

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry



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ABSTRACT: The purpose of this research is to investigate the impact of various influential elements and demographic characteristics on the digital employee experience, with a focus on the telecommunications sector in the Sultanate of Oman. The main objectives of the research are to assess the intensity of various elements such as digital tool usability, technology accessibility, training availability, leadership support, organisational culture, and working environment on the digital employee experience and to explore the relationship between digital employee experience and employee demographic characteristics such as gender, age, education level, work experience, digital literacy, and job tenure in the telecommunications sector in Oman. The data collection is made using an online survey with a sample size of 150 employees from top telecommunications companies in Oman using quota sampling. To accomplish the research goals, IBM SPSS Statistics was used to conduct quartile analysis and ANOVA. Based on the results, it was found that the intensity of digital tool usability on the digital employee experience is high when compared to the other elements, and all demographic characteristics except gender have an impact on digital experience. Several suggestions were made based on the information discovered from the findings.

KEYWORDS: Digital employee experience, digital tool usability, technological accessibility, training, leadership support, corporate culture, working environment.

I. INTRODUCTION

Our interactions with the world around us are modified by the widespread use of digital technology in daily life, particularly in the workplace (Caruso, 2018). The nature of work has changed as a result of the proliferation of online resources for gaining access to knowledge and information (Sima et al., 2020). This facilitates a positive work environment by lowering entry barriers, providing opportunities for professional and personal development, and increasing operational efficiency in the digital realm. The COVID-19 pandemic has also influenced changes in the nature of work, with an increasing emphasis on automation (Siderska, 2021). Thus, digital technology use has expanded people's work and changed living habits, and so more companies offer work-from-home policies. This rapid technological innovation has altered the online and digital experience. Worker expectations for digital interactions are rising as they compare their interactions to their greatest online user experiences. Thus, "digital employee experience," or "DEX," describes an employee's time at their digital workplace (Daud et al., 2021). It also describes the way employees utilise various software programmes, databases, and other digital assets in the enterprise, including video conferencing tools, workflow management and human resources software. Organizations may improve workplaces and productivity by investing in employees' digital experiences.

DEX is a critical factor in creating a positive work environment and driving business outcomes (Deloitte Insights, 2019). The digital employee experience (DEX), one of the results of widespread digital transformation in the workplace, totally changed the way companies are run by shifting focus from managers' demands to workers' needs and work experiences (Moganadas & Goh, 2022). Understanding employee needs, preferences, and behaviours and implementing digital solutions to fit them helps increase DEX (Deloitte Insights, 2019). A positive DEX may encourage, engage, and increase productivity by allowing workers to learn and develop skills on digital devices that boost employee engagement, productivity, and work satisfaction (Burnett & Lisk, 2019).

Factors like digital tool usability, technological accessibility, training, leadership support, corporate culture, and the working environment might impact the DEX (Gheidar & ShamiZanjani, 2021). Factors like digital tool usability, technological accessibility, training, leadership support, corporate culture, and the working environment might impact the DEX. Workers' ability to utilise digital products and services determines digital tool usability. The term "technology accessibility" refers to any piece of technology or set of tools that may be used by any user (Martínez-Caro et al., 2020). It is also important to consider the company's

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

culture and the leadership's encouragement of employees to grow professionally by taking advantage of any available opportunities to expand their digital competence (Kareem et al., 2019; Paderna et al., 2020; Porkodi & Tabash, 2022). In addition, managers should foster a team spirit among their staff by encouraging them to work together and exchange ideas while using technological tools (Gheidar & ShamiZanjani, 2021). Organizational culture also plays a role in employee experience, which defines the set of values and beliefs that are shared within the organisation (Ravasi & Schultz, 2006). It is also important that both the workplace and its people be equipped for digital interaction, which includes both the employees' willingness to adapt to new digital processes and their familiarity with the various technological tools being introduced (Chandwani et al., 2021). Thus, for employees to perform at a higher level, a business should cater to their needs and demands in terms of technology and resources.

