

## **DIGITAL TRANSFORMATION AND INVESTIGATION OF DIGITAL HRM APPLICATIONS IN BUSINESSES**

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### **ABSTRACT**

This research, conducted on 390 factory workers working in companies operating in the service and production sectors in Sakarya, aims to evaluate the effects of digital transformation perception on business processes. The demographic characteristics of the participants, their perceptions of digital transformation and their perspectives on business processes were collected through the digital transformation scale and personal information forms. The average age of 390 employees participating in the research was  $35.80 \pm 10.74$ , and a homogeneous sample from different age groups was obtained. There is diversity in the distribution of male and female employees. The majority of participants have over 10 years of experience. Demographic characteristics of employees do not show a statistically significant difference in their perception of digital transformation, contribution to personal development, contribution to productivity in the workplace and contribution to career development. The results of the regression analysis revealed that the perception of digital transformation has a significant impact on the workflow process. This model was found to be statistically significant and showed that digital transformation makes a positive contribution to business processes. In addition, by conducting a literature review, it was emphasized that digital transformation offers significant advantages and provides cost savings in terms of personal applications in businesses. In conclusion, this study reveals the positive effects of digital transformation perception on business processes, based on a sample of factory workers in Sakarya. The findings show that businesses using digital transformation as a strategic advantage can make positive contributions to the personal development and careers of employees, beyond increasing productivity.

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**Keywords:** Digital HR, Digital Transformation, Human Resources Management, Digitalization.

### **1. INTRODUCTION**

In our study, we examine how companies utilize digital HR applications and the extent to which they have been digitized. Human resource management has become one of the areas most significantly impacted by today's digital transformation. Digital technologies have been integrated into HR applications, giving rise to numerous innovations. For instance, the use of artificial intelligence robots in employee selection and interviews has made it possible to rapidly identify candidates who align with the company's policies and expectations from among thousands, ultimately reducing cost.

Digital applications enable companies to operate more flexibly. Processes can be completed much faster with digital applications compared to manual processes. Digitalized HR applications contribute to cost reduction for businesses through paper savings and streamlined processes. Another advantage is time savings. Similarly, performing routine tasks such as payroll, leave, and reporting in digital environments saves time and money.

Online training systems support both employee development and have a positive impact on employee engagement. It has been discovered that information technology and digital HR applications have a positive effect on business success. As routine tasks in the HR department

become digitized with the impact of digitization, HR employees gain more time to focus on strategic HR, career planning, and employee engagement. This situation also positively contributes to the productivity of employees in the HR department. One of the key impacts of digitization on human resources is its allowance for flexible working.

Regardless of time and place, both employees can perform their tasks, and managers can monitor and control them through online platforms. This is a positive contribution of digitization to companies in terms of both cost savings and employee satisfaction. In conclusion, current technological developments have led to digitization and digital transformation in the business world. Human resource management and applications have been significantly affected by this digital transformation. Almost all HR applications can be conducted in digital environments with digital tools. All companies aware of this change and transformation are adapting their HR practices to this ongoing digital transformation.

In conclusion, 390 participants were sampled from factory workers willing to participate in the study. The digital transformation scale and the employee personal information form were applied, and the data were analyzed. According to the results of regression analysis conducted to determine the impact of digital transformation on the workflow process, the model was found to be statistically significant. Additionally, a literature review was conducted in our study.

## **2. CONCEPTUAL FRAMEWORK**

### **2.1. The Role of Digital In Change And Transformation**

Change is an inevitable action in the world we live in and the universe it inhabits. All living beings experience and undergo this action in various disciplines. Especially organizations, regardless of their purposes or natures, need to change, develop, and if necessary, transform in a planned or unplanned manner according to conditions and needs in order to achieve their goals (Akdoğan et al., Köse, 2013: 468).

### **2.2. Digital Transformation**

The way we do business, our models, and our rules have changed significantly for today's businesses. The digital revolution we are in is changing and reshaping life cycles. New and disruptive threats of change make change inevitable (Rogers, 2016: 13).

