The relationship between digital transformation and employee advocacy

"An applied study on Mansoura University employees"

Prepared by

Prof. Mohamed Galal Soliman

Professor of Human Resources Faculty of Commerce, Mansoura University dr_mgalal@mans.edu.eg

Salma Khaled Mahmoud El-Shamy

Researcher of Business Administration Faculty of Commerce, Mansoura University <u>salmakhaled123123@gmail.com</u>

Assit.Prof. Osama Mahmoud ELnokrashy

Assistant Professor of Business Administration Faculty of Commerce, Mansoura University Osama_usama@mans.edu.eg

Abstract:

This study aimed to investigate the effect of the dimensions of digital transformation named people, technology, strategy, process, customer on employee advocacy for Mansoura University employees. The instrument utilized for data collection was the questionnaire. Consequently, 357 usable questionnaires were collected from Mansoura University employees with a response rate of (89.25%). The study results suggested that digital transformation has a significant direct positive effect on employee advocacy. Furthermore, people have a significant direct positive effect on employee advocacy. Moreover, technology has a significant direct positive effect on employee advocacy. Also, strategy has a significant direct positive effect on employee advocacy. Additionally, process has a significant direct positive effect on employee effect on employee advocacy. Finally, customer has a significant direct positive effect on employee advocacy. Also, theoretical and practical implications were presented in addition to future research suggestions.

Keywords: Digital Transformation, Employee Advocacy.

الملخص

استهدفت هذه الدراسة إلى فحص تأثير أبعاد التحول الرقمي على دفاع الموظف بالتطبيق على موظفي جامعة المنصورة. واعتمدت الدراسة على قائمة استقصاء لجمع البيانات من موظفي جامعة المنصورة، وقد بلغت عدد القوائم الصحيحة (357). وتم استخدام البرنامج الإحصائي (Warp 20.70 (PLS) لاختبار فروض الدراسة. أظهرت نتائج البحث أن أبعاد التحول الرقمي (الموارد البشرية، التكنولوجيا، الاستراتيجية، العمليات، العملاء) لها تأثير إيجابي مباشر على دفاع الموظف. كما تم عرض المساهمات النظرية والعملية بالإضافة إلى مقترحات لبحوث مستقبلية.

1. Introduction

In today's competitive market, digital transformation (DT) has known as a new strategy for organisations seeking a competitive advantage. Many organisations have implemented digital transformation, with a favourable influence on organisation business performance, leading to a rise in superiority (Sundaram et al.,2020; Curraj,2018).

Digital transformation has become an essential objective for higher education institutions (HEIs) in the second decade of the twenty-first century, and it is a normal and required process for organisations that claim to be change leaders and highly competitive in their field (Benavides et al.,2020).

Several authors from the field of business defined digital transformation. Among them (Gobble,2018) defined, "Digital transformation as the significant restructuring of business operations, structures, capabilities, and models in a strategic and prioritised way to maximise opportunities and changes brought about by a technological mix and to hasten its influence on society." In order to achieve digital transformation, businesses must address two key issues: the utilisation of technologies in the value chain and changes affecting their people, culture, and knowledge.

Using and integrating new digital technology is one of the biggest problems that facing businesses today such as a massive transformation in their work design and leadership (Schwarzmüller, et al., 2018; Hess et al., 2016). Consequently, the way they hire, select and retain employees is changing. These modifications can result in several benefits, like enhanced effectiveness, entry into new markets, and enhanced reputation or image of the brand (Ferreira et al., 2019).

Employees play important boundary-spanning responsibilities for companies by communicating relevant information about the company to outsiders (Kim & Rhee, 2011). Employees are frequently seen as reliable and dependable sources of knowledge regarding companies (Dortok, 2006; Kim & Rhee, 2011). Employees' voluntary knowledge sharing improves organisations' image in the marketplace (Kim & Rhee, 2011). Because employees interact with external audiences on social media and in person about both positive and negative aspects of the company, it is critical for organisations to foster relationships that encourage workers to be cheerful and talk favourably about their company. This boundary-spanning work includes employee advocacy, which is described as an employee's volunteer support and defence of a company (Men, 2014). Based on the above discussion, this research aims to study the relationship between digital transformation and employee advocacy for Mansoura University employees. Consequently, the researchers are seeking to answer the following question:

• what are the direct effects of digital transformation (People, Technology, Strategy, Process, Customer) on employee advocacy?