A. Statement of the Problem

DEX is essential for workers' job satisfaction and the company's performance (Gheidar & ShamiZanjani, 2020). Generally, a performance of an organisation may suffer for several reasons if its HR department lacks trained personnel and information regarding the DEX. Additionally, some workers may lack the proper education or training to effectively use digital technologies, which may not result in a favourable experience for such workers (Moganadas & Goh, 2022). However, research shows that enhancing the DEX may improve productivity, employee engagement, and customer satisfaction (Porkodi & Ghosal, 2015; Fang et al., 2018). An organisation cannot use digital technology to improve employee experience and performance without a complete grasp of DEX, its influence on organisational performance, and its association with employee demographics. Thus, the digital transition requires considerable effort and careful preparation, highlighting the need for additional research on this subject.

With the deployment of 5G networks and IoT devices, Oman's telecommunications sector has transformed digitally as like any other sector. This transformation has led to changes in the way employees work and interact with digital technology, which may impact organisational performance. In general, the digital environment has caused many changes in the workplace, such as the use of digital technologies to improve the experience of employees and the performance of the organisation as a whole. The telecommunications industry in Oman is not an exception, and it has been facing various challenges in providing its employees with a positive DEX due to factors such as limited access to digital tools and inadequate training (Al-Lamki et al., 2019).

Accordingly, this research study aims to investigate the effect of DEX on organisational performance in Oman's telecommunications sector. Several researchers have shown that DEX can have a significant impact on employee engagement, productivity, and job satisfaction (Deloitte Insights, 2019; Soni et al., 2017). Further, a few studies have proven that employee opinion regarding the DEX affects corporate performance. However, there is no study on how DEX affects the organisational performance of Oman's telecommunications companies. Further, positive employee sentiment towards DEX has been linked to higher levels of job satisfaction, productivity, and retention, while negative sentiment can lead to low morale, absenteeism, and high turnover rates (PwC, 2021). Thus, understanding employee sentiment towards DEX is crucial for organisations to enhance employee engagement, satisfaction, and ultimately, organisational performance in the telecommunications sector in Oman.

Therefore, this study will contribute to addressing the gap in the literature by providing a comprehensive understanding of the current level of DEX and its relationship with employee demographic characteristics. The findings of this study can provide insights into the importance of DEX in driving business outcomes in the telecommunications sector in Oman and inform organisational strategies for improving DEX.

B. Research Objectives and Questions

The main objective of the research is to assess the effects of influential factors and demographic traits on the DEX in Oman's telecommunications industry. The two main specific objectives are: 1) to assess the intensity of various elements (digital tools usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) on the DEX; and 2) to explore the relationship between the DEX and the employee's demographic characteristics (gender, age, education level, work experience, digital literacy, and job tenure).

To achieve the above research objectives, a few research questions have been framed:

1. What is the intensity of various elements (digital tool usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) on the DEX in the telecommunications sector in Oman?
2. What is the relationship between DEX and employees' demographic characteristics in the telecommunications sector in Oman?

II. RELATED WORKS

Digitalization and modernisation have substantially affected human resources. Particularly, the digital revolution has made the DEX a crucial part of the employee experience after the pandemic (Soñta, 2021). DEX offers a digital workplace and seamless technology for corporate events to engage employees. Moreover, DEX emphasises how workers utilise their digital devices and the digital workplace, which changes the way workers, superiors, and other members of the firm interact (Stone et al., 2015). A study reported that digital technology and surroundings, digital culture and work practises, individual traits and demography are the constructs of

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

DEX (Moganadas & Goh, 2022). The expert analysis also reveals that business strategies, leadership, career, brand, personal, cultural, and technological factors as a component of DEX (Gheidar & Zanjani, 2021).

Few studies have shown that employee demographics, like age and education level, affect digitalization and DEX. Hayes (2015) and Kukanja (2013) also found that demographics affect employee turnover intentions and job motivation. In particular, new workplace technologies hinder older employees' capacity to use digital tools while executing computer-based tasks and digitalize. They struggle to communicate and collaborate using technology (Meret et al., 2018). Thus, the availability of training and the usability of digital tools for those employees have a greater impact on the positive DEX. Though young employees' communication, lifestyle, and work habits have changed due to technology, the level of accessibility to technology and digital resources influences their digital experience. According to Ingham et al. (2017), human resource (HR) practices must provide proper training and enough access to digital technology and tools for the digital workforce to cooperate with the firm digitally, which is crucial to customer experiences. Thus, employee experience is now part of most firms' employee engagement strategies (Tucker, 2020). Some companies even use an employee experience scale to assess employees' job satisfaction and interactions with management, co-workers, and customers (Yadav & Vihari, 2021).

