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THE MODERATING ROLE OF GENERAL ATTITUDE TOWARDS ARTIFICIAL INTELLIGENCE IN THE IMPACT OF DIGITAL TRANSFORMATION ON EMPLOYEE SATISFACTION

DİJİTAL DÖNÜŞÜMÜN ÇALIŞAN MEMNUNİYETİ ÜZERİNDEKİ ETKİSİNDE YAPAY ZEKAYA YÖNELİK GENEL TUTUMUN DÜZENLEYİCİ ROLÜ

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Abstract

This study focuses on understanding the effects of digital transformation processes in the business world on employee satisfaction. The purpose of this study is to determine whether the general attitude towards artificial intelligence plays a moderating role in the effect of digital transformation on employee satisfaction. At the same time, the study was also reinforced and elaborated with demographic questions directed to the employees. The population of the study consists of private enterprises operating in the retail sector in Istanbul. The sample is the decision-making white – collar (N= 522) current employees working in these retail sectors. SPSS 24.0 statistical package programe was used to analyze the data. Normality test was performed to determine whether the data set was suitable for parametric tests. Kurtosis and skewness values were used to evaluate normality. Pearson correlation analysis was performed to determine the direction and severity of the relationship between the variables. Moderating analysis was performed to determine how the relationship between an independent variable and a dependent variable is affectedy a third variable. According to the results obtained from the study, there are quite high and significant correlations between digital transformation and other variables in the correlation analysis. According to the moderating effect analysis, it was observed that the general attitude towards artificial intelligence did

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not moderate the effect of digital transformation on the variables. In demographic variables, significant differences are observed in all variables and sub-dimensions.
Keywords: Digital transformation, employee satisfaction, general attitude towards artificial intelligence
JEL Classification: M00, M1, M19

Öz

Bu çalışma, iş dünyasındaki dijital dönüşüm süreçlerinin çalışan memnuniyeti üzerindeki etkilerinin anlaşılmasına odaklanmaktadır. Bu çalışmanın amacı, yapay zekaya yönelik genel tutumun, dijital dönüşümün çalışan memnuniyeti üzerindeki etkisinde moderatör bir rol oynayıp oynamadığını tespit etmektir. Aynı zamanda çalışanlara yöneltilen demografik sorularla da çalışma pekiştirilmiş ve detaylandırılmıştır. Çalışmanın evreni, İstanbul ilinde perakende sektöründe faaliyet gösteren özel bir işletmelerden oluşmaktadır. Örneklem ise, bu perakende sektörlerinde çalışan karar verici beyaz yakalı (N= 522) mevcut çalışanlardır. Verilerin analizinde SPSS 24.0 istatistik paket programı kullanılmıştır. Veri setinin parametrik testler için uygun olup olmadığını belirlemek adına normallik testi yapılmıştır. Normalliğin değerlendirilmesinde basıklık ve çarpıklık değerleri kullanılmıştır. Değişkenler arasındaki ilişkinin yönü ve şiddetini belirlemek için Pearson korelasyon analizi gerçekleştirilmiştir. Bir bağımsız değişken ile bağımlı değişken arasındaki ilişkinin, üçüncü bir değişken tarafından nasıl etkilendiğini belirlemek için düzenleyicilik analizi gerçekleştirilmiştir. Çalışmadan elde edilen sonuçlara göre, korelasyon analizinde dijital dönüşüm ile diğer değişkenler arasında oldukça yüksek ve anlamlı korelasyonlar bulunmaktadır. Düzenleyici etki analizine göre, yapay zekaya yönelik genel tutumun dijital dönüşümün değişkenler üzerindeki etkisini düzenlemediği görülmüştür. Demografik değişkenlerde ise tüm değişkenler ve alt boyutlarında anlamlı farklılıklar görülmektedir.
Anahtar Kelimeler: Dijital dönüşüm, çalışan memnuniyeti, yapay zekaya yönelik genel tutum
JEL Sınıflandırılması: M00, M1, M19

1. Introduction

Today's business world is undergoing a radical change due to the rapid advancement of technological developments and digital transformation. Technologies such as automation in business processes, data analytics, cloud computing and artificial intelligence (AI) make workplaces more efficient and competitive, while transforming employees' work experiences.

Digital transformation includes many technological innovations that enable businesses to make traditional business processes more efficient and gain competitive advantage (Verhoef et al., 2021). Automation of business processes, data analytics, cloud computing and AI allow businesses to make faster decisions, reduce costs and improve customer service. However, the implementation of these technologies affects not only business processes but also the work experience of employees (Chen, Chiang, & Storey, 2012). One of the vital elements in the success of every organization is employee satisfaction (Hayajneh et al., 2021). Employees who are satisfied with their work and highly motivated are more productive and creative, as well as improving customer service (Nasifoglu Elidemir et al., 2020). However, uncertainty, resistance and stress may occur among employees during digital transformation processes (Ali & Anwar, 2021). In this context, maintaining or increasing employee satisfaction and job satisfaction is a significant challenge for organizations (Li et al., 2023). AI is one of the most important components of digital transformation. Thanks to machine learning and deep learning techniques, AI systems can analyze large data sets, make predictions, and take decisions (Taye, 2023). Although AI cannot replace human labor, it can reduce the workload in workplaces

by automating many business processes. However, the impact of the use of AI on the daily work of employees complicates the dynamics within the organization. Therefore, employees' general attitudes towards AI significantly influence how this technology is accepted and used in the workplace (Ahmad et al., 2023). The purpose of this study is to determine whether the general attitude towards artificial intelligence plays a mediating role in the effect of digital transformation on employee satisfaction. The study also attempts to understand more deeply the positive or negative experiences of employees regarding the adoption of digital technologies in the work environment.

2. Literature Review

2.1. Digital Transformation

The rapid development of technology is radically changing the business world. Digital transformation involves a series of technological innovations for businesses to increase efficiency, reduce costs and increase competitiveness by redefining traditional business processes (Feroz, Zo, & Chiravuri, 2021). This transformation includes elements such as automating business processes, using big data analytics, adopting cloud computing technologies and using advanced technologies such as AI (Akter et al., 2022).

Digital transformation; It is the formation of new business models, processes, products and services as a result of the combination of physical and electronic systems by using digital technologies together (Khattak et al., 2023; Gledson et al., 2024). Digital transformation is when organizations redesign the way they do business, processes, business models and customer interactions by adopting digital technologies (Khanom, 2023; Vendraminelli et al., 2023). This transformation includes the innovative approaches that come with the rapid advancement and adoption of digital technologies. The primary goal of digital transformation is to increase the competitiveness of businesses and enable them to gain fast decision-making capabilities. Data analytics and big data processing give businesses the ability to have more information and make predictions for the future (Saarikko, Westergren, & Blomquist, 2020). Automation accelerates routine business processes and encourages human resources to focus on more complex tasks. However, this technological change not only affects work processes, but also the roles and experiences of employees in the workplace (Zaki, 2019).

Digital transformation consists of five dimensions (Gong & Ribiere, 2021): satisfaction with the working environment, innovation, change and quality, professional and personal development, social and cultural facilities and belonging. The ability of employees to perform their work in a better environment can increase job satisfaction because motivated employees generally feel more satisfied. Innovation, change and quality, digital transformation encourages innovation and change. Businesses become more efficient by adopting new technologies and business processes. Professional and personal development, digital transformation contributes to the individual and professional development of employees (Kaya et al., 2022). Employees acquire new skills and progress in their careers through training and development opportunities. Social and cultural

facilities, digital transformation enables employees to benefit from more social and cultural facilities. Online resources, virtual communities and digital communication enrich non-work interests and cultural experiences. Belonging is the commitment employees feel towards their organizations. In short, it means taking ownership of their work. This contributes to employees' commitment to their organizations and makes them more motivated at work (Sağlam, 2021). These dimensions of digital transformation positively affect employees' work experiences and help increase work productivity and job satisfaction. While digital transformation enables businesses to gain competitive advantage, increase operational efficiency and become more agile, it can also contribute to easier access to information, better services and improved lifestyles for society at large.