Many definitions of digital transformation include this idea. Tarhan (2019) defines the process as a necessity that urgently needs to be implemented with appropriate and agile methods to stay in the game and make it sustainable. When digital technology enters our lives and is used, we carry out the act of digitization. If this action affects our other business and life processes, increases productivity, and various outputs become inputs to digital processes, it can be called a transformation at this stage. Digitization and digital transformation are different concepts. While it cannot be said that the entire digitization process during and after the industrial revolution has transformed into transformation, and continued healthily and steadily, it can be said to be an "early transformation" (Yankın, 2019).

### **2.3. Digital Human Resource Management**

#### **2.3.1. Human Resource Management**

Human Resource Management (HRM) is an increasingly emphasized and effective management approach by companies that involves planning personnel efficiently. Companies

operating in national and international markets now implement HRM processes and consider establishing a human resources department as a necessity.

HRM ensures the fulfillment of job objectives since it tends to meet the needs of individuals working in organizations. It encompasses all processes from an individual's recruitment in the workplace to orientation training, salary planning, legal relations with the company, productivity, and the evaluation of employee performance (Calp, 2016; Çalışkan, 2010: 100-116; Özsöz, 2006; Fındıkçı, 2000).

HRM is an approach that involves providing the necessary human resources for competitive advantage in companies, defining, planning, directing, and monitoring strategies to create new business opportunities (Saldamlı, 2008).

In other words, HRM is the management of all activities carried out in an organization to attract, develop, motivate, and retain high-performing employees. Generally, HRM is a strategically designed approach to effectively manage individuals working in an organization (Barutçugil, 2004; Özcan, 2011).

### 2.3.2. Digital Human Resource Management

HR managers are facing a digital future with the latest technology. As the chaos and costs decrease with the technology of the information age, the digital human resources department will become an essential part of the future. Companies wishing to gain a competitive advantage must implement business strategies. If HR departments are to enter the global market and provide the services their employees need, they must gain a competitive advantage. With the increasing use of information and communication technologies in companies, digital personnel management brings benefits such as increased organizational efficiency, reduced bureaucracy, cost reduction, elimination of paper consumption, and value creation (İşler & Kılıç, 2021).

Digitized human resource management speeds up many processes associated with human resources, minimizes administrative procedures, and, perhaps more importantly, enables the use of online recruitment, e-learning, performance evaluation, online hiring, online training, and applications. It saves time in other HR applications such as payroll collection, e-commerce, talent profile creation, and online career management.

Technological changes and digitization are among the developments that shape the business world. Especially with the use of the internet and intranets, mobile applications, and active social media users, working conditions have changed, and companies have begun to adapt their business procedures and processes to changing conditions. Human resource management is one of the most important management functions that adapts to this change. "Personnel management," which involves technical and mechanical activities such as hiring, selecting and appointing, evaluating, compensating, and determining rights, is the qualification of personnel who carry out these activities in organizations. "Personnel management" aims to increase the quality of life in organizations in the early 1980s to increase workplace productivity and create a competitive advantage (Sadullah, Uyargil, Acar, & Dündar, 2015).

In summary, all of these terms that connect HRM and technology are closely related to the fundamentals of digital human resource management, although they represent the smaller pieces of the whole (Strohmeier, 2007: 20).

Determining factors influencing the formation of digital HRM can be summarized as follows (Jones, 1997: 5-6):

- Information Technology
- Process Reengineering

- High-Speed Management
- Network Organizations
- Information Workers
- Globalization
- Operational HRM
- Relational HRM
- Transformational HRM

### **2.3.3. Digital Transformation of Human Resource Functions**

The globalization of competition, as a result of economic and demographic changes, has led to the transformation of companies in high technology and service sectors, focusing employers on "human capital," which involves more knowledge, education, experience, skills, and leveraging them. In this context, the primary goal of human resource management is to ensure that employees contribute to the company's current and future goals and objectives in the most effective and efficient manner, at the right place and time. HR functions such as recruitment, training, performance evaluation, compensation, safety, health, social rights, and motivation are performed (Dessler, 2016).

It is also crucial for the organization's human resources to be adequate and effective in terms of quantity and quality, with correct and appropriate deadlines, and economically consistent for the job. The development of information and communication technologies also affects human resource functions such as recruitment, training, human rights, and performance evaluation (Şimşek, Öge, 2007).

