

Article

Artificial-Intelligence-Supported Reduction of Employees' Workload to Increase the Company's Performance in Today's VUCA Environment

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Abstract: This paper aims to develop a multidimensional model of AI-supported employee workload reduction to increase company performance in today's VUCA environment. Multidimensional constructs of the model include several aspects of artificial intelligence related to human resource management: AI-supported organizational culture, AI-supported leadership, AI-supported appropriate training and development of employees, employees' perceived reduction of their workload by AI, employee engagement, and company's performance. The main survey involved 317 medium-sized and large Slovenian companies. Structural equation modeling was used to test the hypotheses. The results show that three multidimensional constructs (AI-supported organizational culture, AI-supported leadership, and AI-supported appropriate training and development of employees) have a statistically significant positive effect on employees' perceived reduction of their workload by AI. In addition, employees' perceived reduced workload by AI has a statistically significant positive effect on employee engagement. The results show that employee engagement has a statistically significant positive effect on company performance. The concept of engagement is based on the fact that the development and growth of the company cannot be achieved by increasing the number of employees or by adding capital; the added value comes primarily from increased productivity, which is a result of the innovative ability of employees and their work engagement, which improve the company's performance. The results will significantly contribute to creating new views in the field of artificial intelligence and adopting important decisions in creating working conditions for employees in today's rapidly changing work environment.

Keywords: artificial intelligence; leadership; employee engagement; company performance



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1. Introduction

The business world has become more complex, turbulent, and unpredictable [1]. One of the main reasons for this is the advent of digital transformation [2]. This dynamic environment is often referred to by the acronym VUCA, which stands for volatility, uncertainty, complexity, and ambiguity [3]. The term volatility pertains to a fluctuating pace of modification, while uncertainty denotes the absence of foreseeability and adequate information. Complexity characterizes interconnected structures that lack apparent cause-and-effect relationships, and ambiguity acknowledges the challenge of precisely evaluating the truth in an intricate and volatile environment [4]. VUCA defines the fundamental external and internal conditions and situations that affect a company [1]. The concept of VUCA has recently gained widespread recognition due to digital transformation, technological advances in artificial intelligence, robotics, exchange platforms, and the Internet, fundamentally changing business models and industries [5]. In a world where the environment is defined as volatile, uncertain, complex, and ambiguous, making strategic decisions is

becoming challenging for companies, as the speed of change can make long-term decisions ineffective [6]. Furthermore, in a VUCA environment, leaders can no longer make strategic decisions based on experience and knowledge [4]. The company's strategic decisions using AI are suitable and effective for the VUCA environment, as they lead to faster decision making, which enables agility in the company [1]. AI increases predictability, reduces costs, reduces human bias, and improves the effectiveness of top management [5]. A survey conducted by Deloitte [7] among 9453 global leaders revealed that 80% of the participants concurred that the business environment in the 21st century has introduced fresh demands for leaders. Furthermore, 81% of the respondents highlighted the importance of possessing the capability to guide through increased complexity and ambiguity. The other leadership skills mentioned by the respondents include leading through influence, managing a remote workforce, supervising a team that comprises humans and machines, and leading with speed.

Work has changed in recent years mainly due to digitization and advanced technology. The very nature of work and the way of working have changed [8]. Since the coordination of the individual and the workplace is essential, work design is gaining more and more attention since, on average, we spend 40.3 h per week at the workplace [9]. Each individual must be satisfied with his work and work environment; otherwise, he will not be efficient enough, which will have a negative impact on the company's performance [10]. The research findings presented by Eurostat [9] indicate that a considerable proportion of employees face limited control and influence over various aspects of their work. Specifically, 35% of employees do not have control over their work, 29% cannot influence the choice of work methods, 30% are unable to influence the speed of their work, 39% have no control over their break times, and 55% cannot determine their work schedule. Moreover, 40% of employees report experiencing monotony at work, 60% face pressure due to tight deadlines, and 56% are required to work at a very fast pace. Thus, AI technology improves the entire company's operations from the perspective of new business methods enabled by new digital technology [11]. Digitization is defined as a change in the way of work, roles, and business caused by adopting digital technologies in the company [12]. This pertains to modifications occurring across various levels: (1) at the process level, which involves adopting novel digital tools and simplifying procedures by minimizing manual steps; (2) at the organizational level, which includes introducing new services, discarding outdated practices, and presenting existing services in innovative ways [13]; (3) at the business domain level, which involves alterations in roles and value chains within ecosystems; and (4) at the societal level, which involves modifications in societal structures such as the nature of work and means of influencing decision making. [14]. The fourth industrial revolution will bring about many changes. Most jobs will be increased by the demand for engineers, logistics specialists, IT specialists, designers, marketing personnel, and other professionals [15]. Future jobs will require more skills and many monotonous, repetitive tasks will become obsolete [8]. Digitization affects many aspects of businesses, including information technology, strategy and business models [13], products and services, internal and external processes, and organizational and corporate culture [12].

AI technology is already affecting the business environment and the corporate way of working [16]. Neglecting AI technology could cause companies to lose out in highly competitive markets. It can affect the entire operational environment and the company's internal functioning [11]. Still, it can also bring new business opportunities, change the roles of operators in the value chain, and end existing deals [15]. For example, AI technology can remove traditional semi-finished products in the supply chain and create new interfaces [17]. The use of AI technologies improves the efficiency, quality, and consistency of business processes and enables greater accuracy [18]. In addition, by automating routine work, AI can make employees more engaged at work and allow employees more time for education and developing new skills [19]. A company's digital transformation ability is largely determined by a clear digital strategy supported by leaders who cultivate an AI-supported organizational culture [20]. Employees of all age groups must want to work for companies

that are deeply committed to digital advancement and the use of AI technologies [16]. Leaders must provide appropriate training based on the use of AI for all age-diverse employees and strive to retain the most talented employees [14].

In some industries, work may be tied to machines that must be operated on an inflexible schedule, meaning that work schedules are determined by the location and schedule of the technology itself rather than the needs of the employees [21]. From this point of view, the use of AI technologies allows employees greater flexibility, saving working time and reducing stress in the workplace [22]. Moreover, AI technology can provide opportunities for employees to balance their professional and private life [4]. Thus, machine learning is designed to take over manual and repetitive processes, allowing employees to focus on the more rewarding results and analyzing data [23]. Artificial intelligence significantly reduces employees' workload and increases employee engagement [17]. Using AI technologies, employees perform demanding tasks easily and without excessive human effort. For example, HR departments use chatbots to train their employees and communicate with customers [24,25]. Employees do not have to monitor daily and labor-intensive tasks manually. This means they can focus on meaningful work [26]. This makes the workplace experience even more engaging. As a result, employees have more time to explore new business areas, expand their skills, and become even more productive in more dynamic work roles [16,27].

