THE EFFECT OF DIGITAL TRANSFORMATION PERCEPTION ON EMPLOYEE PERFORMANCE AND JOB SATISFACTION [1]

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Abstract

Digital transformation is the process by which an organization adapts technologies called digital tools to its business processes. Since these processual changes bring along some uncertainties, business managers have to take an employee-oriented approach. The main goal to be achieved is to ensure that employees adapt to digital transformation. The purpose of this study is to understand the possible effects of digital transformation perception on employee performance and job satisfaction. For this reason, the model of the study is based on explaining the relationship between variables theoretically and empirically. The theoretical background of the study is based on theories such as human capital theory, structural adjustment theory, structuration theory, motivation theories, expectancy theory and organizational effectiveness theory. The empirical results are based on data tests from 757 employees in the electrical and electronics industry using partial least squares structural equation modeling and PLS-SEM. The findings suggest that digital transformation perceptions can have positive effects on job satisfaction and employee performance. At the end of the study, recommendations are presented for businesses that want to be successful in digital transformation perceptions to implement employee-oriented strategies.

Keywords: Digital Transformation Perception, Job Satisfaction, Employee Performance.

Jel Codes: L20, J24, O36, M54

DİJİTAL DÖNÜŞÜM ALGISININ ÇALIŞAN PERFORMANSI VE İŞ MEMNUNİYETİ ÜZERİNDEKİ ETKİSİ

Özet

Dijital dönüşüm, bir organizasyonun dijital araçlar olarak adlandırılan teknolojileri iş süreçlerine adapte etme sürecidir. Bu süreçsel değişimler bazı belirsizlikleri de beraberinde getirdiği için, işletme yöneticileri çalışan odaklı yaklaşım sergilemek durumundadır. Ulaşılmak istenen temel hedef ise çalışanların dijital dönüşüme adapte olmasını sağlamaktır. Bu çalışmanın amacı, dijital dönüşüm algısının çalışan performansı ve iş tatmini üzerindeki olası etkilerini anlamaktır. Bu nedenle çalışmanın modeli, değişkenler arası ilişkiyi teorik ve ampirik şekilde açıklamak üzere kurgulanmıştır. Çalışmanın teorik alt yapısında insan sermayesi teorisi, yapısal uyum teorisi, yapılanma teorisi, motivasyon teorileri, beklenti teorisi ve örgütsel etkinlik teorisi gibi teoriler referans alınmıştır. Ampirik sonuçlar, kısmi en küçük kareler yapısal eşitlik modellemesi ile PLS-SEM kullanılarak elektrik elektronik sektöründe 757 çalışandan elde edilen veri testlerine dayanmaktadır. Bulgular dijital dönüşüm

algılarının iş tatmini ve çalışan performansı üzerinde olumlu etkiler ortaya çıkarabileceği yönündedir. Çalışma sonunda dijital dönüşüm algısı konusunda başarılı olmak isteyen işletmelere çalışan odaklı stratejiler uygulamaları gerekliliğine yönelik öneriler sunulmuştur.

Anahtar Kelimeler: Dijital Dönüşüm Algısı, İş Tatmini, Çalışan Performansı.

Jel Kodları: L20, J24, O36, M54.

1. INTRODUCTION

The concept of digital transformation, which is put forward as a vision product with Industry 4.0, refers to the dominance of digital technologies integrated into business processes and business models to radically improve the level of performance (Schwertner, 2017; Chanias and Hess, 2016). While some researchers have hypothesized that this adaptation process may have negative consequences (Henriette et al., 2016), others have hypothesized the positive effects of the transformation process (Teichert, 2019). However, the common point of both perspectives is the welfare of employees and the performance measures as a result of the roles they undertake. In this sense, the research results are aimed at ensuring the harmony between employees and technological transformation (Larjovuori et al., 2016). Such ideas are also among the ideas advocated by the structural adjustment theory. While it is emphasized that there may be employee losses in adaptation processes, it is also argued that by bringing qualified employees who can use new technologies into the business, there may be an increase in added value as well as an increase in performance (Stepantseva, 2020; Hai et al., 2021).