A. DEX and Various Elements

Based on the literature analysis, multiple elements (digital tool usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) are identified that influence the employees' digital experience.

Digital Tools Usability and DEX: Usability refers to the ability of the user to comprehend and utilise the software. It helps individuals efficiently do tasks by allowing them to readily access information through phones, applications, and software, so it should be addressed properly while implementing new technology in the organization (Cayola & Macías, 2018). Easy-to-use tools let employees perform quickly and efficiently (Wilson & Daugherty, 2018; Kareem et al., 2019). The usability of digital technologies improves the employee experience by making it easier to learn and adapt to changes. It simplifies learning new technologies and completing tasks (Abdeldayem and Aldulaimi, 2020).

Technology Accessibility and DEX: All workplaces have prioritised technology or resource accessibility. Further, the digital tools, technology, and other resources used by workers should suit all their demands. Accessible technology removes obstacles and delivers a complete digital experience for diverse employee groups (Guinan et al., 2019). Employees can maximise their productivity when technology is easily accessible (Burnett & Lisk, 2019). It increases workers' usage of digital tools and technologies at work and improves their digital experiences, which benefits both the organisation and the employees (Dash et al., 2019; Dhanpat et al., 2022). Thus, successful performance and improved employee experience require sufficient employee accessibility, which is rarely evaluated in research studies.

Training Availability and DEX: Effective training may help everyone benefit from technology's broad adoption (Wiles, 2022). A professionally trained digital workforce will enhance employee engagement (Molino et al., 2020). According to statistics, baby boomers are retiring swiftly and passing over crucial responsibilities in enterprises to millennials and Generation Z, who have already been established digitally (Pires, 2017). Due to the digital transition, millennials and Generation Z just need more training and better circumstances to improve collaboration (Gheidar & ShamiZanjani, 2020). Chandwani et al. (2021) also claimed that employee development initiatives that involve basic technological skills help firms sustain their business strategies and profitability.

Leadership Support and DEX: Leadership is vital for productivity in all businesses. In many situations, companies that used to dominate marketplaces are facing loss due to a lack of understanding and support from the effective leadership (Gheidar & ShamiZanjani, 2020; Paderna et al., 2020). Employee engagement depends on the supervisor-employee relationship, whereas engaging leadership enhances job resources (Rahmadani et al., 2019). Good leaders understand their employees, invest time and resources in them, create positive work experiences, and improve employee satisfaction and engagement (Lee et al., 2019).

Organizational Culture and DEX: Organisational culture stresses values, ethics, objectives, and beliefs. Despite cultural differences, the company intends to develop its own culture and promote it to all workers (Ismail Al-Alawi et al., 2017). Gochhayat et al. (2017) found that organisational culture significantly affects enterprise efficiency, which also influences positive DEX. Thus, if the organisational culture promotes technology and digital experience, workers may aspire to improve their digital abilities (Martínez-Caro et al., 2020; Paderna, 2020). Thus, digital experiences drive growth, promoting a healthy organisational culture.

Work Environment and DEX: The workplace refers to the physical location where workers carry out their responsibilities involving both the physical elements and the intangible elements (rules, policies, and processes) (Gheidar & ShamiZanjani, 2021). A positive workplace enhances employee satisfaction and productivity by highlighting their skills (Moganadas & Goh, 2022; Taheri et al., 2020). Digital technology and the provision of all tools to workers improve the working environment and make the digital experience better. With the rise of digital technology, it is important to provide all technical tools in the workplace to enable people to work and develop, improving business productivity.

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

Thus, with the knowledge gained from the literature, the following hypothesis on DEX is framed:

H1: DEX is influenced by the various elements (digital tool usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) in the telecommunications sector in Oman.

