these factors, the research then explored their intricate interrelationships, demonstrating how leadership style and employee characteristics can shape employee attitudes and self-efficacy, which in turn impact their preparedness for digital transformation. The analysis revealed that personality characteristics, encompassing traits such as openness to experience, conscientiousness, extraversion, and emotional stability, have the most substantial influence on both attitude and self-efficacy. This suggests that individuals with a proactive, adaptable, and confident disposition are more likely to embrace digital change and exhibit a strong belief in their ability to navigate the complexities that arise. While leadership style also plays a significant role in fostering a positive attitude and enhancing self-efficacy, its effect is generally less pronounced than that of personality characteristics. This underscores the importance of recognizing and leveraging individual strengths while fostering a supportive leadership environment to cultivate a digitally ready workforce.

Summary of the hypothesis

Based on the insights gleaned from the literature review and the conceptual framework, the study formulated seven hypotheses to guide the empirical investigation. These hypotheses posited that leadership style and employee characteristics would positively influence both attitude and self-efficacy, and that both attitude and self-efficacy would be strong predictors of digital transformation readiness.

Method

To test these hypotheses, the study employed a quantitative research approach, utilizing a survey methodology to collect data from a large sample of 525 employees working in various Hungarian companies across different industries. The data collected through the survey was then rigorously analyzed using SmartPLS software, a powerful tool for structural equation modeling, to examine the complex interplay between the variables under investigation.

Measures

The study utilized validated measurement scales to assess the key constructs of leadership style, employee characteristics, attitude, self-efficacy, and digital transformation readiness. All measures employed a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree," to capture the respondents' level of agreement with various statements related to each construct.

Demographic profile of the sample

The demographic profile of the sample revealed a balanced representation of males and females, ensuring that the findings are not skewed towards a particular gender. The majority of respondents were young adults aged between 18-25, indicating that the study captured the perspectives of the generation most likely to be at the forefront of digital transformation in the workplace. The participants also represented a diverse range of work experience, from 1-3 years to 20+ years, providing a comprehensive view of how digital readiness varies across different career stages. Furthermore, the inclusion of employees from both intellectual and physical workplaces, as well as from various industries, including manufacturing, service, education, and IT, ensured that the findings are generalizable across different sectors of the Hungarian economy.

Validity and credibility

To ensure the reliability and validity of the findings, the study employed rigorous statistical measures. Cronbach's alpha and composite reliability were used to assess the internal consistency of the measurement scales, confirming that the items within each scale were measuring the same underlying construct. The average variance extracted (AVE) was calculated to determine the convergent validity of the scales, indicating the extent to which each scale was

measuring the intended construct. Discriminant validity was also assessed to confirm that the different scales were measuring distinct constructs. The study met all the required statistical criteria, ensuring that the data and analysis were robust and reliable.

Structural equation modeling (SEM)

The SEM analysis provided valuable insights into the direct and indirect effects of the examined factors on digital readiness. It confirmed the significant impact of personality characteristics on both attitude and self-efficacy, highlighting the importance of individual traits in shaping an individual's preparedness for digital transformation. Leadership style also emerged as a crucial factor, primarily through its influence on employee attitude, further emphasizing the importance of fostering a supportive and empowering leadership environment to cultivate a digitally ready workforce. The analysis also revealed that both attitude and self-efficacy are strong predictors of digital readiness, indicating that individuals with a positive attitude towards digital change and a strong belief in their ability to adapt are more likely to embrace and thrive in a digitally transformed workplace.

Hypothesis results

The study's findings provided strong support for all seven proposed hypotheses, demonstrating the validity of the theoretical framework and the measurability of digital readiness as a construct. This confirmation further strengthens the study's conclusions and its practical implications for organizations seeking to enhance their digital readiness.

Discussions

The discussion section delved deeper into the nuances of the findings, elaborating on the complex interplay between the examined factors and highlighting the importance of considering both direct and indirect effects when assessing and fostering digital readiness. It emphasized the need for a holistic approach that takes into account individual characteristics, leadership behaviors, and organizational culture to create a work environment conducive to digital transformation. The discussion also explored the practical implications of the findings for organizations, particularly in the context of recruitment.