From the perspective of structuration theory, another important factor in the adaptation of new technologies, especially digital transformation, to the business structure is the adaptation of employees. If this adaptation is not ensured, employee losses may occur, as well as problems in the effective use of new technology. Therefore, ineffective use of employees and subsequent performance problems may also arise. The employee-oriented perspective of organizational effectiveness theory and human capital theory is also among the important principles advocated. In this sense, it is possible to say that the importance of the human factor in business structures will not lose value in the age of digitalization, on the contrary, it may even become more effective by changing its structure.

The concept of job satisfaction, which is the other variable of the study, has been the subject of many studies in a way to establish a relationship with many organizational variables. In the definition of job satisfaction, which draws its essence from theories such as motivation and expectancy theories, it is considered as the positive emotional reactions of employees to their job roles (Vroom et al., 1967). From this point of view, it is also possible to say that job satisfaction can be a concept that can support employee-technology harmony with the positive construction of the working environment in the digital transformation and performance dilemma.

The aim of this study is to understand the possible effects of digital transformation perception on employee performance and job satisfaction. For this purpose, a three-variable interaction model proposal is presented. The theoretical basis is included in the first part. The variables included in the model are supported by theories such as human capital theory, structural adjustment theory, structuring theory, motivation theories, expectation theory and organizational effectiveness theory. Hypothesis presentations based on theoretical basis are also presented in this section. In the other parts of the study, the study was finalized by compiling the research method, findings and discussions.

2. THEORETICAL REVIEW

2.1. Digital Transformation, Job Satisfaction

Digital transformation is defined as "organizational change triggered and shaped by the proliferation of digital technologies" (Hanelt, 2021). Digital transformation has become a phenomenon that inevitably forces sectors as well as businesses to undergo mandatory change (Baker, 2014). In this context, digital transformation should be considered as a holistic transformation process in business processes (Brynjolfsson and McAfee, 2014; Vogelsang et al., 2018). The basis of this idea is that digital transformation has begun to influence all processes of institutions and organizations (Legner et al., 2017). Digital transformation can affect employees' operational work routines and relationships with other employees, as well as business processes (Gong, 2024). For example, it is argued that due to the change in processes, employees whose job satisfaction decreases may increase in their intention to leave (Tschopp et al., 2014). For this reason, businesses are trying to develop people-oriented strategies on issues such as loss of productivity and efficiency that may arise due to decreased job satisfaction as a result of digital transformation.

When viewed from a holistic perspective on digital transformation, it can be said that digital transformation does not only include the work of acquiring new technologies, but also the work of achieving results by adapting new technologies to business processes. For this reason, it includes many managerial issues, including the redesign of business processes (Li et al., 2018). Gaining dynamic capabilities is important for digital transformation to be successful. For this, it is necessary to invest in employees. In this context, it will be important to support informal groups within the business, to be successful in leader-employee interaction, to share information with employees and to create an environment that increases job satisfaction (Petrucci and Rivera, 2018). Supporting this idea, it is stated that digital competence and digital leadership have an impact on job satisfaction (Hidayat et al., 2023). There are many studies that investigate the relationship between digital transformation and job satisfaction and support the finding of a positive relationship between the two phenomena with empirical data (Shoaib, 2022; Bolli and Pusterla, 2022; Mukherjee and Gopal, 2024; Fleischer and Wanckel, 2024). The hypothesis to be tested with reference to such studies is as follows.

H$_1$: Digital transformation has a direct positive effect on job satisfaction.