2.2. Employee Satisfaction

One of the factors considered as a fundamental factor in the success of an organization is the satisfaction level of employees. In today's rapidly changing business world, employee happiness and job satisfaction are important for the sustainability and competitiveness of organizations. The level of job satisfaction of employees is an important factor determining their job performance, their commitment to their organizations and their overall job satisfaction. Therefore, the issue of employee satisfaction is central to the business and management literature.

Employee satisfaction is the feeling that employees feel when their expectations in their working life are realized or not. In other words, employee satisfaction is a phenomenon that occurs over time and as you gain experience in the work environment (Nugroho et al., 2023). In other words, the experience gained over time enables more realistic expectations to be formed (LaGree et al., 2024). Employee satisfaction is a positive feeling that employees feel when their expectations in their jobs are realized (Agustina et al., 2024). To ensure that these expectations are realized, the support of colleagues and managers within the organization is also required (Schaap et al., 2023).

The importance of employee satisfaction has long been recognized by organizations. Employees who are satisfied with their jobs and highly motivated maintain their jobs more effectively and are more creative and productive at work (Faeq, 2022). Moreover, employee satisfaction helps to reduce staff turnover and attract talented employees (Shahzah et al., 2023). A satisfied employee is also expected to positively affect the external reputation of the organization because happy employees tend to provide better service to customers (Irabor & Okolie, 2019). There are a number of factors that affect employee satisfaction. Factors such as workload, working conditions, wages and benefits, management and leadership styles, job security, career opportunities, fair treatment at work and relationships in the workplace have a positive or negative impact on employee satisfaction. These factors should be carefully managed by organizations and better respond to the needs of employees (Inayat & Jahanzeb Khan, 2021). As a result, employee satisfaction is regarded as an indispensable issue for organizations. With the rapid changes in the business environment, employees' job satisfaction and commitment to their organizations can contribute to companies' sustainability and competitive advantage.

2.3. General Attitude towards AI

Today, when technology is evolving rapidly, the concept of artificial intelligence is one of the focal points of our lives. AI includes a set of technologies and algorithms that enable machines to have human-like intelligence and learning capabilities. This technology is used in automation, big data analysis, speech recognition, image processing, autonomous vehicles and many other fields (Haleem et al., 2022). However, the widespread use of AI has brought with it a number of questions and concerns. One of these questions is the general attitude of people to AI.

While the integration of AI into human life is an exciting development for some people, it may cause concern for others. People are questioning how AI is used in the workplace, health sector, education, security and many other areas and the consequences of this use (Khogali & Mekid, 2023). The general attitude of AI reflects how society views and accepts this technology. This perspective provides a critical influence on the broad adoption and implementation of AI (Bankins & Formosa, 2023). The general attitude towards AI is shaped in a complex way because of the interaction of many factors. Media, education, experiences, emotions, and cognitive processes are the elements that shape people's perspective on AI. Media and films influence people's perceptions by frequently showing AI either in a positive light or as a threat (Hadlington et al., 2023). At the same time, personal experiences and education determine the way people understand and accept AI. With the widespread use of AI, the influence of these factors has become even more evident (Sartori & Bocca, 2023).

The general attitude towards AI has two dimensions. These dimensions are the positive dimension of AI and the negative dimension of AI. The positive dimension of AI emphasizes the advantages and benefits provided by technology and AI applications. The negative dimension of AI, on the other hand, addresses the worrisome aspects and potential dangers that the technology brings with it. These two dimensions offer a balanced perspective on AI. AI offers great potential benefits, but also carries potential risks that need to be managed carefully and ethically (Kaya et al., 2022). People and societies should take these two dimensions into account when adopting AI and make efforts to maximize the positive aspects and address the negative aspects of the technology.

The general attitude towards AI can be shaped in a positive or negative framework. Some individuals consider AI to be a factor that enhances business processes and improves quality of life, while others are concerned that AI may increase unemployment, invade privacy and restrict individuals' independence. These various perspectives influence the acceptance and implementation of AI within society (Tai, 2020). The general attitude of AI also depends on cultural and geographical differences. Different countries and cultures may approach AI differently. For example, one country may rapidly adopt AI technologies, while another country may be more cautious. These differences influence how AI is accepted worldwide (Gerlich, 2023). In conclusion, the attitude to AI in general plays a critical role in the adoption and implementation of the technology. People's perspective towards AI determines the progress and utilization of this technology. Therefore, it is important to understand and manage this general attitude so that society can accept and sustainably utilize AI.

3. Methodology

A quantitative method was used in this study.

3.1. Sample

The universe of this study is the retail sector operating in Istanbul. The retail sector has an important role in Turkey's economic structure and Istanbul is considered the largest center of this sector. Retail requires rapid response to dynamic and ever-changing customer demands, so the decision-making processes of white-collar employees are critical. The reason we focus on private businesses in the sector is that these companies can have more diverse applications in terms of flexibility and innovation. In this context, the sample of the study consists of white-collar workers (N = 522) working in decision-making positions in the retail industry.

3.2. Measures

The data used in line with the research objectives were collected by online survey technique. In the first part of the questionnaire, a scale consisting of 12 items and five dimensions developed by Sağlam (2021) was used to evaluate Digital Transformation. The Employee Satisfaction Scale consists of 34 items and a single dimension, as organized by Şimşek, Çetinkaya, & Aytekin (2019). The General Attitude towards AI scale with 20 items and 2 dimensions was used as modified by Kaya et al. (2022). The statements in the scales used in the research have a 5-point Likert scale structure ranging from "1=Strongly disagree" to "5=Strongly agree". Necessary permissions were obtained for all scales.

3.3. Research Model and Hypotheses

The research model is visually expressed in Figure 1.

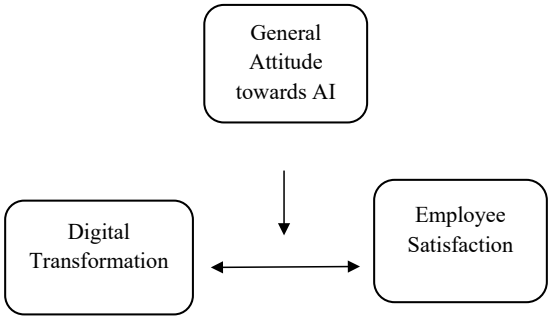

Figure 1: Research Model

The hypotheses formulated for the purpose of the research are as follows:
H_1: Digital transformation has a positive effect on employee satisfaction.

H_2: General attitude towards AI has a moderating role in the positive effect of digital transformation on employee satisfaction.
H_3: Digital transformation shows a significant difference according to demographic variables.
H_4: Employee satisfaction shows a significant difference according to demographic variables.
H_5: General attitude towards AI shows a significant difference according to demographic variables.

3.4. Data Analysis

In this study, SPSS 24.0 statistical package was used for data analysis. The tests applied in statistical analyses and their justifications are explained below:

Normality test was performed to determine the suitability of the data set for parametric tests. The kurtosis and skewness values are in the range of ± 1,96 to show that the data have a normal distribution (George & Mallery, 2010). Independent sample t-test was applied to compare the means of two different groups. This test was used to compare scores between two different groups, for example, binary variables such as gender. ANOVA test was used to compare three or more group means. For example, this test was used to compare scores between different satisfaction categories depending on length of employment. Pearson correlation analysis was performed to determine the direction and severity of the relationship between the variables. This analysis measures the linear relationship between two continuous variables. In addition, regression analysis was used to evaluate the effect of one or more independent variables on the dependent variable. This analysis was conducted to understand the causal relationships between variables. Moderator analysis was applied to determine how the relationship between an independent variable and a dependent variable is influenced by a third variable. This analysis was used to understand how the severity or direction of a relationship is changed by another variable. In all these analyses, $p<0.05$ was accepted as the significance level. This value indicates that the results of statistical tests are not random and represent a real difference or relationship.

