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The Social Implications of Digital Transformation On Administrative Processes (A Case Study of District Swat)

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Abstract

The current research study was about the social implications of digital transformation on administrative processes. The study has a great significance in the current era of modernization and technological development. The issue got great attention for his efficiency and accuracy in administrative processes. The study was conducted in district Swat, Khyber Pakhtunkhwa. The study is purely quantitative in nature. The data was collected through structured questionnaire from forty seven respondents of various departments and public masses through purposive sampling. The data was analyzed through simple frequency and percentage distribution tables. The analyzed data concluded that respondents were aware about various modes of digital transformation in various administrative processes. The study further concluded that digital transformation improved efficiency, data security and improved public interest about public services. The study recommended implementation of various technologies in public offices and a comprehensive awareness of people regarding digital transformation.

Key words; Digital transformation, public administration, administrative processes, information technology

Introduction

Background of the study

In current times the concept of digital transformation is the most dominant concept among researchers, managers and consultants. Digitalization is much broader concept which is basically used to develop a new business process to create customer value through use of digital technologies (Berghaus, 2018; Gobble, 2018). Organizational survival in the current era is depending on transformation capabilities (Ashurst & Hodges, 2010; Berghaus, 2018). Digital transformation (DT) is taking place very quickly both in public and private organizations due to the disruption of market conditions with organizational needs and process reductions. Digital transformation is becoming a basic need for the survival of organizations. Recently through digital transformation new workplace technologies such as AI, Big data, Cloud etc. has emerged as the 4th industrial revolution (Pflaum &

Golzer, 2018). Due to rapid technological, industrial and societal advancement the need for digital transformation arises (Kenney et al., 2015).

The impact of digital transformation on the efficiency of public administration is one of the most important questions and one of the promising new directions of modern governance. In an era of rapid technological development and social digitalization, governments around the world face the challenge of improving the efficiency and effectiveness of public administration systems by the use of digital technologies (Sinha R. P., 2023). The integration and implementation of digital technology, also called digital transformation, has become an essential aspect of contemporary governance. Increasingly, governments are exploring how digitalization can improve public engagement, simplify services and transform administrative processes. Public administration institutions are entering a new era where technological innovation meets fundamental principles of governance as digital technologies advance (Sinha R. P., 2023).

Similarly the introduction of e-government platforms, digitalization of public services, use of data analytics for evidence-based decision-making and integration of new technologies such as artificial intelligence have created potential to enhance the governance system through better resource allocation, utilization and the fulfillment of people needs through efficient, responsive and focused service delivery (Sinha R. P., 2023).

One of the areas in which digital technologies have been leveraged is in public administration. They helped to improve the general public's access to information and enabled the rapid provision of necessary assistance. This powerful management tool increases productivity and reporting accuracy.

In the recent year the digitalization has played a vital role in the economy, especially after the advent of fourth industrial revolution in the world (Yuan et al., 2021).

Digitalization makes it possible to expand various areas like teaching, in fact the addition of new technologies in the teaching method and the usage of new communication and information means, is part of a continuous process, fast and ascending, which is deliberately but new perspectives will give birth to new players, new relationships, at this speed which is never seen in the history of humanity (Gabriel César Dias, 2021).

Digital governance is at the heart of digital infrastructure. It is not just about technology, but also the process of continuous communication with government and citizens. ICTs involve different actors in governance, including citizens, the business community, local communities and the international community. In the context of Pakistan, e-governance has been put into practice since 2002. But, for various reasons, including technical, political, economic and social, this project is still in its infancy. The named institution (Directorate of Electronic Government) was established under the control of (Ministry of Science and Technology) to modernize the socio-economic status of the country and improve information and communication technologies (ICT) (Shaikh & Shah, 2016).

Apart from the Pakistan Digital Policy 2021, there is another government initiative aimed at improving socio-economic well-being by ensuring affordable, reliable and innovative digital services. This could translate into better social services for their citizens, allowing them to easily access government services.

Statement of the problem

The concept of digital transformation refers to digitalization and the economic and social impacts of digitalization, with the term digitization referring to the conversion of analog data and processes into machine-readable form. On the other hand, the concept digital refers to the use and interaction of digital technologies and data to get about new changes. Developed physical systems, innovative business models and new processes create intelligent products and services (European Commission, 2019).

Modern social and business development is dominated by digital transformation, which brings enormous digital benefits to people and businesses around the world (World Bank Group, 2016). According to some studies, new management ideas in the digital age are attributed to digitalization (Margetts & Dunleavy, 2013) or radical administration reinforced by information and communication technologies (Heidelberger, 2009). Many jobs today involve structured, codified, routine, and predictable tasks that are efficiently performed by computers.