- Digitization of Payroll and Personnel Processes
- Digital Recruitment
- Digitization of Training
- Digital Performance Management

## **3. METHODOLOGY**

### **3.1. Research Subject**

With the development of information technologies, companies nowadays have to sustain their professional lives in a highly competitive environment. Through digital transformation, companies aim to increase the efficiency of all business processes, reduce costs, and maximize customer satisfaction. This study attempts to examine the process between the perception of digital transformation by employees and their views on the company's business processes. The research focuses on investigating the expectations of employees working in various sectors in Sakarya through a sample survey. The aim of this study is to emphasize that digital transformation is not only about technology but should be evaluated comprehensively, including people and business processes.

### **3.2 Research Purpose**

Digitalization offers many advantages for companies in the field of HR. One of the first benefits is cost savings. Digitalized HR applications reduce business costs, such as paper savings.

Another advantage is time savings. Processes with digital applications can be completed much faster than manual processes, leading to efficient time management. Ultimately, digital applications enable businesses to operate more flexibly. This study aims to examine how companies use digital HR applications and to what extent they have embraced digitalization. The purpose of this study is to determine the impact of changes in the digital world on human resource management practices.

### **3.3. Importance of the Study**

In the context of digital transformation, there is a significant amount of research and investment being devoted to achieving goals that many companies frequently express today. For successful digital transformation, it is essential for all employees in the company to understand, implement, and support the digital transformation strategy. This strategy needs to be defined and implemented at the management level. Strategies developed by companies will only succeed if they are embraced at all levels of the organization. Therefore, it is crucial for the entire organization to understand and support digital transformation, including both the encouragement and backing of expert personnel during this process. In this context, the study is considered important for obtaining necessary information about both ensuring digital transformation and understanding the effects of digital transformation on business processes, particularly for manufacturing companies and business professionals.

### **3.4. Methodology of the Study**

In our study, the survey method was employed during the data collection process. Initially, qualitative research methods, specifically content analysis, were used. The research utilized a targeted sampling method. Interviews with CEOs and human resources managers, along with secondary data obtained from business news and relevant company websites, were conducted for data collection. Research was conducted under the titles of "Digital Human Resource Management," "Digital Transformation in HR," "Digital Transformation in Human Resource Management," and "Digital Business" to gather information. The interviews and messages with CEOs or HR managers meeting the criteria of "Digital Human Resource Practices" were included in the survey. Seven companies formed the sample of the research. Secondary research was conducted on the websites of these sample companies, and the gathered information was classified. Finally, an additional research was conducted using the company's name along with the titles "Digital Human Resources" and "Digital HR," and the found interviews and news were included in the survey.

The second method of our research emphasizes the development, content, and broad perspective of the work processes in Sakarya for employees from various sectors. Additionally, an attempt was made to evaluate the impact of assessments influencing the perspective of employees on the process on production. Discussing future trends in work processes in the production phase with digitization provides a different perspective. In conclusion, a sample of 390 factory workers who volunteered to participate in the study was taken. The Digital Transformation Scale and the Employee Personal Information Form were implemented, and the data were analyzed. The results of the regression analysis conducted to determine the impact of digital transformation on the workflow process showed that the model was statistically significant.

## **4. FINDINGS**

### **4.1 Identification of Participants**

During the field research conducted to determine the participants in this section of the study, Sakarya Province was selected. Consequently, personnel management in various sectors of Sakarya

province was reviewed, and human resources managers in the participant group were selected from suitable and willing candidates. Communication with individuals was established through face-to-face meetings, phone calls, sometimes through social media applications, and email.

#### 4.2 Data collection process

There were some challenges in collecting data due to time constraints or other constraints that meant we were unable to meet some HRM practitioners face-to-face. Accepted HR managers were contacted via phone calls and occasionally through social media applications and email.

Information collection form: It was prepared by the researcher to collect information about the sector's employees and consists of 6 questions related to the employees' age, gender, marital status, education, professional experience, and administrative level. Digital Transformation Scale: It was developed by Kumar (2016) to measure employees' opinions about the digital transformation process, and was modified by Yıldırım (2020). Validity and reliability analyzes were conducted. The scale was prepared in five Likert-type points and consists of 12 items and 3 sub-factors. There are no reverse questions. The sub-factors of the scale are "contribution to personal development" (statements 1, 2, 3, 5, 6, 7 and 12), "contribution to productivity at work" (statements 9, 10 and 11) and "contribution to career development (Data No. 4) and Data No. 8). The scale's reliability coefficient was set at 0.886 (Yıldırım, 2020).