4. Findings

Table 1: Distribution of Demographic Characteristics

		n	%
Gender	Male	146	28,0
	Female	376	72,0
Age	20-25	54	10,3
	26-31	138	26,4
	32-37	234	44,8
	38 +	96	18,4
Marital status	Single	194	37,2
	Married	328	62,8
Education status	Associate degree	94	18,0
	Undergraduate	288	55,2
	Master	93	17,8
	PhD	47	9,0

Length of work	5 years and less	284	54,4
	6-10 years	142	27,2
	11 +	96	18,4
Total of work	5 years and less	147	28,2
	6-10 years	186	35,6
	11 +	189	36,2

The majority of the participants in the study are female, between the ages of 32-37, married, have a bachelor's degree, and have been working in the organization for 5 years or less. Considering the total working time, the rates of the participants show a close distribution between the categories of 6-10 years and 11 years and above. This demographic information reveals the general profile of the individuals participating in the study.

Table 2: Skewness and Kurtosis Values

	n	Skewness	Kurtosis	Cronbach's Alpha
Digital transformation	522	-0,50	-1,26	0,936
Satisfaction with the working environment	522	-0,31	-1,43	0,914
Innovation, change and quality	522	-0,78	-0,64	0,883
Professional and personal development	522	-0,33	-1,16	0,912
Social and cultural facilities	522	-0,29	-0,02	0,873
Belonging	522	0,07	-1,21	0,807
Employee satisfaction	522	-0,38	-1,40	0,954
The positive dimension of AI	522	0,58	-0,96	0,929
The negative dimension of AI	522	-0,15	-0,21	0,909
General attitude towards AI	522	0,25	-1,22	0,932

Table 3: Descriptive Statistics of Scale Scores

	n	Min	Max	Mean	Standard deviation
Digital transformation	522	31	60	45,38	8,05
Satisfaction with the working environment	522	29	55	42,38	8,23
Innovation, change and quality	522	4	20	16,91	3,18
Professional and personal development	522	14	35	25,39	5,62
Social and cultural facilities	522	11	30	21,95	4,72
Belonging	522	10	30	18,22	5,27
Employee satisfaction	522	83	170	124,85	22,27
The positive dimension of AI	522	32	59	43,02	8,60
The negative dimension of AI	522	8	36	22,70	7,10
General attitude towards AI	522	48	94	68,32	13,63

5. Pearson Correlation Analysis

Table 4: Pearson Correlation Analysis

		Digital transformation	Satisfaction with the working environement	Innovation, change and quality	Professional and personal development	Social and cultural facilities	Belonging	Employee satisfaction	The positive dimension of AI	The negative dimension of AI	General attitude towards AI
Digital transformation	r	1	,880**	,785**	,850**	,612**	,456**	,889**	0,027	0,026	0,004
	p		0,000	0,000	0,000	0,000	0,000	0,000	0,539	0,560	0,933
Satisfaction with the working environment	r		1	,903**	,877**	,568**	,273**	,905**	0,014	0,065	-0,025
	p			0,000	0,000	0,000	0,000	0,000	0,747	0,140	0,573
Innovation, change and quality	r			1	,867**	,723**	,353**	,932**	,121**	-0,005	0,079
	p				0,000	0,000	0,000	0,000	0,005	0,909	0,071
Professional and personal development	r				1	,719**	,453**	,960**	,192**	,162**	0,037
	p					0,000	0,000	0,000	0,000	0,000	0,402
Social and cultural facilities	r					1	,221**	,758**	,165**	-,182**	,198**
	p						0,000	0,000	0,000	0,000	0,000
Belonging	r						1	,549**	,523**	-,089*	,376**
	p							0,000	0,000	0,042	0,000
Employee satisfaction	r							1	,230**	0,004	,142**
	p								0,000	0,919	0,001
The positive dimension of AI	r								1	-,505**	,893**
	p									0,000	0,000
The negative dimension of AI	r									1	-,839**
	p										0,000
General attitude towards AI	r										1
	p										

Table 4 contains the correlation coefficients showing the relationships between different variables. Correlation coefficients (r) express the direction and strength of the relationship between two variables. The "p" value indicates whether this relationship is statistically significant. In general, "p" values less than 0.05 are statistically significant (Gogtay & Thatte, 2017). Based on this table, some main conclusions are as follows: There are quite high and significant correlations between Digital Transformation and other variables. However, the correlations with "Positive Dimension of AI", "Negative Dimension of AI" and "General Attitude towards AI" are not statistically significant. There are high and significant correlations between the Satisfaction with Working Environment variable and other variables. However, the correlations with "Positive Dimension of AI" and "General Attitude towards AI" are not statistically significant. Innovation, Change and Quality variable has high and significant correlations with other variables. Its correlation with "Negative Dimension of AI" is not statistically significant. There are high and significant correlations between the Professional and Personal Development variable and other variables. Social and Cultural Facilities variable has medium-high and significant correlations with other variables. There is a negative correlation between the belongingness variable and the "Negative Dimension of AI", which indicates that there is an inverse relationship between these two variables. There is an insignificant correlation between the Employee Satisfaction variable and the "Negative Dimension of AI". There is a very high negative correlation between the Positive Dimension of AI and the "Negative Dimension of AI", which indicates an inverse relationship between these two variables. There is a high negative correlation between the Negative Dimension of AI and "General Attitude towards AI". Overall, this table shows the severity and direction of the relationships between the variables. In particular, there are very high positive correlations between the variables of digital transformation, satisfaction with the working environment, innovation, change and quality, and professional and personal development.

Table 5: Moderating Impact Analysis

Dependent variable	Independent variable	Beta	t	p	R^2	F
Employee satisfaction	Digital transformation	0,889	44,323	0,000	0,791	1964,555
	Digital transformation	0,794	32,113	0,000	0,805	1073,325
	Interaction (digital transformation*general attitude towards AI)	0,154	6,237	0,000		
Satisfaction with the working environment	Digital transformation	0,880	42,274	0,000	0,775	1787,061
	Digital transformation	0,909	34,295	0,000	0,776	898,686
	interaction (digital transformation* general attitude towards AI)	-0,047	-1,760	0,079		

Innovation, change and quality	Digital transformation	0,785	28,872	0,000	0,616	833,597
	Digital transformation	0,732	21,207	0,000	0,620	423,948
	interaction (digital transformation* general attitude towards AI)	0,085	2,472	0,014		
Professional and personal development	Digital transformation	0,850	36,749	0,000	0,722	1350,480
	Digital transformation	0,840	28,456	0,000	0,722	674,446
	interaction (digital transformation* general attitude towards AI)	0,016	0,529	0,597		
Social and cultural facilities	Digital transformation	0,612	17,649	0,000	0,375	311,477
	Digital transformation	0,465	10,797	0,000	0,409	179,721
	interaction (digital transformation* general attitude towards AI)	0,237	5,511	0,000		
Belonging	Digital transformation	0,456	11,690	0,000	0,208	136,657
	Digital transformation	0,180	3,935	0,000	0,329	127,375
	interaction (digital transformation* general attitude towards AI)	0,444	9,681	0,000		

Model 1 – Employee Satisfaction

The direct effect of digital transformation on employee satisfaction is quite high and significant (β = 0,794, t = 32,113, p < 0,001). The variance explained by this model is 80.5% (R^2 = 0,805, F = 1073,325, p < 0,001). The interaction term (digital transformation * general attitude towards AI) is also significant (β = 0,154, t = 6,237, p < 0,001). This reveals that general attitude towards AI moderates the effect of digital transformation on employee satisfaction.