2. Literature and Hypotheses Development

The researcher illustrated each of the study variable's definitions and dimensions as follows:

2.1. Digital Transformation

According to Fitzgerald et al. (2014) digital transformation is defined as "The utilisation of latest digital technologies including analytics, social media, mobile or embedded devices to facilitate major business enhancements (like improving consumer experience, optimising process, or developing new business models)." Also, Demirkan et al. (2016) defined Digital transformation as the major and rapid transformation of a corporation's processes, capacities, and models to fully capitalise on the changes and opportunities brought about by digital technology and their impact on society.

Additionally, Verina et al. (2019) and Reis et al. (2018) conducted an analytical summary of key definitions from multiple sources and came to the conclusion that the definitions provided allow digital transformation (DT) to be divided into three distinct categories: technological, where digital transformation is centred on the use of latest digital technologies like embedded devices, analytics, mobile or social media; organisational, where digital transformation requires for the development of new business models or change organisational processes; and social, where digital transformation is affecting every aspect of human life.

Furthermore, digital transformation enables the enhancement of existing products, services, and processes as well as the adoption of new ones (Wu et al., 2021) to satisfy the market's fast-changing needs, assuring long-term development through ongoing innovation (Ulas, 2019; Kim et al., 2021).

2.1.1. Dimensions of digital transformation

The study distinguishes between five dimensions of digital transformation, which are: people, technology, strategy, process and customer (Agostino & Costantini, 2022; Ivančić et al.,2019; Rossmann, 2018).

2.1.1.1) People

Organizations use methods to acquire individuals with digital skills and encourage a culture of knowledge-sharing in the workplace to Create a digital culture and get an edge over competitors. (Ivančić et al.,2019). Hence, People refers to the existence of workers with relevant capabilities and digital skills. This dimension is sometimes referred to as "Human Capital" in digital readiness frameworks (Cisco ,2020).

2.1.1.2) Technology

Technologies play an important role in assisting firms in converting non-digital business processes to digital ones. It is not inaccurate to state that digital transformation involves the use of modern technology. (Javadi, 2022). Here, technology" refers to how the organisation uses digital technologies (such the cloud, artificial intelligence, blockchain or Internet of Things). (Agostino & Costantini, 2022).

2.1.1.3) Strategy

Plans for achieving continual growth inside an organisation are referred to as strategy development. It usually embodies an organization's short- and long-term objectives. (Javadi, 2022). Based on this research strategy seeks to assess the organization's ability for developing an ongoing digital strategy while allocating resources to initiatives aimed at digital transformation (Agostino & Costantini, 2022).

2.1.1.4) Process

Digital transformation aids in the improvement of business operations, fosters a digital mindset, strikes the perfect balance between technology and talent, and the digitization of old systems (Javadi, 2022). Processes refer to how a company does its tasks (Wade,2015); they are a series of activities that a company should perform in order to accomplish a given result (Chen,2021). Based on this research process referring to the degree to which internal procedures are digitised.

2.1.1.5) Customer

Customer behaviour, beliefs, and needs have evolved as a result of the digital economy, which has indirectly forced companies to adapt and strengthen their techniques for maintaining client loyalty. An organisation must respond to consumers' current demands and expectations while also being proactive in addressing customers' future requirements, even before they are aware of them (Chen et al.,2021). Customer refers to a company's ability to contact with a customer via digital channels of interaction before and after a service has been accomplished (Coman et al., 2019).

2.2 Employee Advocacy

Although there is little literature on employee advocacy, its current meaning is not uniform. As stated by Schweitzer and Lyons (2008), "employees' willingness to act as 'part-time marketers' of the organization to both potential customers and potential employees" is one definition of advocacy that some have applied.

Tsarenko et al. (2018) defined advocacy as positive word-of-mouth behavior among employees recommending and supporting their organizations and the products and services, they deliver to external publics such as friends, family, acquaintances, and customers (Fullerton, 2011) and prospective employees (Schweitzer & Lyons, 2008). According to other researchers, employee advocacy entails more than just positive word of mouth, it also includes defending a company when it is under attack. Therefore, the term "employee advocacy" refers to "a behavioral concept, which is the voluntary advocacy or defense of an organization, its goods, or its brands by an employee externally" (Men, 2014). Also, employee advocacy refers to the willingness of employees to communicate brand messages and the company's values on social media platforms (Latvala, 2017).