2.2. Job Satisfaction, Employee Performance

The concept of job satisfaction, which entered the literature with motivation theories, is discussed as an important element in terms of focusing on the retention of employees in terms of continuity and competition (Büyükyılmaz et al., 2019). In the definitions of job satisfaction, the state of emotional satisfaction that arises as a result of the values that employees attribute to their work due to the fulfillment of their expectations together with their experiences about their work is mentioned (Locke, 1969). In this respect, it is thought that employees with job satisfaction may have a high probability of continuing in these enterprises. The most important goal in ensuring the continuity of employees is employee performance. For this reason, employee performance has always been one of the focal points of managers (Ghanbar and Chegini, 2014). Employee performance is defined as the achievements that can be obtained as a result of the work done (Gruman and Saks, 2011). The question that these two concepts basically focus on is: do employees like their jobs (Spector, 1997). However, it should not be forgotten that both concepts can be affected by various factors in an integrated manner. In particular, although employee performance is seen as a result, it is also related to whether or not to do the job correctly and whether or not to be happy with the work done. In short, it would be more accurate to consider that the two concepts can mutually affect each other.

In the literature, it is generally accepted that if job satisfaction is successful, better employee performance can be achieved (Dugguh and Dennis, 2014). The findings of the researches also support this idea (Inuwa, 2016; Bhatti and Qureshi, 2007; Gruman and Saks, 2011). With reference to these and similar studies, the following hypothesis was aimed to be tested.

H_2: Job satisfaction has a direct positive effect on employee performance

2.3. Digital Transformation, Employee Performance

The concept of digital transformation has emerged as an extension of technological processes that are constantly and dynamically evolving. Therefore, there is no clear consensus on what the concept should encompass (Schallmo and Williams, 2018; Teichert, 2019). In this study, digital transformation is considered as the process of adapting technologies called digital tools to business processes for organizations. It is a well-known fact that digital transformation involves many factors from an organization's business models to its strategic planning. In this context, businesses that provide digital transformation gain some advantages in competitive environments, while businesses that fail to adapt technologies to business processes may pose some threats (Burmeister et al., 2016). In summary, new technological developments have created a new competitive environment. Businesses that want to succeed in this environment must also ensure digital transformation adaptation (Schwab, 2017).

The most important element in digital transformation adaptation is to determine strategies for transformation. In this context, businesses should prepare a digital transformation roadmap with a holistic approach (Fitzgerald et al., 2014). However, the employee-oriented approach is generally weak in the success of adaptation processes. For this reason, scholars have presented many studies on the impact of digital transformation on employee performance (Shwedeh, 2023; Lumunon, 2021; Lindawati and Parwoto, 2021; Rukani and Ratnasari, 2024; Teng et al., 2022). With reference to these studies, the following hypothesis will be tested.

H_3: Digital transformation has a direct positive impact on employee performance.
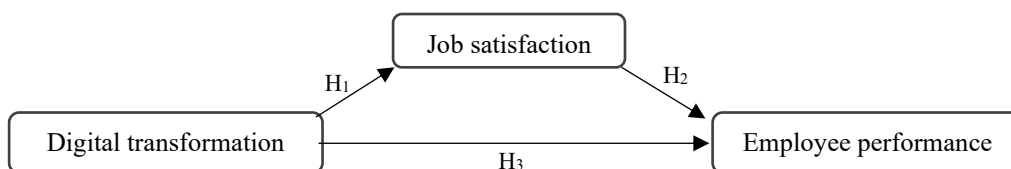

Figure 1. Research model

3. RESEACH DESIGN

3.1. Measures

In order to test the study model and collect the necessary data, multi-item scales used in previous studies and whose reliability was tested were taken as reference. For this purpose, a mixed draft scale tool was prepared. The draft scale created had a categorical structure divided into four parts. A pilot study was conducted on academics and 30 white-collar employees who could be potential participants. As a result of the study, it was concluded that the scale would not be a problem in terms of comprehensiveness and language. In the first part of the scale, question suggestions were included to measure the perception of digital transformation. Digital transformation scale, Iansiti and Lakhani (2014); Jafarzadeh et al. (2015); Kane et al., (2016); Gudergan and Mugge, (2017); Svahn et al. (2017), based on different studies such as Nadeem et al. (2018) It is a scale developed by. It contains twelve question propositions such as "sample item 1: Our company has the ability to discover and use new technologies." There are 12