A survey conducted by the IBM Institute for Business Value [28] on a sample of 5000 businesses around the world showed that 93 % of companies are considering the use of artificial intelligence, but 60 % fear possible problems with responsibility, and 63 % fear a lack of their human resources and knowledge to manage artificial intelligence technologies confidently. According to a study conducted by Oracle and Future Workplace [29] involving 1320 U.S. leaders, although employees are willing to accept the integration of AI in their work and acknowledge its benefits beyond merely automating manual tasks, companies are not providing adequate support to facilitate their employees' adoption of AI, leading to decreased productivity. The study highlights that leaders believe AI can enhance operational efficiency (59%), expedite decision making (50%), significantly reduce costs (45%), improve customer experiences (40%), and enhance the employee experience (37%). However, 90% of leaders express apprehension that they may not be able to adapt to the rapid adoption of AI in their job roles [29]. Hence, the primary objective of this paper is to underscore the significance of utilizing AI to reduce employee workload and to concentrate on multidimensional factors, namely AI-supported appropriate training and employee development, AI-supported leadership, and AI-supported organizational culture, all of which can considerably reduce employee workload and consequently enhance employee engagement and the company's performance. In today's fast-changing business environment, companies are improving their business methods to be more successful than their competitors. Therefore, implementing AI is one of the revolutionary changes that lead to the renewal of the entire company operation, recruitment, training, and retention of people. A company that strives to use AI technology increases its performance in the labor market, as the use of AI technologies reduces routine work tasks and improves employees' quality of life. Moreover, AI-powered technology blends human experience with innovation and generates essential insights for efficient organizational development. By using machine learning algorithms to simulate cognitive functions, AI enables machines to make decisions that resemble human decision making. As a company prioritizes its workforce, AI facilitates the creation of a more conducive and contented work atmosphere, reduces bias, and spearheads meaningful initiatives aimed at holistic employee development.

2. Literature Review and Hypothesis

Implementing digital solutions and the accelerated use of AI have become indispensable for responding to many unexpected changes in the business environment [13]. A Microsoft study [30] found that companies see AI as a digital priority. AI leadership support, an experimental mindset, and creating a new culture that supports AI are the keys to

successfully embedding AI across the enterprise. The implementation of digital solutions in companies and the accelerated use of AI have become indispensable for responding to many unexpected changes in the business market [15,19]. Digital business transformation is the key to business competitiveness and success in today's extremely changing and increasingly demanding business environment [20]. Digital business transformation with its characteristics and rapidly developing digital technology requires a different type of organization and operation in the company, which means a change in organizational culture [21]. The renewal of the organizational culture, which encompasses the set of beliefs, values, habits, and experiences that define the organization through its employees, is one of the biggest challenges of a successful digital business transformation [18]. According to Ransbotham et al. [31], AI-supported organizational culture is a culture that supports innovation with AI. Thus, an organizational culture that supports AI provides all employees with behavioral guidelines that guide individuals to appropriate behavior and decision making, accelerating the achievement of the organization's integrated business digital strategy [32]. A successful organizational culture transformation that supports an integrated business AI strategy decisively supports and accelerates the digital business transformation [33]. Digital business transformation using AI technology is not only an opportunity for companies. However, it has become an obligation if the company wants to survive in a rapidly changing environment in the long term [34], and the first step begins with developing a modern digital organizational culture that supports AI [13]. AI solutions enable companies to automate routine tasks and create smart solutions for employees [35]. Thus, companies can leverage the rapid progress in cognitive services to gain decision support, extract information from unstructured data, comprehend natural languages, recognize and generate speech, analyze audio-visual content, and other fields that were previously the exclusive purview of human intelligence. [23].

The interaction between humans and artificial intelligence reveals that an individual's perception of artificial intelligence is based on different aspects. For example, affordances, salient cues, or collaborative interaction [36] can influence an individual's emotions and thus intentions toward AI [37]. Employees establish an identity concerning the technology used and their workplaces [38]. In our case, the dependent variable is "employees' perceived AI-supported reduction of workload," where we asked employers about their opinion on whether AI enables the reduction of workload. Therefore, the following hypothesis is proposed:

H1. *AI-supported organizational culture has a statistically significant positive effect on employees' perceived reduction of their workload by AI.*

The advent of technology has significantly disrupted conventional working practices, particularly those involving monotonous and recurring tasks [39]. This trend is expected to intensify further with the advent and deployment of AI, which will substantially transform the responsibilities of leaders as well [40]. Several studies have shown that leaders spend over 50% of their time arranging meetings, answering emails, compiling monthly reports, etc. They spend only 15% of their time on strategic thinking and talent development. With the help of AI, this relationship will change, and leaders can devote themselves to work with higher added value, which presents them with a greater intellectual challenge [41]. The adoption of AI requires new leadership that supports AI. In addition to employees, leaders also struggle with the stress caused by uncertainty, increasing complexity, and rapid changes in today's business environment [2]. Thus, AI can greatly help a leader trying to become more internally agile and encourage creative approaches to the transformation of the company [22]. AI has evolved into a practically indispensable technology for every company worldwide that wants to strengthen its competitive power [5]. In addition, recently, some workplaces have become hybrid, which has increased the daily amount of data produced [17]. Employees increasingly rely on the growing amount of data they access and analyze [26]. From this point of view, a new leadership style has been formed in companies that largely support AI and use continuous training on various artificial

intelligence tools [25]. A study by Data Agility [42] on 280 Australian leaders from various industries shows that 92% of leaders are aware of a successful and competitive advantage with AI in their company and 96% of leaders believe that AI will help their company grow. In addition, all Australian leaders believe AI will increase innovation, and 86% believe AI will increase innovation by 15% or more. Competitive advantage, work efficiency, better service delivery, and quicker access to critical insight are the top objectives that leadership across all sectors want to achieve with AI [11]. According to a survey of 1053 global executives, a majority of companies have adopted AI to automate or enhance repetitive or ineffective processes. Of those surveyed, 66% are utilizing AI technologies predominantly for business process automation, which is widely regarded as an ideal starting point owing to its ability to deliver rapid enhancements. [43]. For employees to perform their work effectively, leaders must support using artificial intelligence technologies because, in this way, implementing artificial intelligence in the company reduces employees' workload. Implementing artificial intelligence in the company leads to the transformation of employees' work and the reduction of their workload [43,44]. The use of AI technologies improves the performance of the entire company. Namely, AI is changing how companies structure their workflows, decision-making processes, and strategic planning [12]. In conjunction with analytics, AI programming helps leaders make better decisions about employees, customers, and production based on existing circumstances and future events predicted by AI [13]. Designed to emulate human behavior, customer service chatbots are essentially digital interfaces that engage in "conversations" with consumers while managing their transactions [14]. Furthermore, AI is expected to enhance mobile messaging capabilities between consumers and sellers, streamlining the process further [15]. Hence, it is proposed:

H2. *AI-supported leadership has a statistically significant positive effect on employees' perceived reduction of their workload by AI.*