Digitizing organizational activities means designing and managing all internal and external processes (Casalino et al., 2010), in an combined and collective way: It is not just a question of replacing the paper document with its electronic version, but of a complete overhaul of the process to obtain increased financial and organizational efficiency and an improvement in all the operations carried out. As a result, digital transformation is transforming business models, operational processes and customer experiences (Berman, 2012), generating new tasks for individuals and organizations.

In the modern era of technological development digital transformation have a great impact on the efficiency of administrative process and social relationships. Therefore the current study highlighted various dimensions of digital transformation and its implications on administrative processes.

Objectives of the study

- To examine the social impact of digital transformation on administrative work and efficiency.
- To investigate how digital transformation in administrative processes affects the social interaction of individuals with organizations.

Research Questions

- How do digital technologies change the social dynamics of administrative work, including communication pattern and relationships of individuals with organizations?
- What are the social implications of digital transformation on administrative efficiency?

Significance of the study

The importance and significance of the study is that it is about one the emerging and renewable topic for the countries, governments and societies which is basically a transformation of governments from traditional style to electronic and efficient style of governance. The study provides general awareness about the changes made by digital transformation in public administration.

Literature Review

Digital transformation

Digital transformation is a multifaceted procedure that involves the involvement of all organizational resources: human, physical, organizational and technical to implement digital technologies through the organization, especially in operations (Kutnjak, Pihiri, & Furjan, 2019).

Some consider digital transformation to be the use of new digital technologies, with the aim of achieving higher performance and sustained competitive advantage, by changing multiple business dimensions, including the business model and customer experience, including products, digital services and processes, including judgment, creating and influencing people together, including skills, talents, organizational culture and networks, including across the organization (Ismail, Khater, & Zaki, 2017).

Impacts of Digital transformation in public administration and social relationships

In his study and analysis about the actuality of digital transformation in the Kingdom of Saudi Arabia Muhammad & Al Ghubairi (2020), concluded that, it was found that digital transformation in the Kingdom is growing at an annual rate of 5% between 2011 and 2017. The research gives various

recommendations, including intensifying and deepening of the use and integration of communication and information technologies. Design of operations and activities at all organizational levels and Policymakers should develop appropriate policies to implement digital transformation.

In the literature review, researchers believe that the survival of organizations depends on the transformational capabilities of digital technology (Ashurst & Hodges, 2010; Berghaus, 2018). Digital technology transformation (DTT) is occurring at a rapid pace in public and private organizations due to the disruption of market conditions as well as organizational needs and processes. This is becoming a fundamental market requirement for organizations to survive. According to Pflaum & Golzer (2018), Digital transformation through new technologies in the workplace has become the fourth industrial revolution in recent decades. Kenny et al. (2015) highlighted that the need for change arises from social, industrial and especially technological developments. This profound change highlights various socio-technical issues and challenges, which create obstacles to the success of a change project (Khan & Bokhari, 2018; Mahmood et al., 2019). Researchers, experts and practitioners have recognized that change is a complex process in terms of people and processes, making it a difficult task (Higgs & Rowland, 2005).

Shim and Eom (2009) identify three traditional approaches to eradicating corruption: administrative reforms such as merit-based recruitment and promotions for the ministry; A repressive approach to punish corruption through strict laws; and approaches to social change by increasing the capacity of citizens to participate in reform movements. In all these approaches, two things, citizens' access to information and the ability to monitor government initiatives which constitute a bulwark against corruption, are ensured thanks to ICT. However, cultural influence can pose a challenge to openness and the fight against corruption (Carlo Bertot et al., 2010). It is therefore argued that "ICT can be used to promote transparency in cultures that have a tradition of open government and in those that do not", but ICT interventions on transparency have more pronounced effects in countries with a tradition of openness (Carlo Bertot et al., 2010, p 268).

Research Methodology

Purpose of the Study

The study is aimed at to know about the “social implications of digital transformation on administrative processes” that is an emerging topic in the era of modernization and technological development. In the near past, the governance style has rapidly changed from traditional rigid style of governance to modern efficient style of governance due to the inventions, innovations and discoveries of modern communication tools and software. This change has created a larger impact on the overall process of the governance and social relationships therefore the current study is designed to investigate about the social implications of digital transformation on administrative processes.

Justification of the study

The study “social implications of digital transformation on administrative processes” was a pilot study aimed to test the feasibility and effectiveness of the research design for the larger quantitative study. Due to unknown population and limited resources a purposive sampling approach was adopted to select 47 respondents for the study.

Nature of the Study

This research study was quantitative in nature. .