question propositions. The Turkish adaptation of the scale was made by Sağlam (2021). It was stated that the reliability (α) value was 0.954. In the second part of the scale, question suggestions were included to measure job satisfaction. The job satisfaction scale was an 18-item scale developed by Brayfield and Rothe (1951). However, the scale converted into short form by Judge et al. (1998) is more preferred. The scale content includes five question propositions: "sample item 1: I enjoy my job." The Turkish adaptation of the scale was made by Başol and Çömlekçi (2020) and the reliability (α) value was stated to be 0.929. The scale in the third part, which measures employee performance perception, is a scale developed by Kirkman and Rosen (1999). It contains four question propositions: "sample item 1: I complete my tasks on time". The Turkish adaptation of the scale was made by Çöl (2008) and the reliability (α) value was stated to be 0.827. All scales were evaluated on a single dimension, adhering to the researchers' original dimensioning. Additionally, their contents do not include reverse-coded question propositions. A 5-point Likert method (1: "strongly disagree" and 5: "strongly disagree") was used to rate whether participants agreed or disagreed with each item. Finally, the survey form prepared for the research also includes closed-ended question groups that will determine the demographic characteristics of the participants. The question groups in this section are limited to age, gender, education, marital status and working hours.

3.2. Sampling

The aim of this study is to understand the impact of employees' perception of digital transformation on employee performance and job satisfaction. According to the reference of the 2022 sectoral reports of the Turkish Ministry of Industry and Technology, one of the sectors where digital transformation is most intense is the electrical and electronics sector. The highest number of businesses is located in the Marmara region (Url-1). For this reason, the target sample of the study is the enterprises operating in the electrical and electronics sector in the provinces of İstanbul, Kocaeli and Yalova in the Marmara region. Approximately 150,000 employees are employed in approximately 5,000 businesses. A sample calculation robot was used to calculate the sample size. The minimum number to be reached within a 5% margin of error and 99% confidence interval is 661. Before distribution, the survey forms were applied to 30 employees working in businesses operating in the field of electrical and electronics in Kahramanmaraş. The data obtained from the pilot test showed that there was no problem. Ethical permission for the study was obtained with the decision of İstiklal University ethics committee dated 22.01.2024 and numbered 2024/02-01. After this stage, the survey forms were turned into printouts and data collection was carried out over a five-month period between March 2024 and August 2024. Random sampling method was used to distribute the survey form. In order to encourage survey participation in the businesses reached in this way, we first contacted the human resources department and requested support. After the general purpose of the study was explained to the participants, survey forms were delivered to 1,200 employees who wanted to participate voluntarily. A response rate of 64% was achieved from the invited participants, and 757 fully filled sample data were obtained among them. 72 percent of the volunteer participants were men. 66 percent were married. Their age distribution was in the range of 36-40. Working hours in the sector were concentrated in the 11-15 year range. 75 percent of them had received education at associate and undergraduate levels.

3.3. Statistical Methods

This study examines whether digital transformation has an impact on employee performance and job satisfaction. It was made to answer your questions. For this reason, an empirical test discovery study of the theoretical infrastructure was conducted (Hair et al, 2017). The research model includes more than one formative structure to be measured. The created

model was tested using partial least squares structural equation modeling (PLS-SEM). The main reason for choosing PLS-SEM is that it will work very well if the sample size is high. Additionally, PLS-SEM can be used to analyze composite-based pathway models. It can analyze the net effect of the independent variable on the output. It does not require parametric assumptions (Nitzl, 2016). Additionally, it takes into account the total variance and works on a variance-based basis (Gudergan et al., 2008). It includes a solid methodological approach that is frequently used in business research and is used to test the relationship between variables (Dash and Paul, 2021). SmartPLS v.4 software was used to examine the relationship and effect between structures.

4. ANALYSIS and RESULTS

4.1. Measurement Validation

The variables in the measurement model of the study were considered as functions of the latent variable, and the relationships between the variables were evaluated with a reflective approach since they included perceptual and affect variables (Hair et al., 2017; Duarte and Amaro, 2018). In the reliability analysis of the data collection tools, internal consistency, convergent and discriminant validity values were examined. In the reliability analysis, composite reliability (CR) and rho_A reliability as well as Cronbach alpha value were examined (Hair et al., 2017).