Digital transformation with the help of artificial intelligence is rapidly entering companies of all industries and also in justice, as it is an area that records an extremely fast growth of data, and judicial employees must make complex decisions quickly and efficiently [23,45]. In various justice systems worldwide, digital tools have already been introduced to facilitate access to legal aid, improve communication between courts and lawyers, and support the work of judges and other court employees [46]. For example, the Ministry of Justice in Estonia is looking for AI opportunities to optimize and automate the procedural steps of the court in all types of proceedings, including procedural decisions where possible. Processes based on paper and electronic files will be partially replaced by processes based on AI data. One of the goals is that all court cases are conducted digitally, without paper files, and no unnecessary electronic files are prepared, and the processes will be optimized and automated as much as possible [47]. Moreover, the use of artificial intelligence to help optimize supply chain management is becoming more widespread in various industries. The management of supply chains has become increasingly complex in recent years, as physical flows are increasingly connected, and market volatility increases the demands for agility and adaptability. The use of artificial intelligence to manage supply chains is one way many companies are taking advantage of AI to manage increasingly demanding processes on a global and local level [48]. By using the vast amount of data generated by the company's operations, the company can create solutions to transform supply chain operations with the help of artificial intelligence [49]. This may include factory automation, improving quality control, demand forecasting, and predictive maintenance [38]. Thus, AI-powered tools and solutions are increasingly appearing in the workplace. From this perspective, employee training in artificial intelligence plays a key role [33]. Artificial intelligence in employee training has added a new dimension to many employees' roles [23]. Artificial intelligence can significantly shorten the learning process by recommending unique modules employees need to improve their job skills [34]. Employee training systems infused with AI have more personalization, automation, knowledge insights, and long-term sustainability than ever before [33]. Artificial intelligence enhances employee training by offering innovative

and personalized learning techniques [48]. Program bots select relevant lessons based on employee interest and contextual tagging, delivering tailored training to individuals [23]. With machine learning capabilities, AI can better anticipate learning patterns and forecast training needs based on previous behaviors, work roles, prior learning styles, experiences, and educational backgrounds [50]. This approach creates a more diverse and adaptable training program [39,40]. AI can even personalize quizzes and evaluations to optimize training outcomes. Additionally, AI mitigates any personal biases that may affect employee training [41]. Implementing AI in employee training leads to more effective and successful learning paths [25]. Therefore, it is hypothesized:

H3. *AI-supported appropriate training and development of employees have a statistically significant positive effect on employees' perceived reduction of their workload by AI.*

Employees are the key driving force of any company. Ultimately, highly motivated and engaged employees drive business growth [8]. However, today's trends in the workplace show that employees are not as engaged as they used to be [16]. A Gallup survey [51] of 112,312 business units in 96 countries shows that employee engagement declined by 2% in 2020. In 2020, the world's employees reached an all-time high for experiencing stress. In 2021, this percentage went even higher. Globally, employee engagement and well-being remain very low, holding back enormous growth potential [51]. Inevitably, the stress of employees has a negative impact on employee engagement. From this perspective, companies must focus on radical change rather than incremental improvements [52]. In order for companies to change radically, they need new ways of thinking and new approaches to work [24]. One of the main ways is to introduce AI technology into the company, as AI helps create a new future of work that is more flexible, diverse, and focused on employee well-being [19]. Additionally, a survey conducted by Verint [53] of 34,000 employees in 18 countries globally revealed that 72% of them attributed their low stress levels to access to AI tools. Additionally, 64% of employees agreed that automation technology can reduce both workload and stress. Furthermore, more than 70% of employees expressed a preference for technology to replace manual and laborious tasks. Among employees who reported high base levels of stress (82%), the majority stated that they would welcome AI technology that could provide them with the right information at the right time. Furthermore, 58% of employees expressed a desire for their employers to use more automation technology such as AI, and 55% had directly requested better technology from their employers to help them work more effectively. Artificial intelligence can help improve communication and optimize workflows by enhancing conversations and enriching interactions between employees and customers [20]. Machine learning algorithms can predict reactions to certain actions, such as meeting requests, which leads to higher employee engagement [23]. In this way, AI can minimize employees' steps to agree on meeting times or exchange necessary information in advance [48]. AI can also automatically compose meeting transcripts, allowing employees to focus on the meeting rather than taking notes [20]. It can even identify speakers based on their voices and convert their speech into text. Participants and others can then digitally search the final transcript. Whether it is sales, marketing, HR, finance, or any other company department, AI can help improve work efficiency and engagement [10,30]. Automating tasks gives employees more time to do other work and focus more on tasks that utilize creativity, which leads to increased company performance [14,54]. For example, financial advisors might spend less time analyzing clients' financial situations and more time understanding their needs and explaining creative options [55]. Employee engagement is employees' positive attitude towards their work and the company's values [56]. Employee engagement significantly impacts company performance, which can be greatly enhanced by creating new working conditions using AI [57]. According to this, the following two hypotheses are proposed:

H4. *Employees' perceived reduction of their workload by AI has a statistically significant positive effect on employee engagement.*

H5. Work engagement has a statistically significant positive effect on the company's performance.

Figure 1 presents the conceptual model of reducing employee workload with AI to increase company performance in today's VUCA environment.

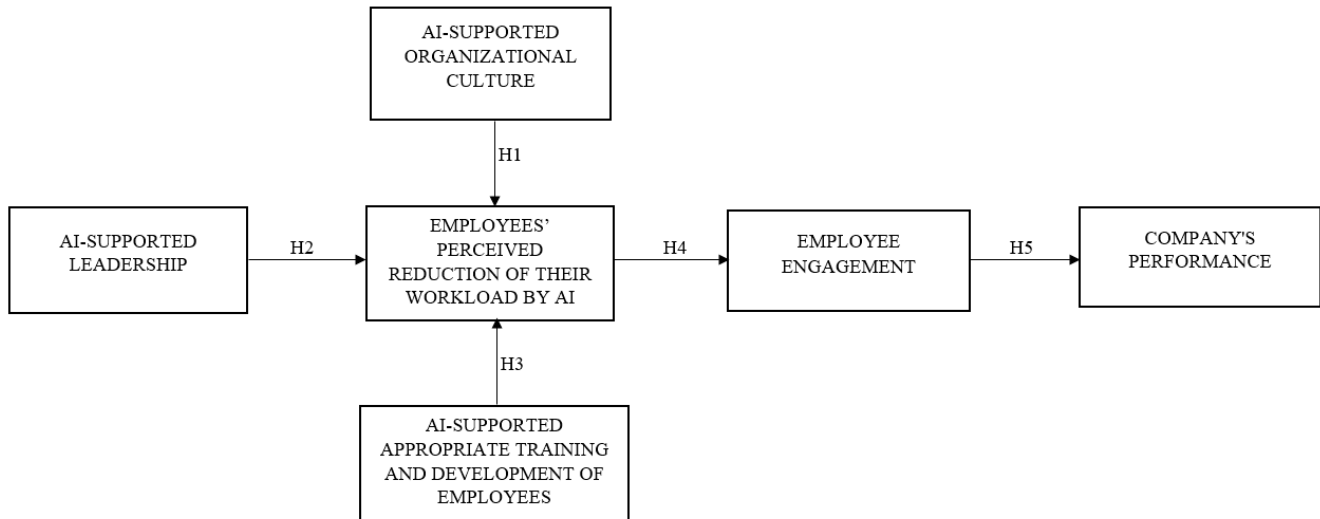


Figure 1. Conceptual model and hypotheses.