Model 2 – Satisfaction with the working environment

The impact of digital transformation on satisfaction with the working environment is significant and evident (β = 0,909, t = 34,295, p < 0,001). It is seen that the model explains 77.6% of the total variance (R^2 = 0,776, F = 898,686, p < 0,001). However, the interaction term is not meaningful for this model (β = – 0,047, t = – 1,760, p = 0,079).

Model 3 – Innovation, change and quality

Digital transformation has a significant impact on innovation, change and quality (β = 0,732, t = 21,207, p < 0,001). This model explains 62% of the variance (R^2 = 0,620, F = 423,948, p < 0,001). The interaction term is also significant for this model (β = 0,085, t = 2,472, p = 0,014).

Model 4 – Professional and personal development

Digital transformation has a very high and significant effect on professional and personal development (β = 0,840, t = 28,456, p < 0,001). This model explains 72.2% of the variance (R^2 = 0,722, F = 674,446, p < 0,001). However, the interaction term is not significant for this model (β = 0,016, t = 0,529, p = 0,597).

Model 5 – Social and cultural facilities

Digital transformation has a significant impact on social and cultural facilities (β = 0,465, t = 10,797, p < 0,001). The model explains 40.9% of the variance (R^2 = 0,409, F = 179,721, p < 0,001). The interaction term is also significant for this model (β = 0,237, t = 5,511, p < 0,001).

Model 6 – Belonging

Digital transformation has a significant impact on belonging (β = 0,180, t = 3,935, p < 0,001). This model explains 32.9% of the variance (R^2 = 0,329, F = 127,375, p < 0,001). The term interaction has an important meaning for this model (β = 0,444, t = 9,681, p < 0,001). According to the results in the table, by looking at the significance of the interaction term between digital transformation and general attitude towards AI, it was determined for which dependent variables the moderating effect was and was not observed.

Dependent Variables with Moderating Effect:

- Satisfaction with the working environment: The term interaction is meaningful (p < 0,001).
- Innovation, change and quality: The term interaction is meaningful (p = 0,014).
- Social and cultural facilities: The term interaction is meaningful (p < 0,001).
- Belonging: The term interaction is meaningful (p < 0,001).

Dependent Variables with No Moderating Effect:

- Satisfaction with the working environment: The term interaction is meaningless (p = 0,079).
- Professional and personal development: The term interaction is meaningless (p = 0,597).

The moderating effect of General Attitude towards AI was found for the dependent variables of Employee Satisfaction, Innovation, Change and Quality, Social and Cultural Facilities and Belonging. However, this effect is not significant for the dependent variables of satisfaction with working environment and professional personal development. This means that general attitude towards AI does not regulate the impact of digital transformation on these variables.

6. Comparison Tests

Table 6: Investigation of Digital Transformation, Employee Satisfaction and General Attitude towards AI Scores in Terms of Gender

		n	Mean	Standard deviation	t	p
Digital transformation	Male	146	49,51	3,05	11,061	0,000
	Female	376	43,77	8,79		
Satisfaction with the working environment	Male	146	46,62	2,72	11,374	0,000
	Female	376	40,73	9,03		
Innovation, change and quality	Male	146	18,13	1,32	7,940	0,000
	Female	376	16,44	3,54		
Professional and personal development	Male	146	27,89	1,59	9,898	0,000
	Female	376	24,43	6,29		
Social and cultural facilities	Male	146	22,56	2,21	2,560	0,011
	Female	376	21,71	5,37		
Belonging	Male	146	19,38	5,71	2,983	0,003
	Female	376	17,77	5,02		
Employee satisfaction	Male	146	134,58	9,85	8,976	0,000
	Female	376	121,08	24,50		
The positive dimension of AI	Male	146	42,91	9,47	-0,177	0,859
	Female	376	43,07	8,24		
The negative dimension of AI	Male	146	27,88	7,90	10,065	0,000
	Female	376	20,69	5,59		
General attitude towards AI	Male	146	63,03	17,13	-4,792	0,000
	Female	376	70,38	11,39		

Table 6 shows the means and standard deviations of specific variables by gender. It also presents the t-test results for each variable. This t-test was used to determine whether there is a significant difference between men and women on these variables. Based on this table we can reach the following conclusions: **Digital Transformation:** The mean of men (49.51) is significantly higher than that of women (43.77). This difference is statistically significant (t=11,061, p=0,000). **Satisfaction with the Working Environment:** The mean for men (46.62) is higher than that for women (40.73). This difference is also statistically significant (t=11,374, p=0,000). **Innovation, Change and Quality:** Men (18,13) have a higher average in innovation, change and quality than women (16,44) (t=7,940, p=0,000). **Professional and Personal Development:** The mean of males (27.89) is higher than females (24.43) and this difference is significant (t=9,898, p=0,000). **Social and Cultural Facilities:** The mean of men (22.56) is slightly higher than that of women (21.71) and this difference is statistically significant, but the magnitude of this difference is less than the other variables (t=2,560, p=0,011). **Belonging:** Men (19.38) have a higher average of belonging than women (17.77) (t=2,983, p=0,003).

Satisfaction with the Working Environment: The mean for men (134.58) is significantly higher than for women (121.08) (t=8,976, p=0,000). **The Positive Dimension of AI:** There is no significant difference between genders for this variable (t=-0,177, p=0,859). **The Negative Dimension of AI:** Men (27,88) have a higher mean in this dimension than women (20,69) and this difference is significant (t=10,065, p=0,000). **General Attitude towards AI:** The mean of women (70,38) is higher than that of men (63,03) and this difference is statistically significant (t=-4,792, p=0,000).

Table 7: Investigation of Digital Transformation, Employee Satisfaction and General Attitude towards AI Scores in Terms of Age

		n	Mean	Standard deviation	F	p
Digital transformation	20-25	54	36,52	6,497	83,352	0,000
	26-31	138	44,33	8,989		
	32-37	234	44,66	6,118		
	38 +	96	53,59	2,782		
Satisfaction with the working environment	20-25	54	34,72	4,772	33,663	0,000
	26-31	138	42,33	6,624		
	32-37	234	42,05	9,646		
	38 +	96	47,55	2,623		
Innovation, change and quality	20-25	54	12,59	2,375	61,065	0,000
	26-31	138	18,00	1,639		
	32-37	234	16,69	3,637		
	38 +	96	18,32	1,192		
Professional and personal development	20-25	54	22,48	3,765	20,652	0,000
	26-31	138	27,00	6,187		
	32-37	234	24,12	6,011		
	38 +	96	27,82	1,723		
Social and cultural facilities	20-25	54	18,89	2,689	82,633	0,000
	26-31	138	25,33	3,412		
	32-37	234	19,72	4,379		
	38 +	96	24,24	3,827		
Belonging	20-25	54	14,22	3,484	62,387	0,000
	26-31	138	15,00	5,736		
	32-37	234	20,75	4,795		
	38 +	96	18,93	1,088		
Employee satisfaction	20-25	54	102,91	15,724	33,030	0,000
	26-31	138	127,67	21,312		
	32-37	234	123,33	24,176		
	38 +	96	136,86	7,539		