Closing remarks

This research contributes valuable insights into the dynamics of digital transformation readiness, a critical aspect of organizational success in today's rapidly evolving technological landscape. By highlighting the crucial role of employee characteristics and attitudes, it provides practical guidance for organizations, particularly during recruitment. Prioritizing candidates with inherent qualities conducive to digital adaptability, such as openness to experience, growth mindset, resilience, and a positive attitude towards change, can significantly enhance an organization's overall readiness for digital transformation and facilitate a smoother transition into the digital age.

REFERENCES

- Aghakhani, G., Wautelet, Y., Dijkmans, D., Heng, S., Poelmans, S., & Kolp, M. (2024). Supporting digital transformation strategy formulation through a customisable set of objectives: conceptual model and expert opinions. *Enterprise Information Systems*, 18(3), 2300089.
- Ahmad, F., Widén, G., & Huvila, I. (2020). The impact of workplace information literacy on organizational innovation: An empirical study. *International Journal of Information Management*, 51, 102041.
- Ahmed, S., Abd Aziz, N., Haque, R., Bin S. Senathirajah, A. R., & Qazi, S. Z. (2024). Digital transformation in Malaysian manufacturing: a study of change sensing and seizing capabilities. *Cogent Business & Management*, 11(1), 2392046.
- Alloghani, M., Thron, C., & Subair, S. (2022). Past achievements and future promises of digital transformation: A literature review. *Artificial Intelligence for Data Science in Theory and Practice*, 27-39.
- Altmann, T. K. (2008). Attitude: A concept analysis. *Nursing Forum*, 43(3), 144-150
- Armenakis, A. A., Harris, S. G., & Feild, H. S. (2000). Making change permanent: A model for institutionalizing change interventions. In *Research in organizational change and development*, 12 (pp. 97-128)
- Bandura, A. (2010). Self-Efficacy. In I. B. Weiner & W. E. Craighead (Eds.). *The Corsini Encyclopedia of Psychology*, 1–3.
- Bandura, A., & Wessels, S. (1997). Self-efficacy (pp. 4-6). Cambridge: Cambridge University Press.
- Bao, X., & Ou, T. (2022, January). Visual analysis of leadership style practical knowledge graph under the background of big data——based on Citespace and Python. In *2022 3rd International Conference on Education, Knowledge and Information Management (ICEKIM)* (pp. 704-707). IEEE.

- Becker, S. (2020). Unternehmerische Transformation und Digitalisierung: Eine empirische Analyse der Digitalisierungsbereitschaft von Beschäftigten mit besonderer Berücksichtigung multipler Kategorien von Einflussfaktoren (Doctoral dissertation, Dissertation, Duisburg, Essen, Universität Duisburg-Essen, 2020).
- Bekkhus, R. (2016). Do KPIs used by CIOs decelerate digital business transformation? The case of ITIL.
- Bouckennooghe, D., Devos, G., & Van Den Broeck, H. (2009). Organizational change questionnaire—climate of change, processes, and readiness: Development of a new instrument. *The Journal of psychology*, 143(6), 559-599.
- Brown, A., Fishenden, J., Thompson, M., Brown, A., Fishenden, J., & Thompson, M. (2014). Organizational structures and digital transformation. *Digitizing Government: Understanding and Implementing New Digital Business Models*, 165-183.
- Brown, G., Pierce, J. L., & Crossley, C. (2014). Toward an understanding of the development of ownership feelings. *Journal of Organizational Behavior*, 35(3), 318-338.
- Bryman, A. (2006). Kvantitatív és kvalitatív módszerek összekapcsolása.
- Bui, T. H. T., Nguyen, T. A. T., & Nguyen, T. M. (2019). Vietnamese Young Graduate Employees' Evaluation of Sources of Self-efficacy at Work. *The Open Psychology Journal*, 12(1).
- Bujang, M. A., Omar, E. D., & Baharum, N. A. (2018). A review on sample size determination for Cronbach's alpha test: a simple guide for researchers. *The Malaysian journal of medical sciences: MJMS*, 25(6), 85.
- Durst S., Davila A., Foli S. & Cheng C.-F. (2023) Antecedents of technological readiness in times of crises: A comparison between before and during COVID-19
- Chantias, S. (2017). Mastering digital transformation: the path of a financial services provider towards a digital transformation strategy.
- Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of applied psychology*, 93(5), 1082.

