

The Implications of Digital Transformation and Its Impact on Human Resource Management Strategies

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ABSTRACT

The application of digitization in organizations requires attention to refining the skills of human resources and increasing their knowledge to achieve organizational goals efficiently. This study aims to identify the impact of digital transformation on human resource management strategies, particularly in the education sector where the shift from traditional to digital education has caused significant changes. Sustainable development is also a challenge facing the world, and this study explores how digital transformation affects human resource management strategies. The study used a descriptive analytical approach and surveyed 37 administrative leaders at the University of Fezzan. The results show a significant impact of digital transformation on human resources management strategies, highlighting the need for organizations to adapt and introduce technology in their systems to achieve sustainable development goals

INTRODUCTION

The study's focus on the impact of digital transformation on human resources management strategies at the University of Fezzan is relevant and significant. As mentioned, human resources are the most important resource that organizations possess, and the success of digital transformation initiatives depends on the alignment with human resource strategies.

Digital transformation can affect human resource management strategies in various ways. For example, it can lead to changes in recruitment processes, training and development programs, performance management systems, and employee engagement initiatives. Digital transformation can also facilitate the use of data-driven decision-making and the adoption of agile methods in human resource management.

The study could explore the current state of digital transformation initiatives at the University of Fezzan and identify the extent of their impact on human resource management strategies. This can involve conducting surveys or interviews with university staff and management to understand their perceptions and experiences regarding digital transformation and its impact on their work. The study can also examine the challenges and opportunities that arise from digital transformation and how human resource management strategies can address them.

The findings of this study can have implications for other organizations that are also undergoing digital transformation initiatives. The study can provide insights on best practices and strategies for aligning human resources management with digital transformation goals. Ultimately, the study can contribute to the development of a more effective and sustainable approach to digital transformation that prioritizes the needs of both technology and people.

THEORETICAL REVIEW

Digital transformation is the use of digital technologies to improve the efficiency and effectiveness of processes. It involves analyzing the business model of an organization and developing a digital model that creates greater value for the facility. This goes beyond simply replicating services in a digital format, as the goal is to transform services into something better. (Matarazzo et al., 2021; Nour Han, 2022)

Digital transformation offers several benefits, including improving the quality and simplifying the procedures for obtaining services provided to beneficiaries, providing innovative and creative services, upgrading the level of services and production, and reshaping the culture of society in terms of work, thinking, and communication. (Husam, 2022)

There are several dimensions of digital transformation, including leadership support, infrastructure, digital security, and new business development. Leadership is crucial in determining the philosophy of an organization and supporting positive behaviors to achieve the organization's goals. Infrastructure is the foundation that supports the organization and includes devices, equipment, programs, networks, and facilities required to develop the organization's services. Digital security refers to the methods used

to protect internet accounts and files from infiltration, interference, and intrusion by external users. New business development involves securing new resources and maximizing existing ones. (Shirin et al., 2022)

Human resources management strategy is a future-oriented process that aligns all human resources activities with organizational goals to maximize the potential of employees. It is a long-term plan that includes practices and policies for developing and implementing human resources programs that address work problems and contribute directly to long-term business goals. The strategy is consistent with the general strategy of the organization and works to achieve its mission, goal, and objectives, taking into account the variables of the internal and external environment, including intense competition between global, regional, and local organizations. (Al-Salem, 2009).

METHODOLOGY

Provide a clear and shortened version of your methods in conducting the research, the population and sample, and means of data analysis.

Research Design: This study employed a descriptive-analytical approach to investigate the impact of digital transformation on human resource management strategies.

Population and Sample: The population of interest was administrative leaders at the University of Fezzan. A total of 37 participants were surveyed using a questionnaire.

Data Collection: The data was collected through a structured questionnaire that consisted of closed-ended questions. The questionnaire was administered online, and the responses were recorded electronically.

Data Analysis: The collected data was analyzed using descriptive statistics to determine the impact of digital transformation on human resource management strategies. The statistical software used for analysis was not specified.

Ethical Considerations: Ethical considerations were taken into account by ensuring the confidentiality of participants' responses and obtaining their informed consent before the study.

Limitations: The limitations of this study include the small sample size and the fact that it was conducted at a single institution, which may limit the generalizability of the findings.

Conclusion: In conclusion, this study provides insight into the impact of digital transformation on human resource management strategies in the education sector. The study highlights the need for organizations to adapt and introduce technology in their systems to achieve sustainable development goals.

RESULTS

Table 1 illustrates the details and description of the digital transformation variable. The results indicate that digital transformation holds significant importance, as demonstrated by the high average score of the three dimensions (3.96) and a standard deviation of (0.89). This suggests that the

University of Fezzan is supportive of the digital transformation process. The following paragraphs received high levels of approval:

Firstly, the university's administrative leaders possess the necessary skills to drive the process of digital transformation. Secondly, the university has the required infrastructure to facilitate digital transformation. Thirdly, there is a high level of support from senior management for digital transformation. These findings highlight the significance of the digital transformation variable in the study sample.