#### 4.3. Research Limitations

This study has adopted a qualitative and quantitative research design, employing interviews with human resources management professionals from six companies in the fields of energy, services, information technology, automotive, and telecommunications within the province of Sakarya.

The research is confined to the following HR functions:

- Job analysis, planning, personnel selection and placement, and training functions,
- Development, performance management, and compensation management functions,
- The scope is limited to data analysis, participant perceptions, and secondary data sources.

#### 4.4. Research Hypotheses

Although digitization is a factor influencing job potential and processes, this transformation also has significant effects on employees. In our study, digital transformation scale, workflow scale, and job definition scale were utilized to measure the impact of digital transformation perception on employees. As the primary data in our study will be collected from industry professionals, it is believed that demographic characteristics will also influence these variables. Therefore, socio-demographic variables have been added to the hypotheses.

H1: The perception of digital transformation among employees in businesses operating in the sector positively affects the workflow process.

H2: The perception of digital transformation among employees in businesses operating in the sector positively affects the job definition process.

H3: Digital transformation varies based on the socio-demographic characteristics that constitute employees' perceptions.

H3.1: The levels of personal development contribution of digital transformation vary among employees based on their socio-demographic characteristics.

H3.2: The levels of contribution of digital transformation to workplace efficiency vary among employees based on their socio-demographic characteristics.

H3.3: The levels of contribution of digital transformation to career development vary among employees based on their socio-demographic characteristics.

#### 4.5. Interview Findings with HR Managers

In this section of the study, the issues arising from the bibliographic research are addressed based on the data obtained from interviews conducted during the field research, forming the content analysis. The findings in this section stem from the data collected through interviews conducted within the scope of the field research, addressing challenges identified in the literature review.

**Tablo 1.** Table of Digital Human Resources Practices of Participating Companies

TGK Otomotiv	- Video and online interviews in the recruitment process.
	- Employees can access requests or documents such as leave and e-payroll through a mobile application.
	- HR processes have been shifted to a digital platform.
	- The entire recruitment process is conducted digitally.
NEUTEC	- Utilization of the 'WhatsApp' application for continuous and fast communication with employees.
	Performance management, promotion, appointment, exit, etc. Business processes in career management are carried out entirely online,
	On the recognition and reward platform, employees can convert their points into gift certificates through the system.
	A mobile compatible digital platform, where all human resources processes can be carried out by managers, employees and HR, is being implemented. All processes are aimed to be digital.
AGDAŞ	Instead of annual performance and employee engagement analyzes and evaluations, the instant pulse of the company can be measured with mobile solutions.
	Every transaction such as recruitment, recruitment, internal posting applications, appointment permits etc. is carried out through electronic flows.
	With the "Easy HR" project, SMEs are enabled to securely manage their company employee processes, such as salary payment, payroll, leave, training, expenses, embezzlement, and personal information, from their computers, smartphones or tablets.
	Through the natural language processing (NLP) based HR Chatbot "1Bilen", employees can access HR applications in a very short time and carry out their transactions,
ALİMEKS	With Human Dashboard, a mobile-compatible human resources analytical application that includes data-based analyses, reporting and executive dashboards provides quick access to all reports and analyzes through a single system.
	Transferred the Human Resources Management of SMEs to the Digital World with the "Easy HR" project,
	Through digital processes, the focus is on areas where value can be created in line with the needs of employees and potential talents."
	Online feedback is given to employees with mobile application support,
	Orientation training is provided with mobile application support,
	While in the past, staff calculations and reporting were done by manual data entry, a

	significant amount of labor and time was wasted, but with the transfer of these processes to digital platforms, transactions are carried out in a much shorter time and with less labor, minimizing errors.
	It is an in-house mobile application where employees can easily access training and special opportunities through which they can earn rewards.
	Employees can be informed about HR processes through the Human Mobile Application. Award-winning competitions, surveys, entertaining, educational videos and contents are offered in this application.
	Human Resources processes have been moved to the digital platform, Recruitment processes are carried out completely digitally,
AKGIDA	Video and online interviews are conducted during the recruitment processes,
	'Virtual Career Fair' is held via the Skype platform.
	Blue collar job applications are made online using an application form created with a QR code or a link.
	In recruitment, pre-selection is done by artificial intelligence. In recruitment, the main goals are to digitally prioritize the candidate pool and attract the most suitable talents with technologies such as AI (artificial intelligence) and Machine Learning.