According to the analysis results, Digital Transformation (DT) was between .714 and .787; Job Satisfaction (JS) had factor loadings between .735 and .767, and Employee Performance (EP) had factor loadings between .816 and .836 (table 1). In the evaluation of reliability and convergent and discriminant validity, Cronbach alpha (Cα) values of Digital Transformation (DT) were 0.935; The values of Job Satisfaction (JS) 0.804 and Employee Performance (EP) 0.841 exceeded the threshold value of 0.70. In the CR evaluation, Digital Transformation (DT) was 0.936; It again exceeded the threshold value (0.70) with the values of Job Satisfaction (JS) 0.804 and Employee Performance (EP) 0.842. In terms of AVE values, the findings obtained were Digital Transformation (DT) 0.583; The values of Job Satisfaction (JS) 0.561 and Employee Performance (EP) 0.676 were above the threshold value of 0.50 (table 2).

Table 1. Factor Loadings of Variables (Outher Loodings-Matrix)

	Digital Transformation (DT)	Job Satisfaction (JS)	Employee Performance (EP)
Digital Transformation 1	0.771		
Digital Transformation 2	0.759		
Digital Transformation 3	0.787		
Digital Transformation 4	0.762		
Digital Transformation 5	0.767		
Digital Transformation 6	0.766		
Digital Transformation 7	0.765		
Digital Transformation 8	0.785		
Digital Transformation 9	0.767		
Digital Transformation 10	0.762		
Digital Transformation 11	0.714		
Digital Transformation 12	0.756		
Job Satisfaction 1		0.752	
Job Satisfaction 2		0.737	
Job Satisfaction 3		0.752	
Job Satisfaction 4		0.735	
Job Satisfaction 5		0.767	
Employee Performance 1			0.816
Employee Performance 2			0.816
Employee Performance 3			0.822
Employee Performance 4			0.836

Table 2. Reliability and convergent and discriminant validity assessment

#	Construct	Cα	CR	AVE	DT	EP	JS
1	Digital Transformation (DT)	0.935	0.936	0.583	**0,764**		
2	Employee Performance (EP)	0.841	0.842	0.676	0,462	**0,822**	
3	Job Satisfaction (JS)	0.804	0.804	0.561	0,522	0,595	**0,749**

Note: Bolded values along the diagonal are the square root of the AVE; values below the diagonal are correlations between constructs.
Abbreviations: AVE, average variance extracted; Cα, Cronbach's alpha; CR, composite reliability

According to these findings, it was concluded that the composite reliability and internal consistency of the study model were high in terms of convergent validity. Fornell-Larcker and HTMT correlation ratio were examined for construct discriminant validity. HTMT values are also below the threshold value of 0.90 (Table 3). No problems were found in the item cross-loading values.

Table 3. HTMT discriminant validity assessment

#	Construct	(DT)	(EP)	(JS)
1	Digital Transformation (DT)	-		
2	Employee Performance (EP)	0517	-	
3	Job Satisfaction (JS)	0.600	0.722	-

Hair et al., (2017) was used as a basis for evaluating the multicollinearity of the measurement model. Accordingly, the VIF value must be below 5. When the results for the VIF values of the model variables were examined, it was concluded that the values were between 1,000 and 2,390 (available from the authors). According to these values, it was concluded that there was no multicollinearity problem among the study model variables. In the model fit examination, it was found that the SRMR value was close to 0.5 and the NFI value was 0.911 (Table 4).

4.2. Structural Model and Hypothesis Testing

In the structural model analysis carried out with reference to Hair et al., (2017), bootstrapping (n = 5,000) bootstrapping technique was used (slowed at 95% confidence interval). The data obtained shows that the path coefficients in the structural model are statistically significant (p <.001) (Table 4). According to the results obtained, positive perceptions of digital transformation lead to employee performance (β=0.209) and Job Satisfaction (β=0.522). Job Satisfaction leads to employee performance (β=0.486).