- Choi, M. (2011). Employees' attitudes toward organizational change: A literature review. *Human resource management*, 50(4), 479-500.
- Christiansen, N., Sliter, M., & Frost, C. T. (2014). What employees dislike about their jobs: Relationship between personality-based fit and work satisfaction. *Personality and Individual Differences*, 71, 25-29.
- De Clercq, D., Haq, I. U., & Azeem, M. U. (2018). Self-efficacy to spur job performance: Roles of job-related anxiety and perceived workplace incivility. *Management Decision*, 56(4), 891-907.
- Dhamija, P., Chiarini, A., & Shapla, S. (2023). Technology and leadership styles: a review of trends between 2003 and 2021. *The TQM Journal*, 35(1), 210-233.
- Di Battista, A., Grayling, S., & Hasselaar, E. (2023). Future of jobs report 2023. World Economic Forum, Geneva, Switzerland.
- Dióssy, K., Losonci, D., & Városiné Demeter, K. (2023). Vezetési stílusok hatása a digitális transzformációra. *Vezetéstudomány-Budapest Management Review*, 54(10), 2-14.
- Elsbach, K. D., & Stigliani, I. (2018). Design thinking and organizational culture: A review and framework for future research. *Journal of management*, 44(6), 2274-2306.
- Fackler, S., & Malmberg, L. E. (2016). Teachers' self-efficacy in 14 OECD countries: Teacher, student group, school and leadership effects. *Teaching and teacher education*, 56, 185-195.
- Fahmi, T. A., Tjakraatmadja, J. H., & Ginting, H. (2023). An empirical study of emerging digital culture and digital attitudes in an established company. *Journal of Industrial Engineering and Management*, 16(2), 342-362.
- Fitouri, M. (2023). Intrapreneurial behaviors and the innovative performance of technology enterprises: employee characteristics' moderating effect. *International Journal of Technoentrepreneurship*, 4(4), 321-343.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.

- Geada, N. (2021). Change Management in Digital Transformation: Business Model Concepts. In *Reviving Businesses With New Organizational Change Management Strategies* (pp. 251-260). IGI Global.
- Gebayew, C., Hardini, I. R., Panjaitan, G. H. A., & Kurniawan, N. B. (2018, October). A systematic literature review on digital transformation. In *2018 International Conference on Information Technology Systems and Innovation (ICITSI)* (pp. 260-265). IEEE.
- Gfrerer, A., Hutter, K., Füller, J., & Ströhle, T. (2021). Ready or not: Managers' and employees' different perceptions of digital readiness. *California Management Review*, 63(2), 23-48.
- Gliem, J. A., & Gliem, R. R. (2003, October). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. In *Midwest research-to-practice conference in adult, continuing, and community education* (Vol. 1, pp. 82-87).
- Gong, C., & Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation*, 102, 102217.
- Gruman, G. (2016). What digital transformation really means. *InfoWorld*, 18(1), 1-3.
- Gun, L., Imamoglu, S. Z., Turkcan, H., & Ince, H. (2024). Effect of Digital Transformation on Firm Performance in the Uncertain Environment: Transformational Leadership and Employee Self-Efficacy as Antecedents of Digital Transformation. *Sustainability*, 16(3), 1200.
- Haktanır, E., Kahraman, C., Şeker, Ş., & Doğan, O. (2022). Future of digital transformation. In *Intelligent systems in digital transformation: Theory and applications* (pp. 611-638). Cham: Springer International Publishing.
- Hargitai, D.M. & Bencsik, A. (2023) *The Role of Leadership in Digital Learning Organizations*
- Heim, I., & Sardar-Drenda, N. (2021). Assessment of employees' attitudes toward ongoing organizational transformations. *Journal of Organizational Change Management*, 34(2), 327-349.