The positive dimension of AI	20-25	54	47,46	2,117	26,751	0,000
	26-31	138	38,33	1,252		
	32-37	234	45,09	10,699		
	38 +	96	42,23	8,082		
The negative dimension of AI	20-25	54	22,46	2,640	38,517	0,000
	26-31	138	27,67	5,007		
	32-37	234	20,56	2,785		
	38 +	96	20,93	12,912		
General attitude towards AI	20-25	54	73,00	3,782	40,222	0,000
	26-31	138	58,67	6,040		
	32-37	234	72,54	11,660		
	38 +	96	69,30	20,804		

Digital Transformation: There is a significant difference between different age groups in terms of digital transformation (F statistic 83,352 and p<0,001). While the average of the 20-25 age group (Mean=36,52) shows the lowest value, the 38 and over age group (Mean=53,59) has the highest average in this category. **Satisfaction with the Working Environment:** There is a significant difference between different age groups in terms of satisfaction with the working environment (F statistic 33,663 and p<0,001). The mean of the 20-25 age group (Mean=34.72) shows the lowest value, while the 38 and over age group (Mean=47.55) has the highest mean in this category. **Innovation, Change and Quality:** There are significant differences between age groups regarding innovation, change and quality (F statistic 61,065 and p<0,001). The 20-25 age group (Mean=12.59) has the lowest mean, while the 38 and over age group (Mean=18.32) has the highest mean in this category. **Professional and Personal Development:** In terms of professional and personal development, there is a significant difference between different age groups (F statistic 20,652 and p<0,001). The mean of the 20-25 age group (Mean=22.48) shows the lowest value, while the 38 and over age group (Mean=27.82) has the highest mean in this category. **Social and Cultural Facilities:** In terms of social and cultural facilities, there is a significant difference between different age groups (F statistic 82,633 and p<0,001). While the mean of the 20-25 age group (Mean =18.89) shows the lowest value, the 26-31 age group (Mean =25.33) has the highest mean in this category. **Belonging:** There is a significant difference between different age groups regarding the sense of belonging (F statistic 62,387 and p<0,001). While the mean of the 20-25 age group (Mean=14,22) shows the lowest value, the 32-37 age group (Mean=20,75) has the highest mean in this category. **Employee Satisfaction:** In terms of employee satisfaction, there is a significant difference between different age groups (F statistic 33,030 and p<0,001). The mean of the 20-25 age group (Mean =102.91) shows the lowest value, while the 38 and over age group (Mean =136.86) has the highest mean in this category. **The Positive Dimension of AI:** There are significant differences between age groups regarding the positive dimension of AI (F statistic 26,751 and p<0,001). The 20-25 age group (Mean =47.46) had the highest mean in this category, while the 26-31 age group (Mean =38.33) had the lowest mean. **The Negative Dimension of AI:** In terms of the negative dimensions of AI, there is a significant difference between different

age groups (F statistic 38,517 and p<0,001). The mean of the 26-31 age group (Mean =27.67) shows the highest value, while the 32-37 age group (Mean =20.56) and the 38 and over age group (Mean =20.93) have similar averages in this category. **General Attitude towards AI:** There is a significant difference between different age groups in terms of general perception of artificial intelligence (F statistic 40,222 and p<0,001). While the average of the 26-31 age group (Mean=58.67) shows the lowest value in this category, the 32-37 age group (Mean=72.54) has the highest average. However, the 20-25 age group (Mean=73,00) and the 38 and over age group (Mean=69,30) have similarly high averages.

Table 8: Investigation of Digital Transformation, Employee Satisfaction and General Attitude towards AI Scores in Terms of Marital Status

		n	Mean	Standard deviation	t	p
Digital transformation	Single	194	42,88	8,32	-5,468	0,000
	Married	328	46,85	7,51		
Satisfaction with the working environment	Single	194	39,71	7,55	-5,870	0,000
	Married	328	43,95	8,23		
Innovation, change and quality	Single	194	15,49	3,67	-7,615	0,000
	Married	328	17,75	2,50		
Professional and personal development	Single	194	25,01	6,87	-1,096	0,274
	Married	328	25,62	4,72		
Social and cultural facilities	Single	194	20,63	6,52	-4,243	0,000
	Married	328	22,73	2,95		
Belonging	Single	194	16,45	4,44	-6,428	0,000
	Married	328	19,27	5,44		
Employee satisfaction	Single	194	117,29	26,10	-5,656	0,000
	Married	328	129,33	18,28		
The positive dimension of AI	Single	194	40,07	5,03	-7,261	0,000
	Married	328	44,77	9,72		
The negative dimension of AI	Single	194	26,79	4,61	11,299	0,000
	Married	328	20,28	7,20		
General attitude towards AI	Single	194	61,28	8,51	-11,195	0,000
	Married	328	72,49	14,37		

Digital Transformation: There is a significant difference between single and married individuals in terms of digital transformation (t value – 5,468 and p<0,001). The mean of single individuals (Mean=42.88) is lower than that of married individuals (Mean=46.85). **Satisfaction with the Working Environment:** There is a significant difference between single and married individuals in terms of satisfaction with the work environment (t value – 5,870 and p<0,001). The mean of single individuals (Mean =39,71) is lower than that of married individuals (Mean =43,95). **Innovation, Change and**

Quality: There is a significant difference between singles and married people regarding innovation, change and quality (t value – 7,615 and p<0,001). The mean of single individuals (Mean=15.49) is lower than that of married individuals (Mean=17.75). **Professional and Cultural Facilities:** There is no significant difference between singles and married people in terms of professional and personal development (t value – 1,096 and p=0,274). **Social and Cultural Development:** There is a significant difference between singles and married individuals regarding social and cultural development (t value – 4,243 and p<0,001). The mean of single individuals (Mean=20,63) is lower than that of married individuals (Mean=22,73). **Belonging:** There is a significant difference between single and married individuals regarding the sense of belonging (t value – 6,428 and p<0,001). The mean of single individuals (mean=16,45) is lower than that of married individuals (Mean=19,27). **Employee Satisfaction:** There is a significant difference between singles and marrieds in terms of employee satisfaction (t value – 5,656 and p<0,001). The average of single individuals (Mean=117,29) is lower than that of married individuals (Mean=129,33). **The Positive Dimension of AI:** There is a significant difference between single and married individuals regarding the positive dimension of AI (t değeri – 7,261 ve p<0,001). The mean of single individuals (Mean=40,07) is lower than that of married individuals (Mean=44,77). **The Negative Dimension of AI:** There is a significant difference between singles and married individuals regarding the negative dimension of AI (t değeri 11,299 ve p<0,001). This time, the mean of single individuals (Mean=26,79) is higher than that of married individuals (Mean=20,28). **General Attitude towards AI:** There is a significant difference between single and married individuals regarding the general perception of AI (t value – 11,195 and p<0,001). The mean of single individuals (Mean=61.28) is lower than that of married individuals (Mean=72.49).