Table 4. The Structural model assessment (path coefficients) / total and indirect effects

Hypotheses	β	STDEV	t	2,5%, 97,5%	p
H₁. Digital Transformation → Employee Performance	0.209	0.210	5.491	0.133, 0.282	0,000
H₂. Digital Transformation → Job Satisfaction	0.522	0.521	13.108	0.444, 0.600	0,000
H₃. Job Satisfaction → Employee Performance	0.486	0.486	12.274	0.408, 0.564	0,000
Total indirect effects	0,253	0,029	8,677		0,000
Total effects					
H₁. Digital Transformation → Employee Performance	0.462	0.039	11.886	0.386, 0.538	0,000
H₂. Digital Transformation → Job Satisfaction	0.522	0.040	13.108	0.444, 0.600	0,000
H₃. Job Satisfaction → Employee Performance	0.486	0.040	12.274	0.408, 0.564	0,000
Model Fit Values, SRMR: 0.047; d_ULS: 0.504; d_G: 0.171; Chi-square: 749.012; NFI: 0.911					

Note: β, beta values, t, t-values, **, p:0.000 in all hypotheses, 2,5%, 97,5%: Confidence intervals bias corrected

The f-square was examined to determine the effect explanations of the variables in the model. In their f-square examination, Henseler et al. (2009) is taken as reference. (0.02 is small; 0.15 is medium and 0.35 and above is large). The findings show that there is a low, high and medium level of explanation between the variables. In the examination of the R^2 explanation ratio (0.25 is weak; 0.50 is medium and 0.75 and above is strong) (>0.1), it was concluded that the R2 coefficients in the explanation percentages of the variables in the model are weak and close to the medium level. It was concluded that the t values of all variables were above the

threshold value (>1.96). As a result, it was found that the hypotheses were empirically supported (See Table 5 and Figure 2).

Table 5. Effect size evaluation and hypotheses decision

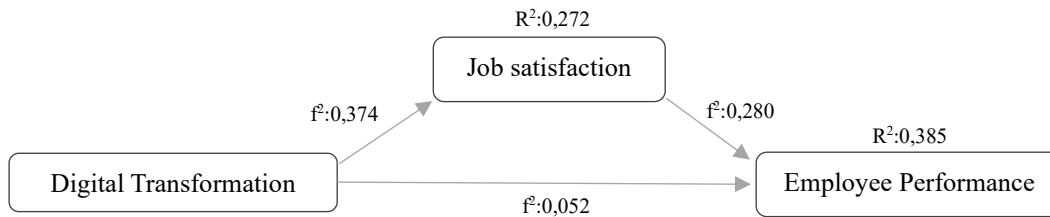| Hypotheses	f^2	t	p	Effect Size	Remarks
H$_1$. Digital Transformation → Employee Performance	0,052	2,535	0.011	Low	Supported
H$_2$. Digital Transformation → Job Satisfaction	0,374	4.670	0.000	Yüksek	Supported
H$_3$. Job Satisfaction → Employee Performance	0,280	4.575	0.000	Orta	Supported

Figure 2. The structural model
Note: all Values are significant at p< .005.

The analyzes indicate that there is an effect between variables within the 95% confidence interval. In other words, the perception of digital transformation has an impact on job satisfaction and workforce performance.

5. DISCUSSION

The purpose of this study is to examine the effects of digital transformation on job satisfaction and workforce performance. For this reason, the study was designed with an interactional model, making use of interrelated theoretical structures. The designed model test was carried out with data obtained from 757 business employees in Istanbul, Kocaeli and Yalova provinces in the Marmara region, which has the highest number of businesses in the electrical and electronics sector, where digital transformation is most intense, within the scope of the 2022 sectoral reports of the Ministry of Industry and Technology of Turkey. The findings indicate that perceptions of digital transformation affect job satisfaction and employee performance. In this context, the study contributes to the literature, albeit partially, by providing the opportunity to make inferences to the literature both theoretically and empirically.