2.3. Hypotheses Formulation

The relationships between research variables were clarified as shown in the following figure (1).

Digital transformation and employee advocacy.

According to Hudson et al. (2015), social media has a tremendous impact on feelings and attachments to festival brands, and that social mediabased interactions result in desirable results such as positive word of mouth. Furthermore, Kim et al. (2020) confirmed that the perceived performance of a smart hotel is essential in generating individuals' favourable attitudes and positive word-of-mouth intentions.

In addition, Sakka and Ahammad (2020) study contributed the theoretical formulation of a new relationship between Social Media employee usage with employee wellbeing and employee advocacy. Moreover, Jacobsson & Linderoth (2021) who concluded that recently graduates do, in fact, have a potentially significant role in the digital transformation process. Their main area of participation is in changing senior colleagues' perspectives about how work could (or should) be done, which has an influence on the circumstances for digital transformation. Depend on this, Jacobsson & Linderoth (2021) said that recently graduated students, based on their skills and often favourable attitudes towards on technology,

serve as ambassadors (another concept of advocacy) for digitalization in the organizations.

Lately, Van et al. (2022) showed a positive interaction between students, faculty, and schools with digital transformation; between digital transformation and student satisfaction and word of mouth communication; between satisfaction with an expression of mouth communication and the intention to continue learning online; and between oral communication and a student's intention to continue learning online.

Based on the previous discussion and empirical studies, this study assumes the following hypothesis:

H1: Digital transformation has a significant positive effect on employee advocacy.

This hypothesis is divided into the following sub-hypotheses:

H1a: People have a significant direct positive effect on employee advocacy.

H1b: Technology has a significant direct positive effect on employee advocacy.

H1c: Strategy has a significant direct positive effect on employee advocacy.

H1d: Process has a significant direct positive effect on employee advocacy.

H1e: Customer has a significant direct positive effect on employee advocacy.

Depending on the previous hypothesis, the study developed the conceptual framework that presents in the following figure (1)

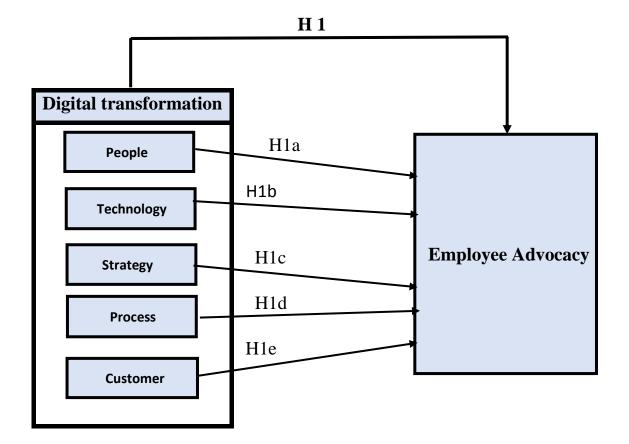


Figure 1. Theoretical framework and hypotheses

3. Research Method

This part attempts to summarise the research method and sampling concerns connected to the population and sample of this study as follows; moreover, it includes a description of measures as follows:

3.1. Samples and Data Collection

This study adopted deductive approaches using a quantitative research method to validate the suggested framework. A convenience sample was employed. Moreover, Primary and secondary data were used. Using a questionnaire, primary data were gathered from Mansoura University employees, while gathered secondary data from public administration in Mansoura University. Based on Gray (2009), A questionnaire survey is one of the best ways to collect quantitative primary data employed in business and management research, particularly explanatory ones. The population in this research is 3787 members of Mansoura University employees.

According to Saunders et al., (2009), considering a margin error equals 5% which is the percentage used in social research, a confidence level of 95%, and the population size is between 2000 and 5000, then, the required sample size ranges from 322 to 357. In general, the questionnaire was sent

to 400 employees, but only 357 of them completed it. Finally, the researcher received 357 questionnaires, with an 89.25% response rate. There were 357 questionnaires in all that were statistically valid and had no missing data.

3.2. Measures

The researchers depended on five-point Likert scale with choices ranging from "1 = strongly disagree " to "5 = strongly agree" to measure study's constructs.

Digital transformation is classified into five dimensions which are: people, technology, strategy, process and customer.18 items are developed to measure these constructs (Ivančić et al. (2019); Rossmann (2018) and Berghaus & Back ,2016). Employee advocacy is measured by 4 items (Phillips et al., 2011).