3. Materials and Methods

3.1. Data and Sample

The primary survey included a random selection of 317 medium-sized and large companies in Slovenia. The sample was selected from the AJPES database of business subjects [58], which represents the population. Empirical research was conducted by randomly selecting 500 medium-sized and large enterprises out of 2576 Slovenian enterprises [58]. The sample was selected using a random sampling method to ensure each population unit had an equal chance of being selected [59]. A manager or owner from each enterprise participated in the research by completing an online questionnaire, which was sent via email. Owners filled the questionnaire because we wanted to find out to what extent owners are aware of the importance of artificial intelligence, which can reduce the workload of their employees and thus increase their work engagement and the company's performance. The study had participation from 57.1% male and 42.9% female respondents. Large companies comprised 54.6% of the total, and medium-sized companies comprised 45.4%. The managers or owners who participated in the study were from various industries, including manufacturing (25.9%); trade, maintenance, and repair of motor vehicles (23.9%); information and communication activities (22.4%); financial and insurance activities (18.6%); professional, scientific, and technical activities (7.9%); and other diversified business activities (1.3%), based on the standard classification of enterprise activities.

3.2. Research Instrument

To conduct the study, a closed-type questionnaire was administered. The respondents were asked to rate their agreement with a series of statements using a 5-point Likert scale, with 1 denoting "strongly disagree" and 5 indicating "completely agree." The questions related to the construct of AI-supported organizational culture were taken from Dabbous et al. [40], while the questions related to the constructs of AI-supported leadership, employee engagement, and company performance were adapted from Wijayati et al. [20]. The questions related to the construct of AI-supported appropriate training and development of employees were adopted from Pillai and Sivathanu [41].

3.3. Statistical Analysis

Structural equation modeling (SEM) is a multivariate method commonly used in scientific research to analyze multivariate causal relationships [60]. Thus, the conceptual model of reducing employee workload with AI to increase company's performance in today's VUCA environment (Figure 1) presents three independent variables, namely AI-supported organizational culture, AI-supported leadership, and AI-supported appropriate training and development of employees, which have a statistically significant positive effect on employees' perceived reduction of their workload by AI (hypotheses H1, H2, and H3). Additionally, a conceptual model presents a statistically significant positive effect employees' perceived reduction of their workload by AI on employee engagement (hypothesis H4) and a statistically significant positive effect employee engagement on the dependent variable company's performance (hypothesis H5). As part of the validity assessment, we evaluated the average variance extracted (AVE) and composite reliability coefficients (CR) based on the criteria of $AVE > 0.5$, $CR > 0.7$, and $CR > AVE$ [61]. We also checked for multicollinearity using variance inflation factors (VIF) with a criterion of $VIF < 5.0$ [62]. The quality of the structural model was measured by the R-squared and adjusted R-squared coefficients, indicating the percentage of explained variance of latent variables in the structural model, as well as the Stone–Geisser Q-squared coefficient to examine the predictability value of the structural model. Acceptable predictive validity for an endogenous latent variable is considered as $Q^2 > 0$ [61]. Additionally, we used the quality indicators listed in Table 1, including the model fit and quality indicators, to test the model.

Table 1. Model fit and quality indicators.

Quality Indicators	The Criterion of Quality Indicators
Average path coefficient (APC)	$p < 0.05$
Average R-squared (ARS)	$p < 0.05$
Average adjusted R-squared (AARS)	$p < 0.05$
Average block variance inflation factor (AVIF)	$AVIF < 5.0$
Average full collinearity VIF (AFVIF)	$AFVIF < 5.0$
	$GoF \geq 0.1$ (low)
Goodness-of-fit (GoF)	$GoF \geq 0.25$ (medium)
	$GoF \geq 0.36$ (high)
Simpson's paradox ratio (SPR)	$SPR \geq 0.7$, ideally = 1
R-squared contribution ratio (RSCR)	$RSCR \geq 0.9$, ideally = 1
Statistical suppression ratio (SSR)	$SSR \geq 0.7$
Nonlinear causality direction ratio (NLBCD)	$NLBCD \geq 0.7$

To test the hypotheses, we used the path coefficient associated with a causal link in the model (γ) and the Cohen effect indicator (f^2), with 0.02, 0.15, and 0.35 indicating small, medium, and large effect sizes, respectively [61].

4. Results

First, based on the Kaiser–Meyer–Olkin measure of sampling adequacy ($KMO \geq 0.5$) and Bartlett's test of sphericity ($p < 0.05$) [63], we wanted to establish if the use of an exploratory factor analysis is reasonable. The results in Table 2 show that factor analysis is justified. Based on the exploratory factor analysis results, we found that all communalities were above 0.40 [64], indicating that no variables needed to be eliminated. Additionally, all factor loadings were above 0.70. To assess the reliability of our research measurements, we used Cronbach's alpha coefficient within the scope of internal consistency [65], which demonstrated high reliability for all measurement scales (Cronbach's alpha > 0.80). Furthermore, the total variance explained was 71.324% for appropriate training and development of employees, 67.592% for organizational culture, 75.289% for leadership, 72.178% for employees' perceived reduction of their workload by AI, 74.425% for employee engagement, and 78.576% for company performance, as shown in Table 2.

Table 2. Factor analysis results.

Construct	Item	Communalities	Loadings	Cronbach's Alpha
AI-supported organizational culture (SOC)	SOC1	0.726	0.839	0.869
	SOC2	0.711	0.843	
	SOC3	0.694	0.802	
	SOC4	0.673	0.818	
	SOC5	0.823	0.904	
	SOC6	0.772	0.896	
	SOC7	0.706	0.824	
	SOC8	0.718	0.851	
KMO = 0.872; Bartlett's test of sphericity: approx. chi-square = 1362.285, df = 28, $p < 0.001$. Cumulative percentage of explained variance: 67.592%.				
AI-supported leadership (SL)	SL1	0.874	0.922	0.876
	SL2	0.774	0.878	
	SL3	0.858	0.916	
	SL4	0.708	0.834	
	SL5	0.861	0.920	
	SL6	0.765	0.866	
KMO = 0.884; Bartlett's test of sphericity: approx. chi-square = 1572.285, df = 15, $p < 0.001$. Cumulative percentage of explained variance: 75.289%.				
AI-supported appropriate training and development of employees (ATD)	ATD1	0.708	0.841	0.897
	ATD2	0.847	0.912	
	ATD3	0.838	0.906	
	ATD4	0.726	0.869	
	ATD5	0.734	0.875	
	ATD6	0.845	0.897	
	ATD7	0.849	0.908	
KMO = 0.928; Bartlett's test of sphericity: approx. chi-square = 1671.946, df = 21, $p < 0.001$. Cumulative percentage of explained variance: 71.324 %.				
Employees' perceived reduction of their workload by AI (REW)	REW1	0.724	0.851	0.940
	REW2	0.683	0.826	
	REW3	0.699	0.836	
	REW4	0.694	0.833	
	REW5	0.638	0.799	
KMO = 0.918; Bartlett's test of sphericity: approx. chi-square = 3275.217, df = 10, $p < 0.001$. Cumulative percentage of explained variance: 72.178%.				
Employee engagement (EE)	EE1	0.860	0.927	0.948
	EE2	0.828	0.910	
	EE3	0.851	0.922	
	EE4	0.714	0.837	
	EE5	0.732	0.856	
	EE6	0.728	0.853	
	EE7	0.806	0.898	
	EE8	0.706	0.728	
KMO = 0.925; Bartlett's test of sphericity: approx. chi-square = 3062.092, df = 28, $p < 0.001$. Cumulative percentage of explained variance: 74.425%.				
Company's performance (CP)	CP1	0.775	0.880	0.948
	CP2	0.825	0.908	
	CP3	0.669	0.836	
	CP4	0.879	0.942	
	CP5	0.806	0.898	
	CP6	0.837	0.915	
	CP7	0.874	0.939	
	CP8	0.765	0.875	
	CP9	0.893	0.952	
	CP10	0.881	0.946	
KMO = 0.938; Bartlett's test of sphericity: approx. chi-square = 5203.703, df = 45, $p < 0.001$. Cumulative percentage of explained variance: 78.576%.				