First of all, this study supports the idea that digital transformation studies can have a positive impact on employees, which can partially contribute to human capital theory, structural adjustment theory, structuring theory and organizational effectiveness theory. It also supports the assumption that technological developments have become a compelling effect on businesses in terms of adapting to innovations, and that the importance of retaining employees who are capable of using new technologies has increased. There are also findings that digital transformation has a positive effect on job satisfaction (Avirutha, 2018; Ninaus et al., 2021; Farivar and Richardson 2021; Shoaib, 2022; Bolli and Pusterla, 2022; Mukherjee and Gopal, 2024; Aydınlı et al., 2024) provides support with empirical results.

Secondly, increasing employee performance through job satisfaction is among the results that businesses aim for. Because employee performance serves organizational goals with organizational performance results (Dekoulou and Trivellas, 2015). In this context, the study provides partial support for motivation and expectancy theories, which consider the two concepts in general. The findings of the study indicate that an increase in job satisfaction level can have a positive effect on employee performance. Along with these findings, the study also

supports the research results that job satisfaction has a positive effect on employee performance with quantitative data (Inuwa, 2016; Berliana vd., 2018; Küçükoğlu, 2018; da Cruz Carvalho, 2020; Alsafadi and Altahat, 2021; Hajiali vd., 2022; Şimşek, 2022; Akar and Bekar, 2022).

According to the empirical results obtained, it is possible to say that job satisfaction and job performance may increase if digital transformation efforts are successful. However, it should not be forgotten that job satisfaction and employee performance increase may also be affected by other variables. The results of the study are an important finding in terms of revealing that in a competitive environment where digital transformation has become mandatory, an employee-oriented approach along with technology adaptation processes may be important.

5.1. Managerial Contributions

This study emphasizes that developing employee-oriented strategies may be important for businesses to create a successful adaptation process in digital transformation processes. In this context, he argues that businesses should develop a clear strategy for their employees in order to complete digital transformation processes correctly. It reveals that digital transformation should not only be perceived as renewing technology, but also that we should act with approaches focused on improving employee talents and skills. In addition, management's determination and leadership support regarding digital transformation will contribute to success. These factors are factors that should be taken into consideration on a managerial basis.

Secondly, it can be recommended that businesses follow an employee-oriented approach in order to be successful in digital transformation. This strategic approach will contribute to businesses achieving job satisfaction and improving employee performance on the path to digital transformation. This situation can also be expressed in the literature as a positive perception of the working environment. The higher the positive perceptions, the higher the likelihood of employee satisfaction increasing. This will ultimately have a positive impact on employee performance. One of the factors that should not be forgotten at this stage is that the increase in employee performance also contributes to the increase in business performance. From this perspective, it may be recommended to carry out practices aimed at job satisfaction and employee performance at regular intervals (surveys, feedback, training and development opportunities, personnel empowerment activities, etc.).

Thirdly, digital transformation can benefit businesses in terms of ease of business processes. However, this usefulness also reveals the need for qualified personnel. For this reason, it is important for businesses to retain qualified employees with high job satisfaction and high performance, especially in terms of business sustainability.

Finally, it would be beneficial for businesses to pay special attention to studies on digital transformation, job satisfaction and employee performance. For this, they need to update their policies and strategies and properly manage the factors that can lead to increased performance, which is the main goal.

5.2. Limitations and Future Research

This research has some limitations. First of all, the study data was obtained only from employees of businesses operating in the electrical and electronics sector in the provinces of the Marmara region (Istanbul, Kocaeli and Yalova). In this field of study, the digital transformation levels of businesses were not taken into account. In future studies, it will be important for the generalizability of the data to be applied to employees from different sectors and to take into account the digital transformation levels. In addition, taking into account the

scale sizes of the businesses can also contribute to the literature. Finally, by evaluating digital transformation perception on a triple scale as the stages of preparation for transformation, transition to implementation and obtaining results, conducting studies that can reveal at what stage employees' perception may differ may also contribute to the literature.

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