4. Data Analysis and Results

4.1. Description of the Sample

The results indicated 58.8% (210) respondents are females, and 41.2% (147) respondents are males. This reflects the real ratios of males and females between employees in Mansoura university. According to employees age, 45.4% (162) employees are aged from 30 to less than 40 years. 36.1 % (129) employees are aged from 40 to less than 50 years. While, 10.1% (36) employees are aged less than 30 years, 8.4% (30) employees are aged 50 years or more.

In terms of the degree of career, the highest proportion is (Third degree) with 149 questionnaires and ratio of 41.7 %, then (second degree) with 121 questionnaires and ratio of 33.9%, then (First degree) with 78 questionnaires and ratio of 21.8% and finally (General manager) with 9 questionnaires and ratio of 2.5%.

Finally, according to employee's years of experience, 47.9% (171) employees have an experience ranging from 5 to less than 10 years, followed by 32.8% (117) employees have an experience of 10 years or more. 19.3% (69) employees have a job experience of less than 5 years.

4.2. Descriptive Statistics

The descriptive analysis of the research's data helps to demonstrate the relative significance of the study variables and their dimensions, which are represented by two variables: digital transformation, which has five dimensions, and employee advocacy.

| Dimensions | Measurement Item | Mean | Std. Deviation | Skewness | Kurtosis |
|--|---------------------|------|-------------------|----------|----------|
| | Q1 | 4.09 | 0.878 | 821 | .308 |
| people | Q2 | 3.95 | 0.845 | 780 | .560 |
| | Q3 | 3.73 | 0.934 | 681 | .245 |
| | people | 3.92 | .76676 | 825 | .775 |
| | Q4 | 3.80 | .957 | 760 | .508 |
| Technology | Q5 | 3.88 | .977 | 829 | .522 |
| | Q6 | 4.13 | .938 | -1.239 | 1.635 |
| | Technology | 3.93 | .85183 | -1.065 | 1.338 |
| | Q7 | 4.02 | .927 | -1.088 | 1.281 |
| | Q8 | 3.92 | .949 | 987 | 1.022 |
| Strategy | Q9 | 3.73 | .951 | 699 | .327 |
| | Q10 | 3.76 | .918 | 858 | .971 |
| | Q11 | 3.82 | .897 | 977 | 1.328 |
| | Strategy | 3.85 | .78116 | -1.219 | 2.106 |
| | Q12 | 3.73 | .933 | 878 | .992 |
| | Q13 | 3.64 | .909 | 575 | .497 |
| Process | Q14 | 3.69 | .995 | 721 | .292 |
| | Q15 | 3.66 | .989 | 621 | .073 |
| | Process | 3.68 | .84452 | 740 | .478 |
| | Q16 | 3.73 | 1.026 | 825 | .350 |
| Customer | Q17 | 3.85 | .906 | -1.011 | 1.235 |
| | Q18 | 3.77 | .875 | 730 | .309 |
| Employee advocacy | Q19 | 3.93 | .909 | -1.219 | 2.024 |
| | Q20 | 4.00 | .948 | -1.273 | 1.924 |
| | Q21 | 4.01 | .910 | -1.107 | 1.566 |
| | Q22 | 4.05 | .889 | -1.138 | 1.642 |
| The Dependant variable: Employee Advocacy | | 3.99 | .84603 | -1.292 | 2.161 |

 Table (1): Descriptive Analysis of the Study Variables and Dimensions

Table (1) shows the means of all items are greater than 3 which means tending the respondents to approval, so their answers were (Agree, Strongly agree). Consequently, there are no negative responses for all respondents about all items.