- Helmold, M. (2020). Leadership and empowerment. In *Lean Management and Kaizen: Fundamentals from Cases and Examples in Operations and Supply Chain Management* (pp. 57-64). Cham: Springer International Publishing.
- Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural equation modeling*, 17(1), 82-109.
- Hortoványi, L., Szabó, Z. R., Nagy, S. G., & Stukovszky, T. (2020). A digitális transzformáció munkahelyekre gyakorolt hatásai–Felkészültek-e a hazai vállalatok a benne rejlő nagy lehetőségekre (vagy a veszélyekre)? *Külgazdaság*, 64(3-4), 73-96.
- Höyng, M., & Lau, A. (2023). Being ready for digital transformation: How to enhance employees' intentional digital readiness. *Computers in Human Behavior Reports*, 11, 100314.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of applied psychology*, 92(5), 1332.
- Imre, P. (2019). Küldetés alapú vezetés a digitális transzformáció korában. Lóderer Balázs–Stohl Róbert (szerk.): *Fegyver nélküli műveletek és háttértényezők*. Budapest, Honvéd Tudományos Kutatóműhely, 2019a, 141-157.
- Jeanquart Miles, S., & Mangold, G. (2002). The impact of team leader performance on team member satisfaction: The subordinate's perspective. *Team Performance Management: An International Journal*, 8(5/6), 113-121.
- Kagan, S. (1994). *Cooperative learning*. San Clemente: Kagan.
- Karam, H., & Tasmin, R. (2020). The leadership style and its impact on the employees' productivity: A review of the oil and gas sector with a focus on ADNOC. *International Journal of Advanced and Applied Sciences*, 7(11), 37-50.
- Khuwaja, U., Ahmed, K., Abid, G., & Adeel, A. (2020). Leadership and employee attitudes: The mediating role of perception of organizational politics. *Cogent Business & Management*, 7(1), 1720066.

- Kiss-Simon, Á. Ipari forradalom 4.0-A digitális transzformáció előnyeiről és kihívásairól.
- Lee, A., Martin, R., Thomas, G., Guillaume, Y., & Maio, G. R. (2015). Conceptualizing leadership perceptions as attitudes: Using attitude theory to further understand the leadership process. *The Leadership Quarterly*, 26(6), 910-934.
- Lee, H., Cayer, N. J., & Lan, G. Z. (2006). Changing federal government employee attitudes since the Civil Service Reform Act of 1978. *Review of Public Personnel Administration*, 26(1), 21-51.
- Leontitsis, A., & Pagge, J. (2007). A simulation approach on Cronbach's alpha statistical significance. *Mathematics and Computers in Simulation*, 73(5), 336-340.
- Liu, W., & Gumah, B. (2020). Leadership style and self-efficacy: The influences of feedback. *Journal of psychology in Africa*, 30(4), 289-294.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual review of psychology*, 51(1), 201-226.
- Matošková, J., Bartók, O., & Tomancová, L. (2022). The relation between employee characteristics and knowledge sharing. *VINE Journal of Information and Knowledge Management Systems*, 52(4), 486-507.
- Matsunaga, M. (2021). Testing the theory of communication and uncertainty management in the context of digital transformation with transformational leadership as a moderator. *International Journal of Business Communication*, 23294884211023966.
- Mehmood, H., & Farshchian, B. A. (2023). Exploring Conditions for Employee Participation in Digital Transformation-A Systematic Literature Review.
- Melinda, M. (2020). „Esélyeink és kihívásaink a digitális transzformáció világában”: Net-workshop–2020. szeptember 1–4. Könyv, Könyvtár, Könyvtáros, 29(9.), 14-20.
- Mitev, A. Z., Tóth, R., & Vaszkun, B. (2024). Role transition of higher education teachers due to disruptive technological change: Identity reconstruction for a better teacher-student relationship. *The International Journal of Management Education*, 22(2), 100978.
- Mitterer, D. M. (2017). Servant leadership and its effect on employee job satisfaction and turnover intent (Doctoral dissertation, Walden University).