Universe of the Study

This study was delimited to district Swat, Khyber Pakhtunkhewa, Pakistan.

Tools of Data Collection
Structured questionnaire was used as a tool for data collection.

Sampling and sample population
While a sample size of 47 may be considered small for a quantitative study, it was deemed sufficient for this pilot study. Purposive sampling was chosen to select respondents from the officials of administrative departments and common individuals.

Data analysis
After collecting the data, it was classified and tabulated with proper percentages and explanation. Major findings obtained from the analysis were compared with objectives and research questions.

Digital transformation

What is meant by digital transformation	Frequency	Percentage
E governance	5	10.63%
Electronic communication system	10	21.27%
A way to connect remote people	16	34.04%
Use of digital technologies	7	14.89%
Any other	9	19.14%
Total	**47**	**100%**

Explanation:
Table three is about the information about digital transformation from respondents. Relatively, 5(10.63%) of respondents believed it is a type of E governance system. Similarly, 10 (21.27%) respondents considered it as electronic communication system. Moreover, 16 (34.04%) of the respondents viewed it as a way to connect remote people. Although, 7 (14.89%) agreed that it is the use of digital technologies and lastly, 9 (19.14) have any other response.

Implications of digital transformation on administrative processes

Statements	Not at all	To some extent	To greater extent	Total
Efficiency in public services	02 (4.25%)	20 (42.55%)	25 (53.19%)	**47 (100%)**
Improvement of administrative system	04 (8.51%)	18 (38.29%)	25 (53.19%)	**47 (100%)**
Improved transparency in organizations	01 (2.12%)	12 (25.53%)	34 (72.37%)	**47 (100%)**
Quick service delivery for public	06 (12.7%)	20 (42.5%)	21 (44.6%)	**47 (100%)**
Prevent loss of public data	07 (14.8%)	18 (38.2%)	22 (46.8%)	**47 (100%)**
Increased public trust on administrative processes	10 (21.2%)	20 (42.5)	17 (36.1%)	**47 (100%)**

Explanation:
The statistical analysis of table number five indicated that digital transformation in administrative processes have a great impact on public institutions and service delivery. The first indicator in this context is efficiency in public services where 25 (53.19%) respondents said that after emergence of digital tools and software the documentation process is easy and fast in public offices up to greater extent while 20 (42.55%) respondents select the category up to some extent. The remaining 02 (4.25%) respondents selected category of not at all. Second indicator is improvement of administrative system where 25 (53.19%) respondents said that digital transformation improved the formerly rigid and slow administrative processes up to greater extent. Further, 18 (38.29%) respondents said that digital transformation improved the formerly rigid and slow administrative processes up to some extent while only 04 (8.51%) respondents selected the category of not at all. The third indicator is about improved transparency about which 34 (72.37%) respondents selected category of greater extent while ratio of some extent was 18 (38.29%). On other hand, only 01 (2.12%) respondent selected the category of not at all.
The fourth indicator in this context is quick service delivery where 20 (42.05%) respondents said that after emergence of digital tools the service delivery and process is easy and fast in public offices up to some extent while 20 (42.05%) respondents select the category up to some extent. The remaining 06 (12.07%) respondents selected category of not at all.
The fifth indicator is prevent loss of public data where 22 (46.08%) respondents said that after emergence of digital tools the protection of public data is enhanced up to greater extent while 18 (38.02%) respondents select the category up to some extent. The remaining 07 (14.08%) respondents selected category of not at all.

The sixth indicator in this context is increased public interest in administrative processes about which 21 (44.06%) respondents said that after emergence of digital tools the service delivery and process is easy and fast in public offices that increased public trust in administrative processes up to greater extent while 17 (36.01%) respondents select the category up to greater extent. The remaining 10 (21.02%) respondents selected category of not at all.

Conclusion and Suggestion

Conclusion

The study was conducted about the social implications of digital transformation in administrative processes. The current study was an important contribution to the existing literature. It was a kind of model for others to investigate about the impact of digital transformation in administrative processes. The study was also important academically for researcher. The current study was been carried out at district Swat, Khyber Pakhtunkhwa Pakistan. The study was quantitative in nature. The data was been collected from 47 respondents selected through purposive sampling. The data was been collected through structured questioner and was analyzed in form of tables including frequencies and percentages.

The study concluded that respondents were partially aware about the digital transformation and its multiple dimensions. In this regard, literally as well as field information concludes that digital transformation brought changes in the form of governance, public administration and social relationships within and outside the organizations. The study concluded that various administrative departments adopted various methods of digital transformation in their work environment. Further the study found that digital transformation created efficiency in documentation work, created management in documentation process and facilitated the common people through efficient and quick service delivery. The study also concluded that digital transformation ensured data privacy and security and it also ensured the management of large scale data through various computing methods and software. Similarly the study concluded that digital transformation increased public interest in the administrative processes through implementation of various modern techniques and methods in public offices. The study further depicts that digital transformation created an efficient and smooth form of administrative process instead of formerly rigid and slow administrative process.