B. DEX and Demographic Characteristics

An employee's digital experience is affected by demographic factors such as gender, age, education level, work experience, digital literacy, and job tenure. Gender is one of the demographic factors that can affect workers in the digital environment, as female technologists are seldom recruited and granted poor salaries and low positions. According to World Bank data, women's STEM (science, technology, engineering, and mathematics) participation is low, and they face greater obstacles to higher positions (López-Aguirre, 2019). Similarly, age plays an important factor in the digital environment. Each generation has different digital expectations, like Gen X employees (1965–1980) use digital tools but are not entirely digitalized (Froese et al., 2019), Millennials (Gen Y, 1981–1996) are more open to change and digital devices, and Gen Zers (1997) like digital interactive experiences and use digital technology more. Further, education level also plays a crucial role in business. Also, the demand for bachelors-level graduates for work rose 10% between 2007 and 2010. Employers assume that college graduates have better hard and soft skills. It is apparent that highly educated workers know how to use their abilities and expertise at work. This shows how an individual with a higher education level can better apply DEX to work needs (Clarke, 2018).

Employees with positive work experiences are valued and communicated well with the organisation, as they work hard and respond better (Morgan, 2017). It was also estimated that 72% of employees think good experiences enhance productivity, which covers 92% of the younger generation, which makes up half of the 21st century's worldwide workforce. Thus, DEX is impacted by workers' characteristics as well as direct and indirect communications with their careers (Gheidar & ShamiZanjani, 2020). Also, DEX is the outcome of employees' attitudes about digital work processes, work histories, co-workers, and organisational structures. The rising need for digital literacy makes employers more aware of the need for digital skills and their applications (Porkodi & Jahan, 2022). Digital literacy empowers employees to use new technology, improve job performance, and adapt to changes (Radovanović et al., 2020). Tenured employees are long-term employees who understand the organisational requirements better. Having endured the company's ups and downs, these workers constitute its foundation (Rahman et al., 2020). They may have solid employment and experience in their field, but they show little interest in professional advancement. They are not ready to enhance their digital skills, even when new technologies are introduced regularly. Thus, various demographic characteristics of the employees affect their DEX, based on which the following hypothesis is framed:

H2: The DEX in the telecommunications sector in Oman is influenced by employee demographic characteristics such as gender, age, education level, work experience, digital literacy, and job tenure.

III. RESEARCH METHODOLOGY

To fully grasp a research topic, this study used a mixed methodology, which combines quantitative and qualitative approaches. With the aid of qualitative and quantitative data gathered from the questionnaire, the researchers used the exploratory research method to investigate the demographic variables (control variables), the six elements (independent variables), and how they are influenced by the demographic traits of the employees. The research targeted approximately 11,200 employees working in the telecommunications sector, regardless of their gender, age, etc. Initially, the sample size has been estimated using the methods used for conducting the research. To determine the exact size of the sample, an online statistical calculator was employed (Daniel WW, 1999) which resulted in 137. However, after consultation with the experts, it has been agreed to survey with a sample of 150 respondents. As the research is aimed at employees working in the telecommunications sector, employees from Omantel, Ooredoo, Awasr, Vodafone, Renna Mobile, and FRiENDi Mobile were used in the research. The research uses quota sampling, which is a non-probability sampling that divides the participants in a population into homogenous subgroups known as quotas before sampling is done. Thus, the proportion of employees in each company was determined based on their representation in the population, as shown in Table 1. Finally, data was collected using the snowball approach that recruits or suggests more responders which helps to quickly collect data.

Table 1. Sample Size Distribution

S. No	Company	Number of Employees	Sample size proportion
1	Omantel	+5,000	67 (44.6%)
2	Ooredoo	+5,000	67 (44.6%)
3	Awasr	+300	4 (2.7%)
4	Vodafone	+500	6 (4.5%)
5	Renna Mobile	+200	3 (1.8%)
6	FRiENDi Mobile	+200	3 (1.8%)
	Total	11200	150