- Montañez Huancaya De Salinas, A. P., Palumbo Pinto, G. B., Ramos Vera, R. P., & Ramos Vera, P. M. (2022). Leadership styles in educational organizations: Theoretical approaches.
- Muduli, A., & Choudhury, A. (2024). Exploring the role of workforce agility on digital transformation: a systematic literature review. *Benchmarking: An International Journal*.
- Muehlburger, M., Krumay, B., Koch, S., & Currie, S. (2022). Individual digital transformation readiness: Conceptualisation and scale development. *International Journal of Innovation Management*, 26(03), 2240013.
- Nagy, M. F. (2018). A digitális transzformáció hatása a munkavállaláshoz szükséges kompetenciákra (Doctoral dissertation, BCE).
- Nielsen, K., & Munir, F. (2009). How do transformational leaders influence followers' affective well-being? Exploring the mediating role of self-efficacy. *Work & Stress*, 23(4), 313-329.
- Nuaimi, B. K., Singh, S. K., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility, and digital strategy. *Journal of Business Research*, 145, 636-648.
- Oldham, G. R. (2011). The design of jobs: A strategy for enhancing the positive outcomes of individuals at work.
- Ormrod, J. E., Anderman, E. M., & Anderman, L. H. (2023). Educational psychology: Developing learners. Pearson. One Lake Street, Upper Saddle River, New Jersey 07458.
- Owolabi, H. O., Ayandele, J. K., & Olaoye, D. D. (2020). A Systematic Review of Structural Equation Model (SEM). *Open Journal of Educational Development* (ISSN: 2734-2050), 1(2), 27-39.
- Paavola, R., Hallikainen, P., & Elbanna, A. R. (2017, June). Role of Middle Managers in Modular Digital Transformation: the Case of Servu. In *ECIS* (p. 58).
- Pan, W., Sun, L. Y., & Chow, I. H. S. (2011). The impact of supervisory mentoring on personal learning and career outcomes: The dual moderating effect of self-efficacy. *Journal of Vocational Behavior*, 78(2), 264-273.

- Parent-Lamarche, A., & Fernet, C. (2020). the role of employee self-efficacy in top-down burnout crossover: A longitudinal study. *Journal of Occupational and Environmental Medicine*, 62(10), 803-809.
- Piccinini, E., Hanelt, A., Gregory, R., & Kolbe, L. (2015). Transforming industrial business: The impact of digital transformation on automotive organizations.
- Poór, J., Schottner, K., Frajna Piller, A., Hárskúti, J., & Kis-Kálmán, D. (2019). Változások az emberi erőforrás menedzsmentben a digitális transzformáció útján egy magyarországi empirikus kutatás tükrében. *Munkaügyi Szemle*, 62(2), 8-14.
- Purwanto, A., & Sudargini, Y. (2021). Partial least squares structural equation modeling (PLS-SEM) analysis for social and management research: a literature review. *Journal of Industrial Engineering & Management Research*, 2(4), 114-123.
- Rialti, R. & Filieri, R. (2024) Leaders, let's get agile! Observing agile leadership in successful digital transformation projects
- Roskams, M., & Haynes, B. (2020). Employee-workplace alignment: Employee characteristics and perceived workplace requirements. *Facilities*, 38(3/4), 282-297.
- Rogers, E. M. (2003). *Diffusion of innovations*. New York, NY: Free Press.
- Rubenstein, A. L., Zhang, Y., Ma, K., Morrison, H. M., & Jorgensen, D. F. (2019). Trait expression through perceived job characteristics: A meta-analytic path model linking personality and job attitudes. *Journal of Vocational Behavior*, 112, 141-157
- Saengsith, N. & Suntraruk, P. (2022) Assessing the internal auditors' readiness for digital transformation
- Schlager, T., Bodderas, M., Maas, P., & Luc Cachelin, J. (2011). The influence of the employer brand on employee attitudes relevant for service branding: an empirical investigation. *Journal of Services Marketing*, 25(7), 497-508.
- Scott, D., Brown, M., Shields, J., Long, R. J., Antoni, C. H., Beck-Krala, E. J., ... & Perkins, S. J. (2015). A global study of pay preferences and employee characteristics. *Compensation & Benefits Review*, 47(2), 60-70.