Table 9: Investigation of Digital Transformation, Employee Satisfaction and General Attitude towards AI Scores in Terms of Education Status

		n	Mean	Standard deviation	F	p
Digital transformation	Associate degree	94	52,13	2,653	228,263	0,000
	Undergraduate	288	39,99	6,785		
	Master	93	50,44	2,564		
	PhD	47	54,83	1,167		
Satisfaction with the working environment	Associate degree	94	50,66	4,664	155,793	0,000
	Undergraduate	288	37,39	7,430		
	Master	93	46,82	2,027		
	PhD	47	47,62	2,626		
Innovation, change and quality	Associate degree	94	19,84	1,110	113,671	0,000
	Undergraduate	288	15,15	3,189		
	Master	93	18,40	1,105		
	PhD	47	18,89	0,729		

Professional and personal development	Associate degree	94	30,78	3,357	101,017	0,000
	Undergraduate	288	22,44	5,628		
	Master	93	27,85	1,452		
	PhD	47	27,85	1,021		
Social and cultural facilities	Associate degree	94	25,81	4,197	125,467	0,000
	Undergraduate	288	19,44	3,935		
	Master	93	22,87	2,356		
	PhD	47	27,77	1,605		
Belonging	Associate degree	94	18,53	4,503	42,103	0,000
	Undergraduate	288	16,62	5,567		
	Master	93	22,96	3,029		
	PhD	47	18,00	0,000		
Employee satisfaction	Associate degree	94	145,62	9,587	161,057	0,000
	Undergraduate	288	111,05	20,318		
	Master	93	138,89	7,388		
	PhD	47	140,13	5,980		
The positive dimension of AI	Associate degree	94	34,89	3,659	53,841	0,000
	Undergraduate	288	43,90	7,675		
	Master	93	44,95	11,012		
	PhD	47	50,13	0,875		
The negative dimension of AI	Associate degree	94	24,64	4,576	118,906	0,000
	Undergraduate	288	23,50	4,703		
	Master	93	25,44	8,519		
	PhD	47	8,51	3,501		
General attitude towards AI	Associate degree	94	58,26	2,648	80,907	0,000
	Undergraduate	288	68,40	10,224		
	Master	93	67,51	19,500		
	PhD	47	89,62	2,626		

Digital Transformation: There is a significant difference between different education levels regarding digital transformation (F statistic 228,263 and p<0,001). The average of bachelor's degree graduates (Mean =39.99) shows the lowest value, while doctoral graduates (Mean =54.83) have the highest average in this category. **Satisfaction with the Working Environment:** There is a significant difference between education levels regarding satisfaction with the working environment (F statistic 155,793 and p<0,001). While the average of bachelor's degree graduates (Mean=37,39) shows the lowest value, doctorate graduates (Mean=47,62) have the highest average in this category. **Innovation, Change and Quality:** There is a significant difference between education levels in terms of innovation, change and quality (F statistic 113,671 and p<0,001). While the average of bachelor's degree graduates (Mean=15,15) shows the lowest value, associate degree graduates (Mean=19,84) have the highest average in this category. **Professional and Personal Development:** There is a

significant difference between education levels in terms of professional and personal development (F statistic 101,017 and p<0,001). While the average of bachelor's degree graduates (Mean=22,44) shows the lowest value, associate degree graduates (Mean=30,78) have the highest average in this category. **Social and Cultural Facilities:** There is a significant difference between education levels regarding social and cultural facilities (F statistic 125,467 and p<0,001). While the average of bachelor's degree graduates (Mean=19,44) shows the lowest value, doctorate graduates (Mean=27,77) have the highest average in this category. **Belonging:** There is a significant difference between different education levels in terms of belonging (F statistic 42,103 and p<0,001). While the average of bachelor's degree graduates (Mean=16,62) shows the lowest value, master's degree graduates (Mean=22,96) have the highest average in this category. **Employee Satisfaction:** There is a significant difference between education levels in terms of employee satisfaction (F statistic 161,057 and p<0,001). While the average of bachelor's degree graduates (Mean=111,05) shows the lowest value, associate degree graduates (Mean=145,62) have the highest average in this category. **The Positive Dimension of AI:** There is a significant difference between different education levels regarding the positive dimensions of AI (F statistic 53,841 and p<0,001). While the average of associate degree graduates (Mean=34.89) shows the lowest value, doctorate graduates (Mean=50.13) have the highest average in this category. **The Negative Dimension of AI:** There is a significant difference between education levels regarding the negative dimensions of AI (F statistic 118.906 and p<0.001). While the average of doctorate graduates (Mean=8,51) shows the lowest value, master's degree graduates (Mean=25,44) have the highest average in this category. **General Attitude towards AI:** There is a significant difference between different education levels regarding the general perception of AI (F statistic 80.907 and p<0.001). While the average of associate degree graduates (Mean=58,26) shows the lowest value, doctorate graduates (Mean=89,62) have the highest average in this category.

Table 10: Investigation of Digital Transformation, Employee Satisfaction and General Attitude towards AI Scores in Terms of Length of Work

		n	Mean	Standard deviation	F	p
Digital transformation	5 years and less	284	44,06	8,899	9,331	0,000
	6-10 years	142	46,45	8,337		
	11 +	96	47,69	1,975		
Satisfaction with the working environment	5 years and less	284	39,98	7,556	31,509	0,000
	6-10 years	142	44,44	10,103		
	11 +	96	46,44	3,142		
Innovation, change and quality	5 years and less	284	16,33	3,057	36,342	0,000
	6-10 years	142	16,50	3,547		
	11 +	96	19,25	1,429		
Professional and personal development	5 years and less	284	24,87	5,832	30,496	0,000
	6-10 years	142	23,92	5,664		
	11 +	96	29,14	2,461		

	5 years and less	284	23,52	4,392		
Social and cultural facilities	6-10 years	142	18,31	4,515	76,380	0,000
	11 +	96	22,69	2,552		
	5 years and less	284	16,28	4,874		
Belonging	6-10 years	142	17,02	2,482	222,230	0,000
	11 +	96	25,72	1,434		
	5 years and less	284	120,97	21,779		
Employee satisfaction	6-10 years	142	120,19	23,302	47,222	0,000
	11 +	96	143,23	9,076		
	5 years and less	284	42,58	4,928		
The positive dimension of AI	6-10 years	142	34,42	3,004	858,182	0,000
	11 +	96	57,08	2,886		
	5 years and less	284	22,01	7,927		
The negative dimension of AI	6-10 years	142	26,08	5,926	28,638	0,000
	11 +	96	19,73	3,069		
	5 years and less	284	68,56	12,222		
General attitude towards AI	6-10 years	142	56,33	6,111	257,960	0,000
	11 +	96	85,35	3,293		

Digital Transformation: There is a significant difference in digital transformation according to the length of service (F statistic 9,331 and p<0,001). While the average of the "5 years and below" group (Mean=44,06) shows the lowest value, the "11 years and above" group (Mean=47,69) has the highest average in this category. **Satisfaction with the Working Environment:** Satisfaction with the working environment according to the length of service shows a significant difference (F statistic 31,509 and p<0,001). While the mean of the "5 years and below" group (Mean=39,98) shows the lowest value, the "11 years and above" group (Mean=46,44) has the highest mean in this category. **Innovation, Change and Quality:** There is a significant difference between the perception of innovation, change and quality according to the length of service (F statistic 36,342 and p<0,001). While the averages of the "5 years or less" and "6-10 years" groups are close to each other, the "11 years or more" group (Mean=19,25) has the highest mean in this category. **Professional and Personal Development:** There is a significant difference in professional and personal development according to the length of service (F statistic 30,496 and p<0,001). While the "11 years and above" group (Mean=29,14) has the highest mean in this category, there is no significant difference between the other two groups. **Social and Cultural Facilities:** There is a significant difference in social and cultural facilities according to the length of service (F statistic 76,380 and p<0,001). The average of the "6-10 years" group (Mean=18,31) shows the lowest value, while the "11 years and above" group (Mean=22,69) and the "5 years and below" group (Mean=23,52) have similar and higher averages in this category. **Belonging:** There is a significant difference in terms of sense of belonging according to working hours (F statistic 222,230 and p<0,001). The "11 years and above" group (Mean=25,72) has the highest mean in this category, while the "5 years and below" group (Mean=16,28) has the lowest mean. **Employee Satisfaction:**

There is a significant difference in employee satisfaction according to the length of service (F statistic 47,222 and p<0,001). The "11 years and above" group (Mean=143,23) has the highest mean in this category, while the "5 years and below" and "6-10 years" groups have similar and lower averages. **The Positive Dimension of AI:** There is a significant difference in the positive dimension of AI according to working hours (F statistic 858,182 and p<0,001). The "11 years and above" group (Mean=57.08) has the highest mean in this category, while the "6-10 years" group (Mean=34.42) shows the lowest mean. **The Negative Dimension of AI:** There is a significant difference in the negative dimension of AI according to working hours (F statistic 28,638 and p<0,001). While the average of the "6-10 years" group (Mean=26,08) shows the highest value, the "11 years and over" group (Mean=19,73) has the lowest average in this category. **General Attitute towards AI:** There is a significant difference in the perception of general attitude towards AI according to the length of employment (F statistic 257,960 and p<0,001). The "11 years and above" group (Mean=85,35) has the highest mean in this category, while the "6-10 years" group (Mean=56,33) shows the lowest mean.