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

A. Framework of the Questionnaire

In this research, a structured questionnaire was used to conduct a survey and gather primary data in the form of responses. A Likert scale and open-ended questions were used to investigate the intensity level of influential elements of DEX and the relationship between DEX and demographic characteristics. To be more specific, the questionnaire has a total of 34 closed-ended questions including 10 questions related to the demographic details of the respondent including gender, age, education level, work experience, digital literacy and job tenure and 4 statements for each DEX elements following 5-point Likert scale: (5) Strongly agree, (4) Agree, (3) Neutral, (2) Disagree and (1) Strongly disagree. Moreover, experts were consulted throughout the structured questionnaire development to assure quality. The questionnaire was constructed with assistance from many relevant research studies and questions were framed for DEX on demographic characteristics of employees (10 questions) (Al Ahad and Khan, 2020; Rahman et al., 2020; Froese et al., 2019) and influential elements of DEX (4 questions for each element), including digital tool usability (Kareem et al., 2019), technology accessibility (Dhanpat et al., 2022), training availability (Wiles, 2022), leadership support (Paderna et al., 2020; Wiles, 2022), organisational culture (Paderna et al., 2020), and working environment (Taheri et al., 2020).

B. Statistical Methods Used

The research applies statistical methods such as quartiles and ANOVA. In statistics, a 'quarter' is a type of quantity that divides data into four equal parts. To calculate the quartiles, it is necessary to arrange the data from smallest to largest. Here, the first quartile (Q1) is the number that falls between the lowest number and the median, second quartile (Q2) is the median of the data set, and the third quartile (Q3) is the midpoint between the median and the maximum number of data sets. The quartile method is used to analyse the interquartile range, which is the measurement of variability surrounding the median, and it helps compare the data while observing to know the lower, middle, and higher levels of intensity between the various factors. Further, ANOVA is a set of statistics and estimation procedures that are used to analyse and explain differences between groups' means.

IV. RESEARCH FINDINGS

This section presents the data analysis on DEX elements using the quartile method and the relationship between DEX and employees' demographic characteristics using ANOVA.

A. Intensity Level of Various DEX Elements

The intensity of various elements such as digital tool usability, technology accessibility, training availability, leadership support, organisational culture, and working environment on the DEX in the telecommunications sector in Oman was measured using the quartile method. The questionnaire's DEX elements, each containing four items, and respondents' Likert scale responses (strongly disagree, disagree, neutral, agree, strongly agree) were used for the analysis. Table 2 shows frequency and percentage values for low, moderate, and high levels.

Table 2. Intensity Level of Various Elements on DEX

Elements	Type	Intensity Levels		
		Low Level	Middle Level	High Level
Digital Tool Usability	Frequency	46	41	63
	Percentage	30.7	27.3	42
Technology Accessibility	Frequency	52	55	43
	Percentage	34.7	36.7	28.7
Training Availability	Frequency	38	62	50
	Percentage	25.3	41.3	33.3
Leadership Support	Frequency	38	62	50
	Percentage	25.3	41.3	33.3
Organizational Culture	Frequency	42	70	38
	Percentage	28	46.7	25.3
Work Environment	Frequency	48	60	42
	Percentage	32	40	28
Overall DEX	Frequency	38	72	40
	Percentage	25.3	48	26.7

According to the results, digital tool usability in the workplace has a higher intensity level of 42%, with 63 positive responses, compared to low and moderate levels of 30.7% and 27.3%, with 46 and 41 responses, respectively. Thus, workplace digital tool usability substantially impacts employee DEX. Also, 34.7% and 36.7% of respondents agreed with low and moderate levels of technology accessibility, and the high level of intensity was supported by 28.7% of respondents. Thus, employee DEX is moderately

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

affected by workplace technology accessibility. Furthermore, 41.3% of respondents also believed that training availability is moderately intense on DEX, and 25.3% agreed with the low-intensity level, whereas 33.3% agreed with the high-intensity level. Thus, employee DEX is slightly affected by the training availability in the organization.

Here, 46% of leadership support is moderately accepted, whereas lower and higher degrees of intensity had an acceptance rate of 28% and 26%, demonstrating that workplace leadership support has a moderate influence on employee DEX. Moreover, 46.7% of respondents also reported that their organization's culture moderates DEX, and the lower and higher levels include 28% and 25.3% of respondents, respectively. Therefore, organisational culture has an intermediate effect on employee DEX. The average intensity of the workplace environment on DEX is 40%, while 31% agreed with a middle-level intensity and 28% with a high intensity. Thus, the work environment greatly affects DEX. The low, middle, and high levels in terms of frequency and percentage for various DEX elements are depicted in Figure 1. The overall intensity level of DEX is shown in Figure 2.