4.3. Measurement model

The measurement model assesses individual item reliability, construct reliability, discriminant validity, and convergent validity to ensure internal consistency across the study 's constructs. The Researchers used a reflecting measurement model statistics in management sciences (Hair et al., 2014). Table (2) shows that loadings of all items are greater than 0.50 (p < 0.001). Cronbach's alpha and composite reliability values were over 0.70, indicating strong internal consistency for the research constructs. The AVE is greater than 0.50 for each latent variable. These constructs have consistent levels of convergent validity.

| | Dimensions | Factor Loading and Reliability | | | Convergent | |
|------------------------|---------------------|--------------------------------|-------------------|---------------------|------------|------|
| | Dimensions | | Factor Loading | Cronbach's Alpha | AVE | CR |
| | people | P1 | 0.859 | | | .900 |
| | | P2 | 0.862 | .832 | .749 | |
| 5 | | P3 | 0.876 | | | |
| tic | | T1 | 0.879 | | | |
| na | Technology | T2 | 0.921 | .868 | .791 | .919 |
| | | Т3 | 0.868 | | | |
| sfc | strategy | S1 | 0.822 | | .708 | .924 |
| Digital transformation | | S2 | 0.869 | .896 | | |
| | | S3 | 0.878 | | | |
| | | S4 | 0.825 | | | |
| | | S5 | 0.810 | | | |
| | process customer | Pr1 | 0.868 | | .779 | .934 |
| | | Pr2 | 0.874 | .905 | | |
| | | Pr3 | 0.899 | | | |
| | | Pr4 | 0.888 | | | |
| | | C1 | 0.881 | | .828 | .935 |
| | | C2 | 0.934 | .896 | | |
| | | C3 | 0.914 | | | |

Table (2): Measurement items loadings, Reliability and Convergent Validity Assessment.

| Employee | EA1 | 0.914 | 31 | | 0.00 |
|----------|-----|----------------|------|------|------|
| advocacy | EA2 | 0.931 | | 057 | |
| | EA3 | EA3 0.926 .944 | .857 | .960 | |
| | EA4 | 0.932 | | | |

Source: prepared by the researcher according to statistical analysis.

Table (3) demonstrates that the square root of average variance recovered for each construct exceeds the variance shared with the other constructs, indicating discriminant validity (Hair et al., 2014).

| Table | (3) |
|-------|-----|
|-------|-----|

Factor Correlation Matrix with Square Root of AVE

| | р | Т | S | pr | C | EA |
|----|-------|-------|-------|-------|-------|-------|
| Р | 0.865 | | | | | |
| Т | 0.737 | 0.890 | | | | |
| S | 0.709 | 0.790 | 0.841 | | | |
| pr | 0.668 | 0.722 | 0.787 | 0.882 | | |
| С | 0.626 | 0.682 | 0.768 | 0.750 | 0.910 | |
| EA | 0.575 | 0.587 | 0.633 | 0.569 | 0.592 | 0.926 |

4.4. Hypothesis testing

Table (4) shows the final results for the study hypotheses. Effect sizes (f2) were used to calculate the amount to which the independent factors influence the dependent variable. It can be measured using effect size values (f2), which can be (0.02, 0.15, and 0.35) for weak, moderate, and strong, respectively. Path coefficients ought to be significant. It is assessed using the P-value. A P-value of less than 0.05 indicates significance (Huber et al., 2008).

Table (4)

| | Independent | Tota | | | | |
|-----|----------------|-----------|--------------|---------|--------|-----------|
| Н | variable | Variables | Path | P- | Effect | Results |
| | | | Coefficients | Value | size | |
| 111 | Digital | Employee | 0.334 | < 0.001 | 0.227 | supported |
| H1 | Transformation | advocacy | | | | |
| | people | Employee | 0.141 | 0.003 | 0.082 | accepted |
| H1a | people | advocacy | | | | |
| H1b | Technology | Employee | 0.092 | 0.039 | 0.053 | accepted |
| | reennology | advocacy | | | | |
| H1c | strategy | Employee | 0.119 | 0.011 | 0.078 | accepted |
| | Strategy | advocacy | | | | |
| H1d | process | Employee | 0.130 | 0.006 | 0.081 | accepted |
| | | advocacy | | | | |
| H1e | customer | Employee | 0.133 | 0.005 | 0.084 | accepted |
| | | advocacy | | | | |

Path Analysis

As shown in table (4), the hypothesis H1 is supported where digital Transformation (β = 0.334, P< 0.001; f^2 = 0.227), has a direct, positive, and significant, effect on employee advocacy.

The hypothesis H1a is supported as people (β = 0.141, P= 0.003; f^2 = 0.082) have a direct, positive, and significant, effect on employee advocacy.

The hypothesis H1b is supported as technology (β = 0.092, P= 0.039; f^2 = 0.053) has a direct, positive, and significant, effect on employee advocacy.

The hypothesis H1c is supported as strategy (β = 0.119, P= 0.011; f^2 = 0.078) has a direct, positive, and significant, effect on employee advocacy.