- Seltzer, J., NUMEROF, R. E., & BASS, B. M. (1989). Transformational leadership: Is it a source of more burnout and stress?. *Journal of Health and Human Resources Administration*, 174-185.
- Solberg, E., Traavik & Wong (2020) *Digital Mindsets: Recognizing and Leveraging Individual Beliefs for Digital Transformation*
- Spinath, B., Spinath, F. M., Riemann, R., & Angleitner, A. (2003). Implicit theories about personality and intelligence and their relationship to actual personality and intelligence. *Personality and Individual Differences*, 35(4), 939-951.
- Stoianova, O., Ivanova, V., Lezina, T., & Moskaleva, V. (2019). Domains for assessing companies' readiness for digital transformation: Practical cases. In *Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020* (pp. 1505-1513).
- Subramony, M., Krause, N., & Norton, J. (2007, August). Organizational performance, human resource investments, and employee attitudes. In *Academy of Management Proceedings* (Vol. 2007, No. 1, pp. 1-6). Briarcliff Manor, NY 10510: Academy of Management.
- Szabó, Z. R., & Hortoványi, L. (2021). Digitális transzformáció és ipar 4.0: magyar, szerb, szlovák és román tapasztalatok. *Külgazdaság*, 65(5-6), 56-76.
- Thuy, N. T. T., Thanh, H. P. T., Ngoc, T. T. B., & Si, L. T. (2023). Determinants of employee digital transformation readiness and job performance: a case of SMES in Vietnam. *Problems and Perspectives in Management*, 21(4), 226-239.
- Tian, Z. L., & Huang, P. L. (2013). Researches on the effects of leader empowerment behavior on employees' voice behavior: The mediating effect of self-efficacy. In *Proceedings of 20th International Conference on Industrial Engineering and Engineering Management: Theory and Apply of Industrial Engineering* (pp. 757-764). Springer Berlin Heidelberg.
- Tobór-Osadnik, K., Wyganowska, M., & Manowska, A. (2017). Employee attitudes to work safety in Poland's coal mining companies. *Journal of the Southern African Institute of Mining and Metallurgy*, 117(1), 41-46.

- Trischler, M. F. G., & Li-Ying, J. (2022). Exploring the relationship between multi-dimensional digital readiness and digital transformation outcomes. *International Journal of Innovation Management*, 26(03), 2240014.
- Van Veldhoven, Z., & Vanthienen, J. (2019). Designing a comprehensive understanding of digital transformation and its impact.
- Varshney, D. (2020). Digital transformation and creation of an agile workforce: Exploring company initiatives and employee attitudes. In *Contemporary global issues in human resource management* (pp. 89-105). Emerald Publishing Limited.
- Viktória, T. E. Iránytű a digitális tájékozódáshoz Magyarországon: a tudásmenedzsment és a feltörekvő technológiák kapcsolatának feltárása a digitális transzformáció korában.
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.
- Wong, C. A., & Laschinger, H. K. (2013). Authentic leadership, performance, and job satisfaction: the mediating role of empowerment. *Journal of advanced nursing*, 69(4), 947-959.
- Wothke, W. (2010). *Introduction to Structural Equation Modelling Course Notes*. SAS Education & Publishing.
- Z Karvalics, L. (2019). Tegyük a humanizmust a digitális transzformáció középpontjává! [Let's put humanism at the heart of digital transformation!]. *információs társadalom: társadalomtudományi folyóirat*, 19(1), 123-125.
- Živković, S. (2022). Inspiring digital transformation: An integrative leadership competency framework. *Ekonomika misao i praksa*, 31(1), 237-254.