The results above demonstrate that the middle-level intensity across all DEX elements is 48%, whereas 26.7% and 25.3% agreed with high and low-intensity levels, respectively. Thus, all factors examined in the research significantly affect the DEX. Thus, it is clear that DEX is influenced by the various elements (digital tools usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) in the telecommunications sector in Oman, thereby accepting hypothesis H1.

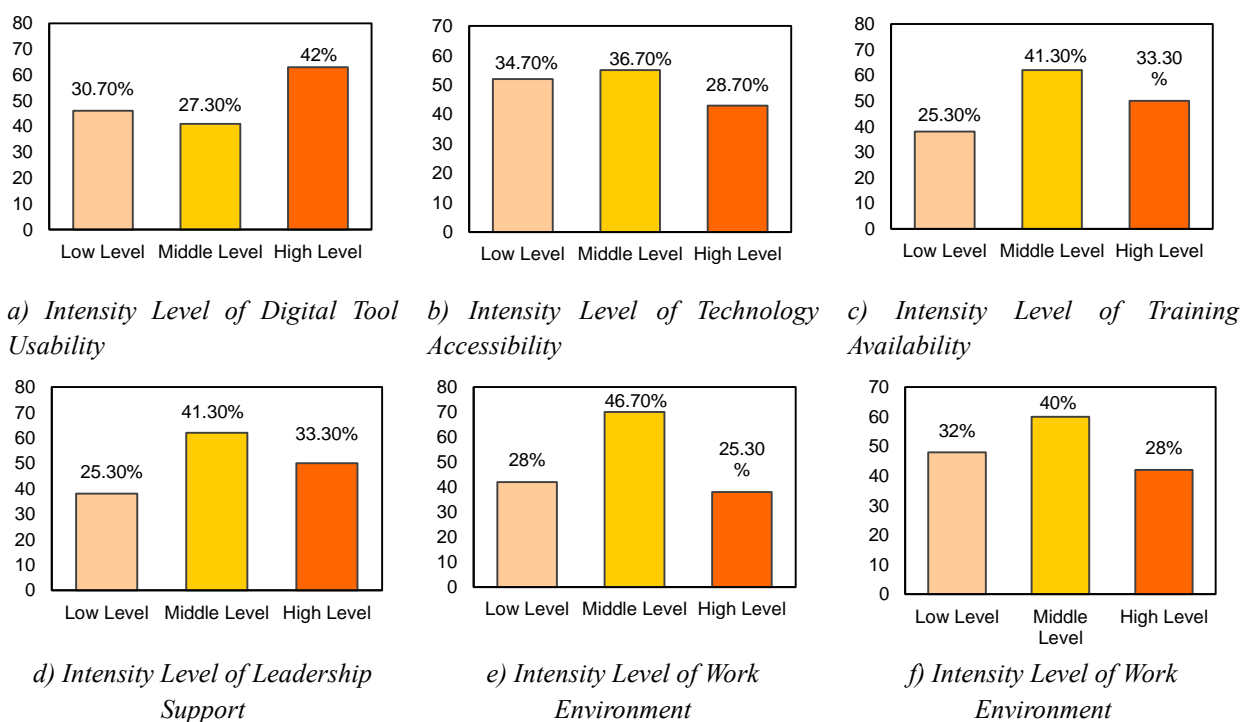


Figure 1. Intensity Levels of Various DEX's Influential Factors

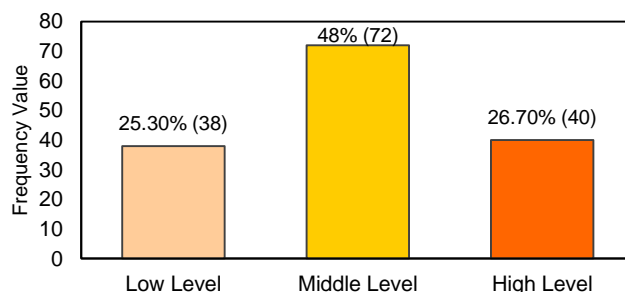


Figure 2. Overall Intensity Level of DEX

B. Relationship between DEX Vs. Employee's Demographics

To explore the relationship between DEX and employees' demographic characteristics (gender, age, education level, work experience, digital literacy, and job tenure) in the telecommunications sector in Oman, ANOVA is utilized. It should be noted that ANOVA analysis does provide accurate and more flexible data that requires less observation. Moreover, the ANOVA type that was