Table 3 shows key quality assessment indicators of the research model.

Table 3. Results of model fit and quality indicators.

Quality Indicators	The Criterion of Quality Indicators
APC	0.425, $p < 0.001$
ARS	0.431, $p < 0.001$
AARS	0.428, $p < 0.001$
AVIF	1.237
AFVIF	2.781
GoF	0.382
SPR	1.000
RSCR	1.000
SSR	1.000
NLBCD	1.000

Table 3 shows that the indicators APC, ARS, and AARS are statistically significant ($p < 0.001$), and the indicators AVIF and AFVIF are lower than 5.0 and are suitable. Additionally, the indicator GoF demonstrates the strength of the underlying conceptual model [61], revealing that it is highly appropriate. The indicators SPR, RSCR, SSR, and NLBCD have values higher than the minimum prescribed standards and are also suitable. The criteria for quality indicators are listed in Table 1. Table 4 presents the quality indicators of the structural model.

Table 4. Indicators of quality of the structural model.

Constructs	CR	AVE	R ²	Adj. R ²	Q ²	VIF
AI-supported organizational culture	0.863	0.725	(-)	(-)	(-)	1.167
AI-supported leadership	0.812	0.648	(-)	(-)	(-)	2.596
AI-supported appropriate training and development of employees	0.854	0.693	(-)	(-)	(-)	2.815
Employees' perceived reduction of their workload by AI	0.897	0.818	0.465	0.448	0.372	2.936
Employee engagement	0.924	0.857	0.528	0.524	0.417	1.936
Company's performance	0.951	0.868	0.573	0.564	0.436	1.842

(-)—values cannot be calculated because the construct is a baseline.

Table 4 indicates that the values of the latent variables' R², adjusted R², and Q² coefficients are greater than zero. The CR values for all constructs exceed 0.7, and the AVE values for all constructs are greater than 0.5. Furthermore, all CR values surpass AVE values, indicating the convergent validity of all constructs. The VIF values range from 1.167 to 2.936 (VIF < 5.0), providing assurance that the structural model results were unaffected by collinearity. Table 5 shows the SEM results and the structural coefficients of links in the basic structural model, while Figure 2 presents the conceptual model with the path coefficient values.

Table 5. Standardized path coefficients for the proposed model.

Hypothesized Path	Path Coefficient (γ)	Sig.	Effect Size (f^2)	Standard Error	Link Direction	Shape of Link
SOC→REW	0.396	$p < 0.01$	0.382	0.026		
SL→REW	0.378	$p < 0.01$	0.375	0.026		
ATD→REW	0.354	$p < 0.01$	0.361	0.027	Positive	Nonlinear
RW→EE	0.467	$p < 0.01$	0.429	0.026		
EE→CP	0.512	$p < 0.01$	0.458	0.028		

SOC—AI-supported organizational culture; SL—AI-supported leadership; ATD—AI-supported appropriate training and development of employees; REW—employees' perceived reduction of their workload by AI; EE—employee engagement; CP—company's performance.

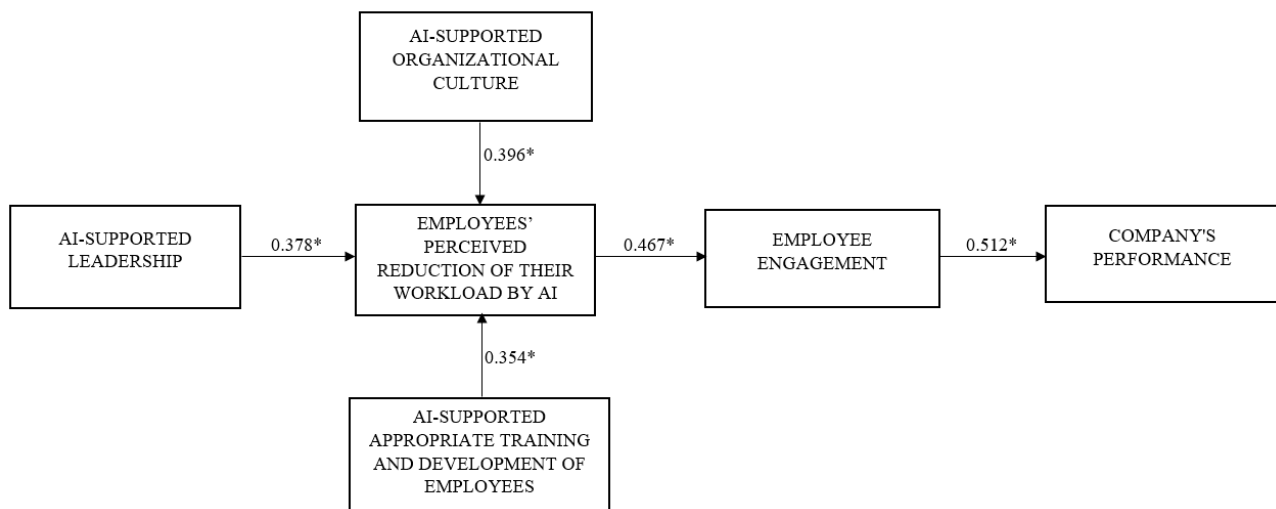


Figure 2. The conceptual model with the values of path coefficients. * $p < 0.01$.

The results in Table 5 and Figure 2 show that AI-supported organizational culture has a statistically significant positive effect on employees' perceived reduction of their workload by AI ($SOC \rightarrow REW = 0.396$, $p < 0.01$) as well as that AI-supported leadership has a statistically significant positive effect on employees' perceived reduction of their workload by AI ($SL \rightarrow REW = 0.378$, $p < 0.01$). Additionally, AI-supported appropriate training and development of employees have a statistically significant positive effect on employees' perceived reduction of their workload by AI ($ATD \rightarrow REW = 0.354$, $p < 0.01$). The results show that employees' perceived reduction of their workload by AI has a statistically significant positive effect on employee engagement ($REW \rightarrow EE = 0.467$, $p < 0.01$), and employee engagement has a statistically significant positive effect on company's performance ($EE \rightarrow CP = 0.512$, $p < 0.01$). The value of Cohen's coefficient for all constructs shows that the effect of predictive latent variables is of high strength. Based on the results, we confirmed hypotheses H1–H5.