Suggestion

- Create public awareness regarding digital transformation.
- Encourage digital transformation in overall administrative processes.
- Implementation of rules and regulation required for the digital transformation of administrative processes.

References

Ashurst, C., & Hodges, J. (2010). Exploring business transformation: The challenges of developing a benefits realization capability. Journal of Change Management, 10(2), p. 217-237.

Berghaus, S. (2018). The Fuzzy Front End of Digital Transformation: Activities and Approaches for Initiating Organizational Change Strategies. Universität St. Gallen. Retrieved from https://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/4704/$FILE/dis4704.pdf

Berghaus, S. (2018). The Fuzzy Front End of Digital Transformation: Activities and Approaches for Initiating Organizational Change Strategies. Universität St. Gallen. Retrieved from https://www1.unisg.ch/www/edis.nsf/SysLkpByIdentifier/4704/$FILE/dis4704.pdf

Berman S.J (2012); Digital transformation; Opportunities to create new business models, strategy and leadership (40)2; 16-24.

Casalino, N., Armenia, S., & Draoli, M. (2010). A System Dynamics model to identify and measure the paper digitalization advantages in Public Administration, Physica-Verlag, Springer, Heidelberg, Germany, 29-36.

Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New Public Management Is Dead—Long Live Digital-Era Governance. Journal of Public Administration Research and Theory, 16(3), 467-494. https://doi.org/10.1093/jopart/mui057

European Commission (2019a). Bridging the digital divide for a more inclusive Europe, Fact sheets:
(https://home-affairs.ec.europa.eu/pages/publication/bridging-digital-divide-more-inclusive-europe_en).

Gabriel César Dias, L. (2021). O USO DAS TECNOLOGIAS DE INFORMAÇÃO NA ESCOLA : DESAFIOS E POTENCIALIDADES NA PRÁTICA PEDAGÓGICA: O USO DAS TECNOLOGIAS DE INFORMAÇÃO NA ESCOLA: DESAFIOS E POTENCIALIDADES NA PRÁTICA PEDAGÓGICA. CPAH Science Journal of Health, 4(1), Article 1. https://doi.org/10.56238/cpahjournalv4n1-010

Gobble, M. M. (2018). Digital Strategy and Digital Transformation. Research-Technology Management, 61(5), 66-71.

Heidelberger, C. A. (2009). Citizens, Not Consumers. In ICT-Enabled Transformational Government : A Global Perspective (citizens-not-consumers).

Higgs, M., & Rowland, D. (2005). All changes great and small: Exploring approaches to change and its leadership. Journal of Change Management, 5(2), p. 121-151. IGI Global.
https://www.igiglobal.com/gateway/chapter/www.igi-global.com/gateway/chapter/35979

Ismail, M. H., Khater, M., & Zaki, M. (2017). Digital business transformation and strategy: What do we know so far. Cambridge Service Alliance, 10, 1-35.

Kenney, M., Rouvinen, P., & Zysman, J. (2015). The digital disruption and its societal impacts. Journal of Industry, Competition and Trade, 15(1), 1-4.

Khan, K.Z. (2021); can digital Pakistan become a reality? Dawn; https://www.dawn.com/news/1636817.

Kutnjak, A., Pihiri, I., & Furjan, M. T. (2019). Digital transformation case studies across industries – literature review. In 42nd International Convention on Information and Communication Technology, Electronics, and Microelectronics (MIPRO), Opatija, Croatia.

Pflaum, A. A., & Golzer, P. (2018). The IoT and Digital Transformation: Toward the Data-Driven Enterprise. IEEE Pervasive Computing (1), 87-91.

Shaikh, A. Z., & Shah, U. L. (2016). Public Service Delivery and eGovernance: The Case of Pakistan. International Journal for Infonomics, 9(2),1161-1189.

Sinha R. P., (2023). The Impact of Digital Transformation on Public Administration Efficiency; CINEFORUM ISSN: 0009-7039 Vol. 63. No. 4, 2023.

Yuan, S., Musibau, H. O., Genç, S. Y., Shaheen, R., Ameen, A., & Tan, Z. (2021). Digitalization of economy is the key factor behind fourth industrial revolution : How G7 countries are overcoming with the financing issues? Technological Forecasting and Social Change, 165, 120533. https://doi.org/10.1016/j.techfore.2020.120533