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

used in this study is a one-way ANOVA that determines the differences in significance between the variables (DEX and demographic characteristics). Table 3 shows the results of the ANOVA.

Table 3. ANOVA Analysis

Factors	Model	Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	708.237	2	354.118	2.183	0.116
	Within Groups	23846.057	147	162.218		
	Total	24554.293	149			
Age	Between Groups	2073.640	3	691.213	4.489	0.005
	Within Groups	22480.653	146	153.977		
	Total	24554.293	149			
Education	Between Groups	3311.772	5	662.354	4.490	<0.001
	Within Groups	21242.521	144	147.518		
	Total	24554.293	149			
Experience	Between Groups	2438.897	4	609.724	3.998	0.004
	Within Groups	22115.396	145	152.520		
	Total	24554.293	149			
Digital Literacy	Between Groups	5642.113	4	1410.528	10.815	<0.001
	Within Groups	18912.180	145	130.429		
	Total	24554.293	149			
Job Tenure	Between Groups	1530.477	3	510.159	3.235	0.024
	Within Groups	23023.816	146	157.697		
	Total	24554.293	149			

The above results of the ANOVA analysis presented in Table 3 illustrate that all of the demographic variables (gender, age, education level, work experience, digital literacy, and job tenure) are related to the DEX. As it is shown, gender is not statistically significant at 5%, as indicated by its F-ratio of 2.183 and p-value of 0.116, whereas the F-ratio for age is 4.489, with a significance of 0.005, indicating that it affects DEX. Also, education and digital literacy are statistically significant with DEX since they had F-ratios of 4.490 and 10.815, respectively, with a significant value of 0.001. Besides, the F-ratios for experience and job tenure are 3.998 at 0.004 and 3.235 at 0.024, respectively, indicating that both variables are significant with DEX.

The preceding data shows that DEX is affected by all employee demographics except gender, including gender, age, education, work experience, digital literacy, and job tenure. Thus, the ANOVA results show that demographic factors (age, education level, work experience, digital literacy, and job tenure) do affect the DEX, rejecting the null hypothesis and supporting hypothesis H2 that the DEX in the telecommunications sector in Oman is influenced by employee demographic characteristics such as age, education level, work experience, digital literacy, and job tenure except gender.

V. DISCUSSIONS

While analysing the objective that intends to assess the intensity of various elements (digital tools usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) on the DEX in the telecommunications sector in Oman, the literature showed that none of the researchers incorporated all of the identified DEX elements in a single study. However, a few researchers have identified these elements: digital tool usability (Kareem et al., 2019); technology accessibility (Dhanpat et al., 2022; Burnett and Lisk, 2019); training availability (Wiles, 2022); leadership support (Paderna et al., 2020; Wiles, 2022); organisational culture (Paderna et al., 2020); and working environment (Taheri et al., 2020) as a significant factor for employees. The primary drawbacks found in such research studies were missing empirical analysis (Moganadas & Goh, 2022; Stone et al., 2015), limited sample size (Chandwani et al., 2021), and very few experts participating in the review (Gheidar & ShamiZanjani, 2021). Moreover, these studies assessed the various identified DEX elements individually; even with the elements' significance, none of the studies analysed the intensity level of these elements on DEX.