5. Discussion

Automation and AI are changing companies, the form of work, leadership [26], the organizational culture [32], the way of educating and training employees and will contribute to economic growth by contributing to productivity [20]. Employees will have to acquire new knowledge and skills in AI and adapt to increasingly powerful machines that accompany them at work [35]. They may have to move from declining occupations to growing and, in some cases, new occupations [13]. Implementing AI helps leaders focus more on employees' emotions and desires [12]. By automating daily tasks that may seem superfluous to employees, AI will allow employees to channel their energy into creative work and generate new innovative ideas [25]. AI will enable companies to use enhanced equipment that expeditiously increases coherence and organize work to assist employees in polishing their work output [17]. AI will assist in the detection of errors and help to achieve more precise decisions [50]. Workflow and workspace design must adapt to a new era where employees interact more closely with machines [33]. This is both an opportunity and a challenge to create a safe and productive environment. Thus, work becomes more collaborative, and companies seek to become increasingly agile and nonhierarchical [18]. On the other hand, Wang et al. [66], Malik et al. [19], Ivanov [67], and Vetro [68] list some downsides of artificial intelligence in business. Artificial intelligence's results depend on how it is designed and what data it receives. Both design and data can be intentionally or unintentionally biased. Either some important aspects are not included in the algorithm, or it is programmed to reflect and reproduce a structural bias [67,68]. Additionally, the use of artificial intelligence could mean the abolition of a large number of jobs. Although forecasts also show that it will simultaneously create new jobs and improve existing ones,

education and training will be key to preventing long-term unemployment and ensuring a skilled workforce [69]. According to Malik et al. [19] the promotion of artificial intelligence by leaders has a negative impact on well-being of employees, as they are overwhelmed with new information and new ways of working, which causes stress.

Furthermore, AI has transformed the industry, and consequently, some jobs have been reduced or increased. With the development of AI technology, different business sectors will gain new and advanced analytical and automation systems [70]. The applications of AI technology are practically endless. AI brings tremendous potential to create new value in marketing, an industry increasingly reliant on automation [71]. Artificial intelligence will help marketers send potential customers more personalized and relevant messages. E-commerce companies should benefit the most as such platforms collect a large amount of customer data. AI will help them process this data and create special offers and prices dynamically and in real time [72,73]. Moreover, AI will bring changes in healthcare as well. It will help doctors diagnose, analyze findings, and choose appropriate drugs. Algorithmic solutions in health care, where computers analyze large amounts of information about patient cases and recommend treatments based on calculations, already exist today [74]. In healthcare, artificial intelligence techniques, including machine learning and deep learning, are widely used for disease diagnosis, drug discovery, patient risk identification, and other aspects of patient care and intelligent health systems. As such, artificial intelligence can aid healthcare providers in numerous ways [75]. Furthermore, AI-driven logistics optimization can reduce costs through real-time forecasts and behavioral coaching. Application of AI techniques, such as continuous estimation to logistics, can add substantial value across sectors. McKinsey's research cites the example of a European company that optimized its trucking operations based on artificial intelligence algorithms, reducing fuel consumption by 15 percent and also reducing delivery time [76]. As AI technology continues to improve and become more accessible, it is expected that its adoption will accelerate in the coming years. However, it is crucial to note that AI is not intended to replace human workers, and it is unlikely that entire professions will disappear suddenly. Instead, the impact of AI on various occupations is likely to be gradual, with some tasks being automated or augmented by AI, while others remain the responsibility of human workers [77]. For instance, natural language processing and machine learning algorithms, both AI technologies, can process vast amounts of data with speed and precision, potentially reducing the need for human data entry personnel. Additionally, the use of robots and automation in manufacturing could lead to a reduction in available jobs for human workers [78]. Moreover, AI-driven chatbots and other technologies have the potential to manage customer inquiries and support tasks, which could reduce the need for human customer service representatives. AI-powered translation software can rapidly and precisely translate written materials, potentially reducing the requirement for human translators [79]. Similarly, AI-powered accounting software can handle invoicing and expense tracking, potentially reducing the demand for human bookkeepers. While AI may influence the demand for specific jobs, it is essential to acknowledge that it may also generate new job prospects in data science and AI development. It is challenging to predict with certainty which professions will be completely safe from being replaced by AI. Nonetheless, AI is likely to have less impact on specific jobs that necessitate tasks that demand creativity, empathy, and decision-making skills, which are challenging for machines to imitate (e.g., psychologists and therapists, teachers, social workers, architects and designers, lawyers, and doctors) [78].

5.1. Theoretical Implications

Through this research, we came to conclusions with which we will upgrade the theoretical knowledge about reducing the workload of employees to increase the company's performance in today's VUCA environment through the prism of artificial intelligence. Table 5 and Figure 2 show that AI-supported organizational culture has a statistically significant positive effect on employees' perceived reduced workload by AI. Table 2 shows that the most important role of AI-supported organizational culture is that company policies

are clearly defined, followed by employees fully understanding the company's goals and employees being familiar with all the services or products offered or produced in the company. The next most important roles of AI-supported organizational culture are that AI technology is used in any part of business, the company's culture is very responsive and changes easily, the company's management provides information to employees in a timely manner, and there is a shared vision of what enterprise will be like in the future. According to Behl et al. [32], a company needs an organizational culture that encourages innovation and accepts the change to implement artificial intelligence technology successfully. An organizational culture that encourages a digital way of thinking is the key to a company's long-term successful digital business [33]. Without recognizing the importance of organizational culture, it will be complicated for a company to achieve significant progress in the field of AI [8]. Therefore, if a company wants to implement the changes required by successful AI, it must recognize the potential of organizational culture, as this is the key driver of all planned changes. However, adopting the right methods that actively support introducing a different culture that supports artificial intelligence is necessary. Thus, organizational culture is an important factor for the success of companies. Wamba-Taguimdje et al. [12] emphasize that retaining talented employees is one of the main benefits of developing a strong AI-supported organizational culture. Additionally, a strong AI-supported organizational culture helps motivate employees and gives them a sense of belonging to the company [13]. An AI-supported organizational culture reduces employees' workload, as the automation of tasks and processes helps reduce work and creates capacity within companies. Creating better digital experiences and using AI tools will make employees more productive and improve employee well-being and engagement. In today's VUCA environment, AI is inevitable. Companies that will evolve to thrive in the future will undoubtedly have AI as a central part of their success. By implementing AI in their work environment, companies will accelerate their development and create a competitive advantage by establishing a new vision, strategy, and work plan that includes the necessary cultural and operational shifts.

Table 5 and Figure 2 show that AI-supported leadership has a statistically significant positive effect on employees' perceived reduction of their workload by AI. Table 2 shows that the most important role of AI-supported leadership is developing a clear vision for what was going to be achieved by each department, followed by employees having strong leadership to support AI initiatives and being committed to AI projects, ability to anticipate future business needs of functional managers, suppliers, and customers and proactively design AI solutions to support these needs. Additionally, the next most important roles of AI-supported leadership are ability to understand business problems and to direct AI initiatives to solve them, enabling open communication so that employees' problems are solved on the spot, and the ability to work with data scientists, other employees, and customers to determine opportunities that AI might bring to the company. The advantages of AI are manifested in the recruitment process, for example, by automating repetitive tasks, pre-screening candidates, and assessing their personalities, which greatly reduces the time of the HR department [19,35,54]. With increasing employee workloads, companies use AI to help monitor and maintain employee mental health to reduce their workload and burnout. AI can help employees and leaders communicate more effectively by providing the necessary information. Thus, AI can help managers and employees make better decisions by providing them with faster and more accurate information than humans can process. AI helps transform complex data sets into meaningful insights that can identify patterns, trends, and consumer behavior changes. AI can help employees become more efficient by automating tasks that can be done faster and more accurately with the help of a computer. It also eliminates the possibility of errors in business. AI can help employees be more efficient by providing tools that can automate tasks and make recommendations to optimize their work. Leaders devote a significant amount of time to administrative duties, such as coordination, planning, and making data-driven decisions in the short term. In this regard, AI has the potential to assume these and other intricate responsibilities.