The hypothesis H1d is supported as process (β = 0.130, P= 0.006; f^2 = 0.081) has a direct, positive, and significant, effect on employee advocacy.

The hypothesis H1e is supported as customer (β = 0.133, P= 0.005; f^2 = 0.084) has a direct, positive, and significant, effect on employee advocacy.

5. Discussion and Conclusion

The study findings revealed that digital transformation has a significant direct positive impact on employee advocacy. The study results agreed with the work of Jacobsson & Linderoth (2021) who concluded that

recently graduates do, in fact, have a potentially significant role in the digital transformation process. Their main area of participation is in changing senior colleagues' perspectives about how work could (or should) be done, which has an influence on the circumstances for digital transformation. Depend on this, Jacobsson & Linderoth (2021) said that recently graduated students, based on their skills and often favourable attitudes towards on technology, serve as ambassadors (another concept of advocacy) for digitalization in the organizations.

Similarly, in line with Van et al. (2022) showed a positive interaction between students, faculty, and schools with digital transformation; between digital transformation and student satisfaction and word of mouth communication; between satisfaction with an expression of mouth communication and the intention to continue learning online; and between oral communication and a student's intention to continue learning online.

According to Hudson et al. (2015), social media has a tremendous impact on feelings and attachments to festival brands, and that social mediabased interactions result in desirable results such as positive word of mouth. Similarly, Hanaysha (2021) found that corporate social responsibility and social media marketing have a significant positive effect on consumers' word of mouth. Furthermore, Kim et al. (2020) confirmed that the perceived performance of a smart hotel is essential in generating individuals' favourable attitudes and positive word-of-mouth intentions.

The current research aimed to examine the effect of digital transformation on employee advocacy in the context of Mansoura university employees. Consequently, a model containing these two constructs was built based on the extant literature review. Additionally, the research methodology employed to test the model are also discussed. The study embraced the philosophy of positivism, the deductive approach and the method of quantitative analysis, the instrument used for data collection in the study was the questionnaire. The questionnaire was directed to university' employees where 357 usable questionnaires were collected with a response rate of (89.25%). The measurement model showed an acceptable level of validity and reliability. Further, Warp PLS was used to test the research hypotheses. Furthermore, the structural model was developed and research hypotheses were examined, the results showed that the majority of research hypotheses were accepted.

5.1. Theoretical and practical implications

The research contributes to the body of knowledge of the existing literature of digital transformation, and employee advocacy. It is the first study that investigated these study variables in the context of developing countries. Firstly, the current research the first study that investigated the direct effect of digital transformation on employee advocacy being the first study to explore this relationship type. It outlined implementing digital transformation within organizations as an effective strategy for encouraging employees to defence and share their ideas or spread favourable word of mouth about a company. Lastly, the results of this research opened a window for other researchers to conduct researches on both digital transformation and employee advocacy.

This study provides significant practical implications and guidelines for policymakers and managers at Mansoura University to get benefited from the results of this study. Stemming from the results of the study, Mansoura University could encourage employee's advocacy via implementing suitable digital transformation strategy.

- Universities have to determine general goals and clearly state the digital transformation process's direction. Therefore, Mansoura University should develop a clear policies, vision, plans, and strategies to support comprehensive digital transformation and consider digital transformation strategies as the first step and the foundation for successfully implementing digital transformation goals.
- University should communicate such policies, strategies, and visions, as well as obtain opinions from internal and external consumers and stakeholders regarding engineering of business process. Such strategies should regularly be evaluated to adapt to environmental changes.
- University needs to hire digital transformation experts to integrate their corporate strategies with digital transformation.
- University should strengthen their digital technology infrastructure in order to accelerate the digital transformation. That is to say, without these infrastructures, university will not implement the digital transformation properly. Also, it should be essential to encourage the utilise of new digital technology to foster existing business processes.
- University should also provide training programs for employees on the use of specific equipment and technologies, as well as the ability to comprehend and operate with the latest technology, get IT expertise. because the successful implementation of digital transformation processes is heavily dependent on the workforce. These practices can increase employee involvement, engage with the company, embrace creative practices, and contribute to the organization's digital transformation.