Table 11: Investigation of Digital Transformation, Employee Satisfaction and General Attitude towards AI Scores in Terms of Total of Work

		n	Mean	Standard deviation	F	p
Digital transformation	5 years and less	147	41,01	7,031	67,585	0,000
	6-10 years	186	44,20	9,766		
	11 +	189	49,93	3,193		
Satisfaction with the working environment	5 years and less	147	37,47	7,297	150,260	0,000
	6-10 years	186	39,64	7,841		
	11 +	189	48,89	4,134		
Innovation, change and quality	5 years and less	147	15,69	2,304	90,370	0,000
	6-10 years	186	15,70	3,801		
	11 +	189	19,05	1,550		
Professional and personal development	5 years and less	147	22,26	5,006	66,332	0,000
	6-10 years	186	24,72	6,820		
	11 +	189	28,50	2,115		
Social and cultural facilities	5 years and less	147	21,82	2,310	0,121	0,886
	6-10 years	186	21,92	7,364		
	11 +	189	22,07	2,022		
Belonging	5 years and less	147	14,71	5,034	90,771	0,000
	6-10 years	186	17,76	3,579		
	11 +	189	21,39	4,969		
Employee satisfaction	5 years and less	147	111,96	13,698	100,441	0,000
	6-10 years	186	119,75	28,103		
	11 +	189	139,90	8,250		

The positive dimension of AI	5 years and less	147	40,64	3,171	13,348	0,000
	6-10 years	186	42,56	6,136		
	11 +	189	45,33	12,242		
The negative dimension of AI	5 years and less	147	24,27	6,312	10,606	0,000
	6-10 years	186	20,89	7,892		
	11 +	189	23,26	6,469		
General attitude towards AI	5 years and less	147	64,37	8,442	8,919	0,000
	6-10 years	186	69,67	13,276		
	11 +	189	70,07	16,410		

Digital Transformation: Significant differences are observed in digital transformation depending on the length of service (F=67,585; p<0,001). The highest score was obtained by the "11 years and above" group (Mean=49.93), while the lowest score was obtained by the "5 years and below" group (Mean=41.01). **Satisfaction with the Working Environment:** There are significant differences in satisfaction with the working environment according to the length of service (F=150,260; p<0,001). While the "11 years and over" group (Mean=48,89) indicated the highest satisfaction, the "5 years and under" group (Mean=37,47) indicated the lowest satisfaction. **Innovation, Change and Quality:** There are significant differences in innovation, change and quality according to the length of service (F=90,370; p<0,001). The "11 years and above" group (Mean=19,05) received the highest score in this category, while the "5 years and below" group (Mean=15,69) received the lowest score. **Professional and Personal Development:** There are significant differences in professional and personal development depending on the length of service (F=66,332; p<0,001). The "11 years and over" group (Mean=28,50) received the highest score in this category, while the "5 years and under" group (Mean=22,26) received the lowest score. **Social and Cultural Facilities:** No significant difference was observed in this category (F=0.121; p=0.886). There are similar scores between the groups. **Belonging:** There are significant differences in belongingness scores according to working years (F=90,771; p<0,001). The "11 years and above" group (Mean=21.39) received the highest score in this category, while the "5 years and below" group (Mean=14.71) received the lowest score. **Employee Satisfaction:** There are significant differences in employee satisfaction scores according to the length of service (F=100,441; p<0,001). While the "11 years and above" group (Mean=139,90) indicated the highest satisfaction, the "5 years and below" group (Mean=111,96) indicated the lowest satisfaction. **The Positive Dimension of AI:** In terms of the positive aspects of AI, significant differences are observed depending on the working hours (F=13,348; p<0,001). The "11 years and above" group (Mean=45,33) received the highest score in this category, while the "5 years and below" group (Mean=40,64) received the lowest score. **The Negative Dimension of AI:** Significant differences are observed in the negative dimension of AI depending on the duration of employment (F=10,606; p<0,001). The "5 years and below" group (Mean=24,27) received the highest score in this category, while the "6-10 years" group (Mean=20,89) received the lowest score. **General Attitude towards AI:** There are significant differences in general attitude towards AI scores according to working hours (F=8,919; p<0,001). The "11 years and above" group (mean=70,07) received the highest score, while the "5 years and below" group (mean=64,37) received the lowest score.

As a result, it is observed that working time causes significant differences in most categories. In particular, it is observed that employees with "11 years or more" have higher satisfaction and positive scores in many categories. However, no significant difference was observed in the category of "Social and Cultural Facilities".

7. Discussion and Conclusion

According to the results of the analyses, statistically significant and significant relationships were determined between digital transformation and satisfaction in the work environment. This finding is in line with the results of various studies in the existing literature. Digital transformation stands out as a concept that has the potential to optimize business processes, increase efficiency and provide organizations with competitive advantage (Nadkarni & Prügl, 2021; Lee, Kao, & Yang, 2014). However, it was determined that the correlations between the positive dimension of AI, the negative dimension of AI and the general attitude towards AI and other variables were statistically insignificant. This situation supports various views in the literature. There are uncertainties about the positive and negative effects of AI, and attitudes may differ among individuals (Dignum, 2018; Floridi et al., 2018). The fact that satisfaction with the working environment is strongly associated with other variables is consistent with similar studies in the literature. Employees' satisfaction with their jobs can increase their motivation, positively affect their job performance and contribute to organizational success (Hackman & Oldham, 1976; Kraut, 1998). The statistically insignificant correlations between the positive dimension, negative dimension and general attitude towards AI and other variables are also in line with some contradictory findings in the literature. Attitudes to AI may differ among individuals and these attitudes may be shaped by various factors such as personal experiences, cultural factors, and educational levels (Dignum, 2018; Rader & Gray, 2015). In conclusion, this study has shown that the correlations between digital transformation and satisfaction with the work environment are high and significant as expected. However, the statistically insignificant relationships between AI-related variables reflect the complexity in the literature. These results highlight that there are several factors that need to be considered for organizations to adopt AI technologies and increase employee satisfaction.

Based on the results of statistical analyses, high and significant correlations were found between innovation, change and quality variables and other factors. These results indicate that innovation and quality-oriented efforts in organizations are strongly associated with overall business performance (Uzkurt et al., 2013; Alsawafi, Lemke, & Yang, 2021). The fact that the professional and personal development variable has high and significant correlations with other factors emphasizes the importance of individuals' need for continuous development and learning in business environments (Tannenbaum & Yukl, 1992; Watkins & Marsick, 1993). The fact that the social and cultural facilities variable has medium-high and significant correlations indicates that the social context of the work environment and cultural factors are effective on employees' performance and satisfaction (Cohen & Bailey, 1997; O'Reilly, Caldwell, & Barnett, 1989). The negative correlation between the belongingness variable and the Negative Dimension of AI indicates that job belongingness, a prominent concept

in the literature, may be related to negative perceptions of AI technology (Meyer & Allen, 1991; Riketta, 2005). The very high negative correlation between the Positive Dimension of AI and the Negative Dimension of AI indicates that there is a marked contrast between these two variables. This shows that the positive or negative perception of AI applications in organizations is separated from each other (Dignum, 2018; Floridi et al., 2018). The high negative correlation between the Negative Dimension of AI and General Attitude towards AI suggests that negative perception of AI technology is associated with a general attitude. This result points to the challenges faced by organizations in the process of adopting AI applications (Dignum, 2018; Rader & Gray, 2015). In conclusion, this study shows that factors such as innovation, change, quality, professional and personal development, social and cultural facilities are strongly related to organizational performance and employee satisfaction. However, it highlights the complexity of perceptions about the positive and negative dimensions of AI in the organizational context.