#### 4.6. Findings of the Digital Transformation Scale Research

##### 4.6.1. Confirmatory Factor Analysis (CFA)

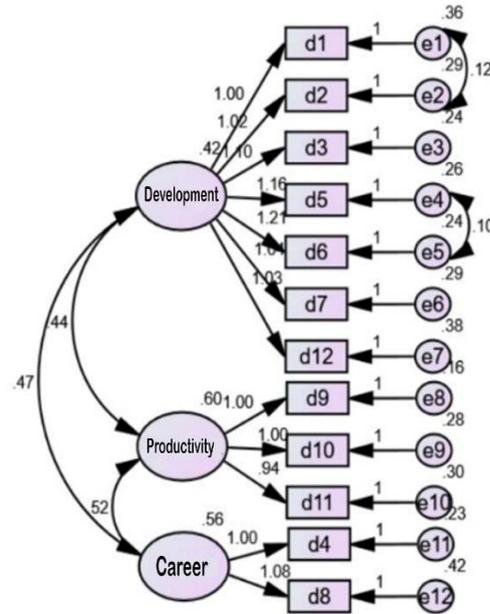
"CFA examines whether there is a sufficient level of relationship between factors previously determined by exploratory factor analysis, which variables are associated with which factors, whether the factors are independent of each other, and whether the factors are sufficient to explain the model" (Özdamar, 2004). The scale structures used were validated and proven for reliability through analyses, and subsequently tested with CFA. CFA was conducted for the scale structure, and the cutoff values for acceptance, as proposed by Akgün, Büyüköztürk, Özkahveci, and Demirel (2004), were used as the basis for the research.

**Table 2. Fit Index Values of the Digital Transformation Scale**

	Unrelated	Highly	Factorized
$\chi^2/$	8,006	4,582	<5
<b>GFI</b>	,831	,907	
<b>CFI</b>	,907	,956	>0,80
<b>NFI</b>	,896	,923	
<b>RMSEA</b>	,134	,096	<0.05

The fit index values obtained from the confirmatory factor analysis applied to the unrelated model are as follows:  $\chi^2 = 8.006$ , GFI = 0.831, CFI = 0.907, NFI = 0.896, and RMSEA = 0.134.

The indicated fit indices were determined to fall short of the acceptable threshold values. Upon examining modification indices, it was decided that considering the covariance values between the errors of the 1st item (Statement 1) and 2nd item (Statement 2) under the Personal Development Contribution dimension, as well as between the errors of the 4th item (Statement 5) and 5th item (Statement 6), is necessary. According to this outcome, it was evaluated that "item pairs are located under the same latent variable and are conceptually close to each other" (Büyüköztürk et al., 2004). The model, incorporating the covariances between errors of these items, was subsequently tested with confirmatory factor analysis (CFA).



The fit index values obtained from the confirmatory factor analysis applied to the multifactorial model depicted in the figure are as follows: GFI = 0.907,  $\chi^2 = 4.582$ , CFI = 0.956.

The fit index values obtained from the confirmatory factor analysis applied to the multifactorial model depicted in the figure are as follows: NFI = 0.923, RMSEA = 0.096. According to the research conducted by Büyüköztürk et al. (2004), the RMSEA value does not fall within the boundary range. However, in a different study by Bağlıbel, Samancıoğlu, and Bindak (2015), it has been determined that an RMSEA value between 0.08 and 0.10 could be considered as "moderate fit" and acceptable. In conclusion, when looking at the goodness-of-fit values after confirmatory factor analysis (CFA), it is observed that the observed variables for the measurement model consisting of three factors and 12 items adequately represent the latent variables.