- Providing a technical support unit for all digital services and apps raised concerns, in order to reduce employees' fear of dealing with technological issues and foster correct usage, with the following available:
 - Receiving and responding to technical support inquiries.
 - It is necessary to have a performance indicator.
 - Respond to the request based on the performance indicator

5.2. Limitations and Future Research

While the present research has some beneficial theoretical and practical implications, it also has a few limitations that should be taken into account. Firstly, considering time and budget constraints, the present research used only a sample of Mansoura University employees. As a result, the study suggests that future research should rely on a larger sample size from various sectors.

Second, a questionnaire was employed in this study to provide crosssectional data and assess research hypotheses. As a result, there is no indication in the research data regarding how the research variables will alter over time. It would thus be beneficial for future research to conduct a longitudinal study to look at how implementing digital transformation affects employee advocacy over time.

Third, the research utilises a sample from Mansoura University (developing country). Thus, future researches may rely on universities in developed countries and compare the findings with the present research.

Finally, this research has explained that digital transformation has a significant influence on employee advocacy from Mansoura university employee's perspective. Future researchers have to orientate their research on such variables with another dimension and new fields of application.

References

- Rossmann, A. (2018). Digital maturity: Conceptualization and measurement model In Proceedings of the Thirty Ninth International Conference on Information Systems, San Francisco, CA, USA, 13–16.
- Agostino, D., & Costantini, C. (2022). A measurement framework for assessing the digital transformation of cultural institutions: the Italian case. *Meditari Accountancy Research*, 30(4), 1141-1168.
- Benavides, L. M. C., Tamayo Arias, J. A., Arango Serna, M. D., Branch Bedoya, J. W., & Burgos, D. (2020). Digital transformation in higher education institutions: *A systematic literature review*. Sensors, 20(11), 3291.
- Berghaus, S., & Back, A. (2016). Stages in digital business transformation: Results of an empirical maturity study.
- Chen, C. L., Lin, Y. C., Chen, W. H., Chao, C. F., & Pandia, H. (2021). Role of government to enhance digital transformation in small service business. *Sustainability*, 13(3), 1028.
- Cisco (2020), "Cisco global digital readiness index 2019", (White Paper).
- Coman, A., Grigore, A. M., & Ardelean, A. (2019). The digital tools: supporting the "inner lives" of customers/visitors in museums. In Social Computing and SocialMedia. Design, Human Behavior and Analytics: 11th International Conference, SCSM 2019, Held as Part of the 21st HCI International Conference, HCII 2019, Orlando, FL, USA, July 26-31, 2019, Proceedings, Part I 21 (pp. 182-201). Springer International Publishing.
- Curraj, E. (2018). Business digitalization of SMEs in Albania: Innovative approaches and their impact on performance.
- Demirkan, H., Spohrer, J. C., & Welser, J. J. (2016). Digital innovation and strategic transformation. *It Professional*, 18(6), 14-18.
- Dortok, A. (2006). A managerial look at the interaction between internal communication and corporate reputation. *Corporate reputation review*, 8, 322-338.
- Ferreira, J. J., Fernandes, C. I., & Ferreira, F. A. (2019). To be or not to be digital, that is the question: Firm innovation and performance. *Journal of Business research*, 101, 583-590.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., and Welch, M. 2014. "Embracing digital technology: A new strategic imperative," *MIT Sloan Management Review* (55:2), pp. 1-12.

- Fullerton, G. (2011). Creating advocates: The roles of satisfaction, trust and commitment. *Journal of Retailing and Consumer Services*, 18(1), 92-100.
- Gobble, M. M. (2018). Digital strategy and digital transformation. *Research-Technology Management*, 61(5), 66-71.
- Gray, D.E. (2009). *Doing Research in the Real World*, (2nd ed.), Sage, London.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2014), Multivariate data analysis, Prentice Hall, *Upper Saddle River*, *NJ*.
- Hess, T., Benlian, A., Matt, C., & Wiesböck, F. (2016). How german media companies defined their digital transformation strategies. MIS Quarterly Executive, 15(2), 103-119.
- Huber, F., Herrmann, A., Meyer, F., Vogel, J., & Vollhardt, K. (2008). Kausalmodellierung mit partial least squares: eine anwendungsorientierte einführung. Springer-Verlag.
- Hudson, S., Roth, M. S., Madden, T. J., & Hudson, R. (2015). The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees. *Tourism management*, 47, 68-76.
- Ivančić, L., Vukšić, V. B., & Spremić, M. (2019). Mastering the digital transformation process: Business practices and lessons learned. *Technology Innovation Management Review*, 9(2).
- Jacobsson, M., & Linderoth, H. C. (2021). Newly graduated students' role as ambassadors for digitalisation in construction firms. *Construction Management and Economics*, 39(9), 759-772.
- Javadi, Y. (2022). 7 Pillars of Digital Transformation Framework for Continuous Business Growth. *iBusiness*, 14(3), 139-149.
- Kim, J. J., Lee, M. J., & Han, H. (2020). Smart hotels and sustainable consumer behavior: Testing the effect of perceived performance, attitude, and technology readiness on word-of-mouth. *International Journal of Environmental Research and Public Health*, 17(20), 7455.
- Kim, J. N., & Rhee, Y. (2011). Strategic thinking about employee communication behavior (ECB) in public relations: Testing the models of megaphoning and scouting effects in Korea. *Journal of public relations research*, 23(3), 243-268.