Thus, the proposed study first uses the quartile approach to examine the intensity level of several elements (digital tools usability, technology accessibility, training availability, leadership support, organisational culture, and working environment) on the DEX in Oman's telecommunications industry. According to 42% of telecommunications respondents, DEX is strongly influenced by digital tool usability intensity, whereas all other components have a moderate intensity on DEX. Further, technology accessibility, training availability, and leadership support all moderately affect the DEX based on 36.7%, 41.3%, and 41.3% of respondents, respectively. Organizational culture and work environment have a moderate influence on DEX, with the greatest acceptance rates (46.7% and

Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

40%, respectively). Based on 48% of respondents' maximum responses, these factors on DEX imply a moderate intensity level. Thus, although digital tool usability has the greatest impact on DEX, all other DEX elements evaluated in this study have a significant impact on the DEX.

Moreover, it was found that few studies have examined the relationship between DEX and demographic characteristics (gender, age, education level, work experience, digital literacy, and job tenure) in the telecommunications sector in Oman. Demographic factors including gender, age, education level, work experience, digital literacy, and job tenure have been shown to affect employee turnover (Froese et al., 2019) and an employee's digital experience (Meret et al., 2018). Though these studies provide significant results, the results are not supported by detailed quantitative analysis, as few studies have a theoretical analysis and other studies evaluate DEX with descriptive statistics (Gheidar & ShamiZanjani, 2021).

This study found that demographic characteristics (age, education, work experience, digital literacy, and job tenure) substantially influence the DEX. Education and digital literacy are very significant DEX variables with a p -value < 0.001 . Additionally, the age component has a significant value of 0.005, suggesting a relationship between DEX and age. Experience and job tenure were influential as they exhibit significant p values of 0.004 and 0.024, respectively, which is < 0.05 . However, the gender component demonstrated non-significance with $p > 0.05$, indicating that gender does not substantially affect DEX.

A. Study Implications

The study has the following research implications: As the statistics suggest, age greatly affects an employee's digital experience, so employers should prioritise older employees to improve their digital skills. Thus, to improve their digital experience, several training programmes may be undertaken, depending on their digital abilities. Also, according to the study, education and literacy affect employees' digital experiences. Thus, the organization must provide training programmes for low-educated and digitally inexperienced staff separately to improve their skills.

Allowing workers to share their opinions can help telecommunications employees be satisfied with their usage of digital technology and generate more creative ideas. Instead of enforcing stringent limitations on employees' use of digital devices, which may lower morale and encourage tedious, repetitive work, employers should grant employees ample latitude. Employees would learn more about the platform and educate others if they could engage on virtual platforms. By having employees work on digital projects in teams, organisations may develop their digital skills and collaboration. Also, telecommunications workers should tackle difficult tasks that require digital tools. Employees will be more motivated to get things done if they feel comfortable asking questions and contributing new ideas in a friendly but demanding work environment.

B. Study Limitations

The current study has substantial limitations that must be addressed in the future. First, the research only covers the telecommunications industry, which may restrict its applicability to other sectors. Second, the research is limited to the Sultanate of Oman's telecommunications industry; thus, the findings may not apply to other nations with differing cultural, economic, or regulatory environments. Third, the study is limited to six important DEX elements, which may ignore other factors that may impact DEX findings, limiting the validity and reliability of the results. Finally, the study is new, and existing research on this topic needs to be expanded and made more extensive, thereby promoting the depth and breadth of the analysis.

VI. CONCLUSION

The digital employee experience is one of the huge transformations that many organisations are dealing with, especially in the current digital era. The purpose of this study is to determine the impact of employees' knowledge and familiarity with digital tools on their satisfaction, performance, and creativity in the context of the digital experience within the telecommunications industry in the Sultanate of Oman. Thus, this research was conducted by administering a questionnaire to telecom employees to explore different aspects of the digital experience. Results from this study have shed light on the digital challenges faced by telecoms workers, helping us to develop more effective solutions. More specifically, the intensity of various influential elements such as digital tool usability, technology accessibility, training availability, leadership support, organisational culture, and work environment on digital employee experience was assessed. The results indicate that the intensity of digital tool usability on the digital employee experience is high when compared to the other elements as expressed by the respondents. Additionally, the digital employee experience has also been affected by demographic aspects including age, education level, experience, digital literacy, and job tenure whereas gender does not.

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Assessing the Effects of Influential Factors and Demographic Traits on the Digital Employee Experience in Oman's Telecommunications Industry

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