As a result, leaders must acquire a thorough comprehension of the technical role of AI and bridge any gaps in areas that go beyond development, interpersonal, and soft skills. Therefore, leaders who will lead the transition of the current workforce to an automation-driven paradigm must have the right skill set to manage both the machine and human side. According to a study conducted by Infosys [43], which surveyed 1053 global executives, 73% of respondents agreed or strongly agreed that AI has already revolutionized their business practices. Additionally, 45% of respondents reported that their company's AI deployments are significantly surpassing the accuracy and productivity of comparable human activity. Furthermore, 86% of those surveyed consider AI a crucial enabler of future business operations.

Table 5 and Figure 2 demonstrate a statistically significant positive impact of AI-supported appropriate employee training and development on the employees' perception of reduced workload by AI. The most critical role of AI-appropriate employee training and development, as shown in Table 2, is the reduction of attention deficits experienced by employees during conventional in-enterprise training processes. Furthermore, employees are provided with the necessary training to handle AI applications, and AI technology increases access to in-enterprise training courses. With the use of artificial intelligence technology, location-based training restrictions are eliminated, employee knowledge is updated through in-company training courses via AI technology, and a successful training program is achieved with AI-based in-company training courses, ultimately resulting in a reduction in the time spent on in-company training courses. AI technology allows companies to customize their training and provide a continuous training strategy for employees who can continuously learn and develop their skills at work [20]. The work environment is constantly changing, technology is advancing rapidly, workplace strategies are improving, tasks are constantly changing, and employees and leaders must adapt to the new changes to maintain a competitive advantage. From this point of view, employees need appropriate training, which leads to lower stress and greater employee engagement. According to Infosys's study [43] of 1053 global executives, 77% of IT decision-makers expressed confidence in their organization's ability to train employees for the new job roles that AI will generate in their business. Furthermore, 53% of the respondents reported an increase in training in job functions that are significantly impacted by AI deployments within their companies. AI helps provide personalized learning and training for all employees in different company departments. In addition, according to Wheeler and Buckley [23], AI eliminates all personal biases present in various aspects of employee training processes, collects data such as different learning styles and prior knowledge history of employees, and analyzes it pragmatically. In this way, the AI recommends the content and design of the training as well as the course evaluations. The use of AI in employee training provides novel and innovative learning techniques that offer feedback on areas for improvement. AI-based tutors can optimize and streamline the efficiency of employee training and learning processes. According to Arora and Sharma [49] and Giuggioli and Pellegrini [50], the natural language processing capabilities of AI enable it to converse with employees effectively, providing human-like interactions that relay information in a manner that is suitable and engaging to them. AI-powered learning also reduces the learning curve for employees, enabling them to acquire the necessary technical skills to become experts in less time, leading to improved performance and higher levels of engagement at work. Table 5 and Figure 2 show that employees' perceived reduction of their workload by AI has a statistically significant positive effect on employee engagement. Table 2 shows that the most important role of employees' perceived reduction of their workload by AI is that AI reduces the burden on administrative staff in the company, followed by the AI technology communicating with users/customers, which reduces the workload of employees; the AI technology searching and analyzing information, which reduces the workload of employees; the AI technology taking orders and completing tasks, which reduces the workload of employees; and AI helping in getting the job done, which saves employees work time. The results (Table 2) show that the most important role of employee engagement is using AI

to enhance employee effectiveness, which leads employees to do their work with passion, to be engaged to the quality of their work, to be engaged for business ideas and solutions, to be aware of the importance of innovation for the company, and to help to develop the company. Paesano [17] summarizes that AI can help the HR department streamline hiring. Dhamija and Bag [8] argue that AI software can automate the initial screening and weed out suitable candidates from a large pool of candidates. It can also scan thousands of social media profiles to search for potential candidates. AI can then generate and analyze assessments that help the HR department shortlist suitable candidates. Thus, the HR department has more time to perform complex tasks [15]. The algorithm's results can help companies make business decisions. For example, suppose HR department uses AI to find real-time market trends around critical talents. In that case, this information may be utilized to make larger judgments about enhancing departments inside the business [55]. Artificial intelligence helps employees perform their tasks better and be more organized, leading to increased work engagement [39]. Automating certain work tasks enables a lower risk of manual errors, leading to less stress and lower workload of employees [20]. By automating repetitive tasks such as report completion, meeting scheduling, and sending standardized emails, employees can save a significant amount of time. This alleviates pressure, allowing employees to focus on more critical tasks and achieve better time management. The use of AI in a company can also enhance employee well-being. AI-powered chatbots utilize natural language processing and sentiment analysis to analyze cognitive and behavioral insights, offering personalized responses to individuals. Through conversation with these chatbots, individuals can improve their outlook and identify areas where they may require assistance. A study [80] conducted across 11 countries with 12,000 employees found that the COVID-19 pandemic has resulted in increased workplace stress, anxiety, and burnout worldwide, leading people to prefer the assistance of AI robots over human interactions. In total, 68% of employees would rather discuss their work-related stress and anxiety with a robot than their leader, and 80% of employees are receptive to the idea of a robot serving as a therapist or counselor. Additionally, 75% of employees reported that AI has improved their mental health at work, with the most significant benefits being the provision of job-relevant information (31%), task automation to prevent burnout (27%), and stress reduction through task prioritization (27%). AI has also enabled over half (51%) of employees to reduce their workweek, leading to more extended vacation periods (51%). The majority of respondents acknowledged that AI technology increases employee productivity (63%), enhances job satisfaction (54%), and improves overall well-being (52%).

Table 5 and Figure 2 show that employee engagement has a statistically significant positive effect on a company's performance. The results from Table 2 show that the most important aspect of company performance is profitability, followed by innovation. Other important factors include the acceleration of decision making to achieve successful outcomes, timely delivery of goods or services, and meeting customer expectations. Additionally, AI can reduce the chance of employee errors, provide accurate data and information, generate accurate results, promote faster company growth, and improve the effectiveness of decisions and actions. AI tools can also help employees set business goals, find training resources based on specific skills, and receive timely feedback on their progress, increasing their engagement and ultimately leading to improved company performance. Artificial intelligence helps maintain effective communication in the workplace and connect with remote employees, increasing work efficiency and engagement. Chatbots facilitate online communication with employees to answer frequently asked questions and disseminate relevant information to employees. AI enables asynchronous meetings using video and voice recordings, automated recording software, meeting transcription tools, etc. This is particularly useful for a remote workforce in different locations. AI-enabled tools enable post-meeting collaboration with employees both onsite and offsite. In addition, employees can record, transcribe, and share information from the meeting with other team members who could not attend, contributing to the successful achievement of business goals and company performance. According to Sundaresan and Zhang [57], AI is generally seen

as a complement to human intelligence and ingenuity. Agarwal [56] emphasizes that AI can process and analyze huge amounts of data quickly, which strengthens the company's competitive advantage over companies that have not implemented AI. Moreover, AI is the software equivalent of the second coming [10]. It is a type of software that can make decisions independently and act in situations the programmers did not anticipate [54]. Artificial intelligence has a greater range of decision-making abilities than traditional software, leading to greater company performance [19]. Frascaroli [81] summarizes that companies implementing AI have 50 % more leads and 33 % lower costs. In addition, implementing voice recognition and machine learning in customer service can save 60 % to 80 % compared to traditional call centers. In a survey [82] of executives of the world's 2000 largest companies, those who discussed AI on their 2021 earnings calls were 40% more likely to see their companies' share prices increase (up from 23% in 2018). Furthermore, companies leading the way are already seeing the positive business results of AI; for example, 42% said that the return on their AI initiatives exceeded their expectations, while only 1% said the return did not meet expectations. The use of artificial intelligence brings higher revenues to companies. The results of the McKinsey Global Survey on 1843 companies show that companies that use AI in their business have 20% higher revenue or more [44].