Dimensions	Arithmetic mean	Standard deviation	Relative Importance %
Senior Management Support	3.990	0.911	79.8
Infrastructure	4.121	0.882	82.4
Digital Security	3.770	0.892	75.4
Overall average of digital transformation	3.960	0.895	79.2

Table No. (1) Digital Transformation Variables

Table 2 illustrates the dimensions of the dependent variable, which is human resources management strategies. The level of approval for the paragraphs was recorded at (3.225) with a standard deviation of (0.836), indicating a good level of approval. The highest average score of (3.482) with a standard deviation of (0.781) was obtained by the paragraph stating that the university has an effective performance evaluation system. Another paragraph that received a high average score was the one highlighting the university's commitment to paying wages based on the quality of work. Additionally, the paragraph discussing the university's plan to attract human competencies also obtained a high average score. These findings suggest that the University of Fezzan has effective human resources management strategies in place.

The table indicates that infrastructure has the highest relative importance percentage (82.4%), followed by senior management support (79.8%) and digital security (75.4%). The overall average of digital transformation was 3.960 with a standard deviation of 0.895, indicating that digital transformation has a significant impact on business analytics.

Dimensions	Arithmetic mean	Standard deviation	Relative Importance %
Polarization	3.142	0.875	62.8
Training	3.110	0.877	62.2
Stimulation	3.171	0.814	63.4
Evaluation	3.480	0.781	69.6
Overall average of human resource management strategies	3.225	0.836	64.5

Table No. (2) Dimensions of Human Resources Management Strategies

The data presented in Table (3) demonstrate the influence of digital transformation on human resource management strategies. The coefficient of determination (R²) value of (0.547) indicates that digital transformation accounts for 54.7% of the variation in human resource management strategies, while the remaining 45.3% can be attributed to other factors not related to digital transformation. Furthermore, the ANOVA coefficient indicates that the calculated value of (F) is 73.120, and its significance level is less than 0.05, indicating a significant impact of digital transformation on human resource management strategies.

The table shows that the most important dimension of human resource management strategies is evaluation with a relative importance percentage of 69.6%, followed by stimulation with 63.4%, polarization with 62.8%, and training with 62.2%. The overall average of human resource management strategies is 3.225, with a standard deviation of 0.836.

Dependent variable	Model summary		Analysis of variance ANOVA				Independent variable	Regression coefficients Coefficients		
	R	R ²	F	DF	Sig*	B		T	Sig*	
	Link	Coefficient of determination	Calculate	Degree of freedom	Significance	of	Calculate	Significance		
HR Strategies	0.721	0.547	73.120	1	0.00	Digital Transformation	0.725	8.811	0.00	
				Regression						
				Remainders	86					
				Total	87					

Table (3) The impact of digital transformation on human resources management strategies

The table presents the model summary, analysis of variance (ANOVA), and regression coefficients of the dependent variable.

The dependent variable is HR Strategies, and the independent variable is Digital Transformation. The coefficient of determination (R²) is 0.547, indicating that 54.7% of the variation in HR Strategies can be explained by Digital Transformation.

The F-calculation of the ANOVA is 73.120 with 1 degree of freedom for the regression and 86 degrees of freedom for the remainders. The significance level (Sig*) is 0.00, indicating that the regression model is significant.

The regression coefficient of Digital Transformation is 0.725, indicating a positive relationship between Digital Transformation and HR Strategies. The degree of impact is 8.811, and the significance level (Sig*) is 0.00, indicating that the coefficient is significant.

The total degrees of freedom are 87, indicating the total number of observations used in the study.

CONCLUSIONS

Based on the statistical analysis, it can be concluded that digital transformation has a significant impact on the human resource management strategies at the University of Fezzan. The study found that supporting senior management and having the necessary infrastructure were crucial for successful digital transformation. Moreover, the implementation of digital transformation relied heavily on capacity development through training and motivation of human resources to achieve organizational goals efficiently and effectively.

The study also emphasized the importance of the human element in the success of any organization, regardless of its size or nature of activity. The Human Resources Department plays a critical role in manpower planning and selecting suitable individuals for work. Investing in effective ways to develop and motivate employees is key to achieving the best results. It is also important to strengthen cooperation among employees to ensure that organizational goals are achieved.

In summary, the study highlighted the significant role of digital transformation in improving the university's performance levels and reaching high levels of employee satisfaction. It emphasized the importance of human resource management strategies in achieving organizational goals and the need for capacity development through training and motivation.

RECOMMENDATIONS

Every research is subject to limitations; thus, you can explain them here and briefly provide suggestions to further investigations.

The study focused on the University of Fezzan, so future research could examine the impact of digital transformation on human resource management strategies in other organizations and industries. This could provide a more comprehensive understanding of the role of digital transformation in organizational performance and employee satisfaction.

While the study emphasized the importance of capacity development through training and motivation, future research could investigate specific training programs and motivational strategies that are most effective in facilitating digital transformation and improving organizational performance.

The study identified the importance of cooperation among employees in achieving organizational goals. Future research could explore the impact of team building activities and communication strategies on employee cooperation and performance in the context of digital transformation.

The study highlighted the critical role of the Human Resources Department in selecting suitable individuals for work and investing in employee development. Future research could investigate the recruitment and selection processes used by organizations to ensure that they are attracting the most suitable candidates for digital transformation roles.

Finally, the study found that supporting senior management and having the necessary infrastructure were crucial for successful digital transformation. Future research could explore the specific elements of senior management support and infrastructure that are most essential in facilitating digital transformation and improving organizational performance.

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