#### 4.6.2. Internal Consistency Analysis

At this point in the study, the expressions included in the Digital Transformation Scale, which is the chosen data collection instrument, consist of a total of 12 items. A reliability analysis has been conducted based on the responses given to the scales. The criteria for evaluating the coefficient related to reliability are as follows:

- "Not reliable if  $0.00 < \alpha < 0.40$ "
- "Low reliability if  $0.40 < \alpha < 0.60$ "
- "Moderately reliable if  $0.60 < \alpha < 0.80$ "
- "Highly reliable if  $0.80 < \alpha < 1.00$ " (Özdamar, 1999, p. 513)

**Table 3. Reliability Analysis Results for Variables**

Scales	Cronbach's Alpha	Number
Digital Transformation	0,950	12
Contribution to Personal Development	0,925	7
Contribution to Productivity at Work	0,875	3
Contribution to Career Development	0,788	2

It was determined that the Digital Transformation Scale was 0.950.0. These values; It shows that the scales are “highly and highly reliable” and that there is no obstacle to their use in analysis.

#### 4.6.3. Findings Regarding Regression Analysis

Within the scope of the research, simple linear regression analysis was conducted to determine the impact of digital transformation on the process. Prior to regression analyses, assumptions of normality, linearity, and homogeneity for scale structures were examined. The Durbin-Watson statistic being around 2 indicates no autocorrelation among errors. In the conducted analysis, the Durbin-Watson statistic was found to be 1.838 and 1.866, suggesting no autocorrelation among errors (Genceli, 1973, p. 179).

**Table 4. Impact of Digital Transformation on Workflow Process**

	Standardized Coefficients		Standardized Coefficients			F	R <sub>2</sub>
	B	Std. Error	$\beta$	t	p		
<b>Constant</b>	1,962	204		9,598	0,000	70,380	0,153
<b>Digital Transformation (XIA)</b>	0,428	0,51	0,391	8,389	0,000*		

Dependent Variable: Workflow (Y)

\* p<0.01

The results of the regression analysis conducted to determine the extent to which digital transformation affects the workflow process indicate that this model is statistically significant. According to the findings, digital transformation can explain 15.3% of the variance in the workflow process ( $R^2=0.153$ ;  $F(1,389)=70.380$ ,  $p<0.001$ ). The results suggest that digital transformation significantly and positively predicts the workflow process ( $\beta=0.391$ ,  $t=8.389$ ,  $p<0.001$ ). In other words, the perceptions of employees in the study group positively influence the workflow process in the context of digital transformation. Additionally, when examining the regression equation, a one-unit increase in the level of digital transformation will result in a 0.428 increase in the level of the workflow process. The equation for the model is constructed as  $Y = \text{Constant} + \beta X$ , where X represents digital transformation. Therefore, the hypothesis "H1: There is a positive effect of digital transformations on the workflow process in businesses operating in various industrial sectors" is accepted, given that digital transformation significantly and positively predicts the workflow process.

**Table 5. The Impact of Digital Transformation on Job Definition**

	Standardized Coefficients		Standardized Coefficients			F	R <sub>2</sub>
	B	Std. Error	$\beta$	t	p		
<b>Constant</b>	2,216	0,15		14,755	0,000	40,353	0,94
<b>Digital Transformation (XIA)</b>	0,238	0,38	0,306	6350	0,000*		

Dependent Variable: Job Description (Y)

\* p<0.01

Digital transformation has been determined to statistically and significantly predict the job identification process ( $\beta=0.306$ ,  $t=6.350$ ,  $p<0.001$ ). In other words, employees comprising the study group positively influence the job identification process through digital transformation. Furthermore, upon examining the regression equation, a one-unit increase in the level of digital transformation will result in a 0.238 increase in the level of the job identification process. Given that digital transformation significantly and positively predicts the job identification process, the hypothesis "H2: Digital transformations of businesses operating in various industrial sectors have a positive impact on the job identification process" is accepted.

#### 4.6.4. Analysis Results

##### - Demographic Distribution of the Research Group:

- The average age of the employees in the research group was  $35.80 \pm 10.74$ , with 18.7% being 46 years and older, 18.4% being 25 years and younger, 18.2% being in the 36-40 age range, 17.9% in the 31-35 age range, 17.6% in the 26-30 age range, and 9.2% in the 41-45 age range.