- Kim, S., Choi, B., & Lew, Y. K. (2021). Where is the age of digitalization heading? The meaning, characteristics, and implications of contemporary digital transformation. *Sustainability*, 13(16), 8909.
- Latvala, T. (2017). Employee Advocacy on social media: The role of management in enhancing employee advocacy.
- Men, L. R. (2014). Why leadership matters to internal communication: Linking transformational leadership, symmetrical communication, and employee outcomes. Journal of Public Relations Research, 26(3), 256-279.
- Men, L. R. (2014). Why leadership matters to internal communication: Linking transformational leadership, symmetrical communication, and employee outcomes. *Journal of Public Relations Research*, 26(3), 256-279.
- Phillips, J., Noble, S.M. and Noble, C.H. (2011), "Managing rewards to enhance relational worth", *Journal of the Academy of Marketing Science*, Vol. 39 No. 3, pp. 341-362.
- Reis, J.; Amorim, M.; Melão, N.; Matos, P. Digital transformation: A literature review and guidelines for future research. *In Trends and Advances in Information Systems and Technologies*; Rocha, Á., Adeli, H., Reis, L.P., Costanzo, S., Eds.; Springer: Cham, Switzerland; Berlin/Heidelberg, Germany, 2018; pp. 411–421.
- Sakka, G., & Ahammad, M. F. (2020). Unpacking the relationship between employee brand ambassadorship and employee social media usage through employee wellbeing in workplace: A theoretical contribution. *Journal of business research*, 119, 354-363.
- Saunders, M., Thornhill, A. & Lewis, P. (2009). Research methods for business students. London: Financial Times Prentice Hall.
- Schwarzmüller, T., Brosi, P., Duman, D., & Welpe, I.M. (2018). How Does the Digital Trans-formation Affect Organisations? Key Themes of Change in Work Design and Leadership. Management Review: Socio-Economic Studies, 29(2), 114 – 138.
- Schweitzer, L., & Lyons, S. (2008). The market within: A marketing approach to creating and developing high-value employment relationships. *Business Horizons*, 51(6), 555-565.
- Sundaram, R., Sharma, D. R., & Shakya, D. A. (2020). Digital transformation of business models: A systematic review of impact on revenue and supply chain. *International Journal of Management*, 11(5).

- Tsarenko, Y., Leo, C., & Herman, H. M. (2018). When and why do social resources influence employee advocacy? The role of personal investment and perceived recognition. *Journal of Business Research*, 82, 260-268.
- Ulas, D. (2019). Digital transformation process and SMEs. *Procedia Computer Science*, 158, 662-671.
- Van Vu, D., Tran, G. N., & Van Nguyen, C. (2022). Digital Transformation, Student Satisfaction, Word of Mouth and Online Learning Intention in Vietnam. *Emerging Science Journal*, 6, 40-54.
- Verina, N.; Titko, J. Digital transformation: Conceptual framework. In Proceedings of the International Scientific Conference Contemporary Issues in Business, Management and Economics Engineering, Vilnius, Lithuania, 9–10 May 2019; pp. 719–727.
- Wade, M. (2015). Digital business transformation: a conceptual framework. Global Center for Digital Business Transformation, 15, 1-15.
- Wu, M., Kozanoglu, D. C., Min, C., & Zhang, Y. (2021). Unravelling the capabilities that enable digital transformation: A data-driven methodology and the case of artificial intelligence. Advanced Engineering Informatics, 50, 101368.