5.2. Managerial Implications

In today's VUCA environment, using AI is essential for a company to reduce employee workload and increase work engagement, which leads to company performance. Moreover, leaders play a key role in increasing employee engagement. Therefore, we recommended that leaders change their traditional mindset and leadership style. Employee engagement is not something that is taken for granted but is a part of daily management habits and practices, so leaders are the ones who reduce the workload of employees and thereby increase their work engagement with the appropriate leadership style. We suggest to the company that appropriate leadership becomes a mandatory business subsystem, which will need to be integrated into all new business models that support the company's artificial intelligence and personnel development systems and the ecosystems in which they operate. The evolving knowledge-based economy and technological advancements are transforming job roles, necessitating distinct skill sets and technical competencies. Therefore, companies must implement strategic workforce development measures, including skill upgrading and knowledge management. Deploying the necessary skills requires well-designed training programs using artificial intelligence. Thus, the leader's task is to understand the capabilities of digital technologies and constantly monitor the development of digital economy concepts. The digital transformation process begins with establishing a digital strategy, which becomes part of the company's business strategy and is the basis for digital business transformation. Artificial intelligence enables different ways of performing specific tasks, allowing employees to devote their time to complex tasks and innovation, which is crucial in a competitive environment. In addition, AI will enable leaders to devote more time to developing solid strategies to improve employee engagement, cooperation between employees, and foster lasting relationships within the company. AI technology can be used to digitize various processes throughout the company, allowing employees more time to perform more innovative and complex tasks, which increases their productivity. By automating routine tasks, companies can achieve greater business results in less time and at lower costs. However, using AI in the company also brings many other advantages, such as increasing the company's competitive advantage, increasing employee productivity, employee motivation, better working conditions, etc.

5.3. Social Implications

Artificial intelligence is increasingly involved in the daily tasks of the population, but at the same time, it can also have an extraordinary impact on economic activities. With artificial intelligence, the effects of the digitalization of the economy on the labor markets will expand and increase. Technical progress has always affected work and employment,

so new social and social management forms are needed. The transformational potential of artificial intelligence opens up new opportunities in all areas, from process automation to talent development. Artificial intelligence technologies can significantly impact various industries, such as healthcare, supply chains, manufacturing, finance, and education. Technical knowledge and skills in artificial intelligence are crucial to ensure that people and companies can use services and solutions based on artificial intelligence, which brings great benefits to the digital ecosystem and society. As we mentioned, the development of technology and the use of artificial intelligence have caused enormous changes in society, which we feel every day in various fields. One such area is particularly important for the age group entering the labor market. Technology development will stimulate the development of many economic sectors, creating new jobs. On the other hand, especially professions whose work can be automated would disappear, such as, for example, work in production, as well as the professions of librarians, service staff, accountants, employees in telemarketing, etc. However, the need and demand for professions such as social workers, psychologists and therapists, doctors, medical technicians, scientists, computer and energy engineers, financial analysts, and programmers are increasing. Since one of the main disadvantages of artificial intelligence is the inability to think and communicate outside of prescribed programming and feel emotions, various skills and competencies that employers desire are increasingly coming to the fore. Such skills are mainly communication, originality, ability to work with people, creativity, teamwork, leadership skills, problem solving, and other social skills.

5.4. Limitations and Further Research

Our study is limited to analyzing company performance in Slovenian companies. In addition, the limitations of our research are reflected in the constructs we have chosen for the survey: AI-supported organizational culture, AI-supported leadership, AI-supported appropriate training and development of employees, employees' perceived reduction of their workload by AI, employee engagement, and company performance. Thus, we recommend for further research to upgrade the measurement instrument with new multi-dimensional aspects. Furthermore, it would be interesting to analyze the multidimensional model of reducing employee workload with AI to increase company performance in today's VUCA environment in selected foreign countries and analyze whether there are any differences between Slovenia and other countries regarding the connection between the constructs. Even if some job roles are considered less susceptible to being replaced by AI, their job functions can still be impacted by incorporating AI technologies. For instance, AI can support activities such as data analysis or planning, allowing employees to allocate more time to more complex tasks. For further research, we see in the examination of artificial intelligence in various industries the impact it has on reducing or creating new jobs. Moreover, the research in Slovenian companies analyzes the present situation; therefore, we suggest modeling the process and making scenarios that show how a situation might develop in the future in Slovenian companies and maybe an improvement can be found in the factors. On the other hand, it would be interesting to analyze artificial intelligence's negative impact on certain factors we covered in this research. Therefore, for future research, we recommend creating a questionnaire that measures the negative impact of artificial intelligence on company operations or performance.

6. Conclusions

Constant changes in today's VUCA environment often require quick business decisions. Companies that are incredibly responsive to continuous changes and are always one step ahead of their competitors to increase their company's performance. AI can enable companies to develop a new generation of services and products even in sectors where European companies already have a strong position (for example, in the green and circular economy, engineering, agriculture, healthcare, and tourism). It can increase production capacity and product quality, enable more sustainable products, improve machine mainte-

nance, enable simpler and optimized sales channels, improve customer service, and reduce employee workload. According to Chen [83], AI can reduce costs in the company and enable new styles of employee training that can be tailored to each individual. In addition, Jacobs [84] summarizes that AI can significantly contribute to improvements in logistics, which can be used, for example, to forecast demand, plan orders, avoid errors and ensure optimal storage of transported goods. The flexibility enabled by AI for companies can lead to perfect adaptation to market demands, better services, lower costs, and increased company performance. Eriksson et al. [85] and Bhagat et al. [71] emphasize that using AI is crucial in marketing. With the advent of Internet business, new metrics have appeared, requiring in-depth and computationally demanding analytics to explain certain phenomena. The advantage of AI for marketing analysis is that it enables the calculation and allocation of large databases. The knowledge that a company would gain in the case of using artificial intelligence in marketing is knowledge about customers, not only about their preferences but also their behavior, knowledge about the business environment and its changes, and knowledge about the company and its strategies. Moreover, AI based on superior automated analytics reduces employee workload and increases work engagement. AI is still something new for humans, and companies are trying to understand its full functionality and impact on market changes. In light of this, we have developed a multidimensional model that focuses on reducing employee workload with the help of AI to increase company performance in today's VUCA environment. This model considers important multidimensional aspects that companies need to be aware of. With accurate predictions enabled by AI, any company can become efficient and improve its performance in the market by providing services and products that appeal to the consumer and always remaining one step ahead of competitors.

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