- 55.2% of the employees were female, and 44.8% were male.

- 56.5% of the employees were married, and 43.5% were single.

- 62.7% of the employees had an associate's/bachelor's degree.

- Regarding professional experience, 41.4% had over 10 years of experience, 24.6% had 1-3 years, 12.3% had 4-5 years, 12.3% had 6-7 years, and 9.5% had 8-9 years of experience.

##### - Comparison of Group Average Scores:

- Age did not create differences in the average scores of variables.

- Gender created differences in the average scores of variables.

- Marital status did not create differences in the average scores of variables.

- Education did not create differences in the average scores of variables.

- Professional experience did not create differences in the average scores of variables.

- Managerial status created differences in some variable scores.

##### - Impact of Digital Transformation:

- Digital transformation was found to significantly and positively predict the workflow process. A one-unit increase in the level of digital transformation resulted in a 0.428 increase in the workflow process.

- Digital transformation was found to significantly and positively predict the job identification process. A one-unit increase in the level of digital transformation resulted in a 0.238 increase in the job identification process.

Hypothesis No.	Age	Gender	Marital status	Education	Professional experience	Being a Manager
H3: Digital transformation varies according to the socio-demographic characteristics of employees that form their perceptions.	X	✓	X	✓	X	✓
H31: The contribution levels of digital transformation to personal development vary according to the socio-demographic characteristics of employees.	X	X	X	X	X	✓
H32: The contribution levels of digital transformation to productivity in the workplace vary according to the socio-demographic characteristics of employees.	X	X	X	X	X	✓
H33: The contribution levels of digital transformation to career development vary according to the socio-demographic characteristics of employees.	X	X	X	X	X	✓

## CONCLUSION

Digitalization is one of the most impactful issues for companies today, particularly with Industry 4.0. It involves leveraging digital technologies in the production of goods and services. Digital technologies provide businesses with a competitive advantage, enabling time and cost savings compared to their competitors. Human Resources Management is one of the business functions most affected by digital transformation. The transition from managing human resources with a human-centric approach to managing them with a strategic approach that adds a human-centered perspective has taken place. With the advancement of technology, digitalization has become crucial in human resources management today. Among the digital technologies used in human resources management are interviews with artificial intelligence robots, chatbot usage, transfer of payroll, handling vacations, transferring personal information to digital platforms, online training, and the use of QR codes in applications. From mobile applications for all HR functions to online monitoring, performance measurement, instant feedback, and digital career plans, digitalization brings many benefits for personal applications, resulting in cost savings for businesses.

In this study, the impact of employees' perceptions of digital transformation on business processes in companies operating in the service and production sectors in Sakarya was examined. Among the 390 participants, the average age was  $35.80 \pm 10.74$ , with 18.7% aged 46 and above, 18.4% aged 25 and below, 18.2% in the 36-40 age range, 17.9% in the 31-35 age range, 17.6% in the 26-30 age range, and 9.2% in the 41-45 age range. This sample consisted of 55.2% female and 44.8% male employees, exhibiting variations in marital status and education levels. A majority of employees had over 10 years of experience. There were no differences in the group average scores for age, digital transformation, contribution to personal development, contribution to workplace efficiency, and contribution to career development. Each age group in the organization perceives that this change does not affect their development and contribution to the organization. According

to the independent sample t-test results, digital transformation, contribution to personal development, contribution to workplace efficiency, and contribution to career development differ statistically based on the managerial status. Employees who are managers have higher scores in digital transformation, contribution to personal development, contribution to workplace efficiency, and contribution to career development compared to non-managers. In other words, the managerial status of employees creates differences in group average scores for digital transformation, contribution to personal development, contribution to workplace efficiency, and contribution to career development, while it does not create differences in the perceived meaning of work, feedback, and autonomy.