According to the results of the moderator effect analysis, it was determined that the general attitude towards AI does not moderator the effect of digital transformation on employee satisfaction. These findings provide a consistent view when compared with other literature studies on a similar subject. Many studies suggest that the integration of AI into business processes and digital transformation can increase employee satisfaction (Nadkarni & Prügl, 2021, 2020; Lee, Kao, & Yang, 2014). However, whether this effect is moderated by general attitude towards AI has different views in the literature. For example, Dignum (2018), in his study on the ethical and social implications of AI, suggests that general attitude towards AI may affect individuals' trust and satisfaction with technology. In this context, according to the results of this research, it has been revealed that the general attitude towards AI does not affect the relationship between digital transformation and employee satisfaction in a moderating way. On the other hand, Rader & Gray (2015) emphasize that trust in AI can affect individuals' satisfaction as well as general attitude. In this context, in a model where they examine the effects on employee satisfaction, they reach a conclusion that the moderating effect of general attitude towards AI is not observed. Overall, the results of this research are inconsistent with other studies in the literature on the moderating role of general attitude towards AI in the relationship between digital transformation and employee satisfaction. These contradictory findings may reflect the complexity and diversity of research in the field of AI and digital transformation.

This research aims to examine the moderating role of the general attitude towards AI while evaluating the impact of digital transformation on employee satisfaction. The findings are considered as a step towards filling the gaps in the literature on digital transformation and AI. According to the results of the analyses, the moderating role of general attitude towards AI in the effect of digital transformation on employee satisfaction could not be determined. These results show that digital transformation has a direct effect on employee satisfaction, but this effect is not affected by the variability in the perception of AI. Employee satisfaction is critical for the success and sustainability of organizations. Digital transformation has great potential to optimize business processes, increase efficiency and provide competitive advantage. In this context, the successful implementation of digital transformation practices has a positive impact on employee satisfaction. The fact that the moderating role of the general attitude towards AI cannot be determined reflects the various views that come to the fore

about the adoption of AI technologies in the digital transformation processes of organizations. The effects of digital transformation may differ depending on factors such as organizational culture, leadership understanding and employees' approach to technology.

Considering the limitations of this study, more in-depth studies on this issue can be carried out in future research with more comprehensive data sets and analyses in different sectors. In addition, it is thought that more specific research focusing on the effects of general attitude towards AI should be conducted. In conclusion, this study aimed to contribute to the literature on digital transformation and AI, but the failure to identify the moderator effect emphasized the complexity and diversity of the issue. These findings may help organizations to better understand how they adopt AI technologies and how they affect employee satisfaction when developing their digital transformation strategies.

8. Theoretical and Practical Implications

The study has important theoretical and practical implications. These results provide valuable insights for both organizations and managers to increase employee satisfaction and effectively manage digital transformation processes.

8.1. Theoretical Implications

The general attitude of the staff to AI is a critical factor in determining the success of digital transformation processes. Theoretically, in order to successfully integrate AI technologies, organizations should encourage a positive employee attitude to this technology. This can increase employee satisfaction and help business processes become more efficient. Theoretically, organizations should increase employee knowledge and awareness of AI. When employees understand how AI is integrated into business processes, they may approach this technology more favorably. Training and awareness can help employees better understand how AI can contribute to their daily work. Theoretically, it is important for leaders and managers to involve employees in the implementation of AI and ensure open communication. Leaders who drive changes in work processes can help to overcome employee insecurities and create a positive working environment.

8.2. Practical Implications

The study shows that there are statistically significant relationships between digital transformation and satisfaction with the work environment. This finding suggests that digital transformation can increase employee satisfaction and that businesses' adoption of this transformation can have a positive impact in the workplace. Increasing the satisfaction level of employees is an important strategic goal for businesses to increase workforce efficiency and employee loyalty. The finding that digital transformation increases satisfaction with the work environment provides a strong incentive for businesses to adopt digital technologies. For example, automation of business processes,

streamlining communication, and the use of digital tools can help employees feel more satisfied with their jobs. Regulatory impact analysis shows that the general attitude towards artificial intelligence does not affect the relationship between digital transformation and employee satisfaction. This result reveals that digital transformation has a direct effect on employee satisfaction and general attitudes towards artificial intelligence do not change this effect. This finding may indicate that businesses should focus directly on the efficiency and comfort aspects of digital tools when adopting digital transformation, rather than focusing on the general attitudes of employees. In light of these findings, it is recommended that businesses use digital transformation as a tool to increase employee satisfaction. The importance of showing employees the benefits of digital technologies and addressing negative perceptions of these technologies should be emphasized. To address the concerns caused by artificial intelligence in business processes, businesses should create open communication channels and invest in employee training and awareness programs for these technologies.

9. Limitations and Future Research

9.1. Limitations

The sample of this study may be limited to a specific sector or geographical region. Results may differ across different sectors or geographical regions. Therefore, generalization of results may be limited for situations where larger and diverse sample groups are not included. Data collected through methods such as questionnaires and interviews may result in respondents tending to give socially desirable answers. There is a possibility of creating a situation where respondents may give favorable or acceptable responses rather than expressing their true thoughts. This study is based on data from a specific point in time. This may necessitate an assessment of changes over time and long-term impacts. The impact of digital transformation processes and the use of AI on employee satisfaction may vary over time.

9.2. Future Research

Future research should comparatively examine the impact of digital transformation and the use of AI on employee satisfaction in organizations across different sectors. This can help to better understand sectoral differences and specificities. Future studies should examine in more detail the long-term effects of digital transformation processes and how the use of AI changes over time. This can help us better understand the long-term effects on the sustainability of organizations and employee satisfaction. Future research should examine in more detail the attitudes and reactions of different employee profiles (e.g. age, experience, skill level) towards digital transformation and the use of AI. This could contribute to the development of customized management strategies. Future studies should investigate how organizations can develop more effective training and awareness-raising programes on AI and digital transformation for their employees. This could help employees to approach technology in a more positive way. Future research should utilize data sources other than

surveys and interviews. For example, internal organizational performance data and monitoring tools can help us better understand the relationship between employee satisfaction and technology use.

In conclusion, the limitations of this study and suggestions for future research can be instructive to better understand the impact of digital transformation on employee satisfaction and the regulatory role of the use of AI. Future studies can help organizations to manage digital transformation processes more effectively and increase employee satisfaction.

Author Contribution

CONTRUBUTION RATE	EXPLANATION	CONTRIBUTORS
Idea or Notion	Form the research idea or hypothesis	Ayşe Meriç Yazıcı Filiz Sivaslıoğlu
Literature Review	Review the literature required for the study	Ayşe Meriç Yazıcı
Research Design	Designing method, scale, and pattern for the study	Ayşe Meriç Yazıcı
Data Collecting and Processing	Collecting, organizing, and reporting data	Ayşe Meriç Yazıcı
Discussion and Interpretation	Taking responsibility in evaluating and finalizing the findings	Ayşe Meriç Yazıcı Filiz Sivaslıoğlu

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