According to this result, digitalization in the sector affects managers in line with the specified variables. It was determined that this change would have a positive effect on the organization and its employees. Change begins primarily with management. The presence of organizational culture without a philosophy of change is the biggest obstacle to change, either physically or mentally. Based on post-interview statements, it is understood that business leaders support industrial change. One of the biggest questions that come to mind when talking about change is undoubtedly the organization's employees. According to Hawthorne's research, the human factor plays a significant role in organizations that cannot be ignored. From this perspective, employees directly affected from the point where organizational changes are involved are considered to belong to the organization's resources. Intensive technology used in digital transformation raises concerns for employees about the future and the opportunities they may miss in the future. In contrast, in our study, it was found that there is a positive and low, moderate, and high level of relationship between the perceptions of employees contributing to personal development and the diversity of contributions to career development and feedback perceptions, while there is no statistically significant relationship between perceptions of contributing to personal development and the meaning of work and autonomy.

While digital transformation, contribution to personal development, contribution to workplace efficiency, and contribution to career development create differences in group average scores according to the demographic characteristics of employees, no differences were observed in the perceived meaning of work, feedback, and autonomy. It was found that digital transformation statistically and positively predicted job identification and workflow processes, resulting in an increase in job identification and workflow processes with a one-unit increase in the level of digital transformation. If these results are evaluated for the sector, the perception of digital transformation in the developing and progressing sector will positively affect the development of group average scores for personal development, contribution to workplace efficiency, contribution to career development, workflow process, job enjoyment, dedication to work, job identification process, and skill diversity. The positive development of group average scores in the job identification process and skill diversity will increase the performance of employees in their jobs. Sector leader process recommendations that can be made in the sector can be summarized as follows:

- The study shows that job characteristics affect the workflow of employees in the sector. In this context, managers must contribute to the specialized state of working conditions for the employee. This way, employees can experience more workflow. Thus, it is supported to improve the quality of general and professional activities.
- Another implication of the study is which stream of study it contributes to. It is estimated that it should be included in the research and that these studies should be based on the impact rate of experience.
- As a result of the research, it was found that the amount of emotional work increased as the level of emotional and independence. This section requires financial and moral measures to be taken to realize one's profession.

- Researchers can review the relevant dimensions from the perspective of industry managers regarding Qualitative Research Methods.
- In the relationship between workflow job characteristics, the mediating relationship between different variables should be examined.
- In working emotional relationships, the relationship between different variables can be examined.
- The effect of job characteristics-emotional labor relationship on health status can be investigated according to gender.
- Workflow-emotional labor relationships, arguments, burnout and job satisfaction can be examined in a model that accepts one variable.

In order to increase individual performance in the sector, visual content that will help employees in their work can be transferred to employees during work.

As a result, while the application of digital transformation to business processes is very popular around the world, some companies are lagging behind in a wait-and-see strategy. This carries the risk for these companies of losing a viable competitive advantage to rivals. It is assumed that it is important for researchers to work in this field in order to undertake an exemplary study that will address the difficulties of implementing the digital transformation process of the sector. When evaluating the results of the study, it was important that the fourth industrial revolution was a step forward for the textile industry and organizations in this regard. It was noted that the interlocutors are aware of the need to adapt to the digital transformation process in order to take part in the future and compete effectively. In these qualitative studies, it is clear that the reason for the textile industry's transition from the industrial revolution to the digital transformation process is production errors, lack of quality and efficiency. In addition, despite all adaptation efforts, there are some obstacles that may be encountered and investment costs are high, the number of skilled workers is insufficient and interconnected technologies are vulnerable to cyber attacks. However, workflow is known to affect emotional labor. Workflow experiences that support deep and honest behavior rather than superficial behavior need to be strengthened. Another finding of this research is that feedback is incorporated into the workflow. Therefore, employees should be encouraged and appreciated to provide feedback on the effectiveness of the work performed. Electronic survey forms or electronic voting methods can be used as feedback providers. The study found that job characteristics affect employees' workflow. In this regard, managers should contribute to the professional working conditions of their employees. Thus, employees can have more work experience. Thus, increasing the quality of production activities is supported. When the literature was scanned, no previous study was found with the scales we discussed within the scope of the impact of digital transformation on business processes in the textile industry. When the literature was scanned, evaluations of digital transformation were mainly made from the company's perspective. Considering employee productivity variables in our study will ensure that our study is included in the literature as a qualified study. For this reason, it will serve as an example for studies to be carried out by changing the number of data and the region where the data is obtained.

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