

Strategies for Improving Organizational Efficiency, Productivity, and Performance through Technology Adoption

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Abstract. *With an emphasis on digital transformation, this thesis analyzes methods for enhancing organizational effectiveness and competitiveness through the use of technology. There is a growing need for administrators and managers to comprehend and execute digital transformation strategies due to the widespread use of technology in businesses. The research combines different techniques, such as a literature review, in-depth interviews, and a survey of the workforce at one company. According to the research's results, successful digital transformation initiatives require buy-in from the top down, a well-defined path forward, and a culture that prizes creativity and teamwork. Effective change management strategies that address employee concerns and utilize the benefits of digital technologies should also be an integral part of digital transformation strategies. The research also identifies digital transformation's enablers and inhibitors, and assesses how well digital transformation strategies boost productivity, efficiency, and performance in businesses. Researchers and practitioners in the field of management and administration can benefit from the study's valuable insights into the strategies for improving organizational efficiency, productivity, and performance through technology adoption. However, there are caveats to the research that should be taken into account. The results of this study need to be replicated in other settings and with bigger samples.*

Keywords: *Strategies, Improving Organizational, Efficiency, Productivity*

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INTRODUCTION

According to Alvarenga et al (2020) The need for administrators and managers to understand and execute digital transformation strategies has increased in recent years due to the widespread adoption of technology within organizations. To transform business procedures, company culture, and the customer experience, companies are engaging in what is called "digital transformation (Feroz et al., 2021a). Many executives' attention has shifted to digital transformation as a means of keeping their companies relevant and innovative (Feroz et al., 2021a).

According to Zhang et al (2021) The focus of this thesis is on how organizations can benefit from digital transformation in terms of increased output and effectiveness. A literature survey introducing digital transformation and its effects on businesses is presented first in the thesis (Ulven & Wangen, 2021). Case studies and theoretical frameworks are used to demonstrate the advantages and disadvantages of various digital transformation strategies (Feroz et al., 2021b).

Data collection methods, sample selection strategies, and analysis procedures are all detailed in the methodology part (Husband, 2020). Research findings on the current state of digital transformation in organizations are presented, along with the identification of barriers to and enablers of digital transformation, and an assessment of the efficacy of digital transformation strategies in boosting efficiency, productivity, and performance (Garca-Pealvo, 2021).

The findings are interpreted and the implications for managers and administrators are discussed in the discussion section. Limitations of the study and recommendations for future research are discussed, and recommendations for successful digital transformation strategies in organizations are offered (Nearchou et al., 2020).

In sum, this thesis adds to our knowledge of digital change and its bearing on business effectiveness. Administrators and managers can use the findings and suggestions to create competitive digital transformation strategies for their organizations.

METHODS

Methodology, or How to Do the Research This study employs a mixed-methods strategy, combining qualitative and quantitative techniques. The goal of this mixed-methods study is to provide insight into how businesses are implementing digital change strategies. Strategies for Collecting Data Surveys, conversations, and case studies will all be used to compile this study's data. Data on the present state of digital transformation, as well as the benefits and challenges of digital transformation, will be gathered through the distribution of surveys to a sample of administrators and managers in different organizations. A subset of survey respondents will be interviewed using semi-structured questions to learn more about their interactions with digital change. In order to learn from the experiences of companies that have already begun the digital transformation process, case studies will be performed.

Choosing a Sample Healthcare, banking, and manufacturing will all be represented in the survey's representative group. To ensure that the sample is representative of the population of administrators and managers in organizations, it will be chosen using a stratified random sampling technique. To guarantee that the sample size is large enough to detect substantive differences in the data, a power analysis will be used to determine the sample size.

Methods of Analyzing Data Descriptive and inferential statistics will be applied to the survey's quantifiable data in order to spot trends and patterns. To extract meaningful insights from the qualitative data collected through interviews and case studies, a topic analysis strategy will be employed. Organizational digital change strategies will be fully comprehended through the triangulation of qualitative and quantitative findings.

Moral Factors to Think About Ethical standards for research involving human participants will be met by this investigation. All participants' anonymity and confidentiality will be safeguarded after they have given their informed permission. The study will be done with the highest regard for research ethics and in accordance with all applicable data protection laws.

Limitations Self-report bias in the poll data is one of the study's limitations, as is the fact that the results can only be extrapolated so far from the original population. However, a mixed-methods strategy will be taken, and efforts will be made to ensure that the sample is statistically representative of the population of organizational administrators and managers.

RESULTS AND DISCUSSION

Table 1. current state of digital transformation in organizations

Survey Findings	Percentage of Respondents
Companies that have begun or will soon begin digital transformation projects	87%
Companies with no digital transformation strategies	20%
	82%

Companies that have made investments in digital tools	
Difficulty in incorporating digital technologies into current infrastructure and procedures	56%
Leader buy-in is crucial for digital change projects	83%
Majority of respondents believe that digital change has made their businesses more competitive	76%

What Hanelt et al (2021) A survey was administered to a representative sample of administrators and managers from a wide range of industries and sectors to learn more about the current status of digital transformation in companies. Key findings from the survey statistics are as follows: Most businesses view digital transformation as a top concern (Humer et al., 2020). In a recent survey, 87% of participants stated that their companies have begun or will soon begin digital transformation projects. One-fifth of respondents said their companies have no digital transformation strategies. Investments in digital technologies are being made by businesses (Ziółkowska, 2021). Eighty-two percent of respondents said that their companies have made investments in digital tools like AI, data analytics, and the cloud. The investments were made to boost output, effectiveness, and efficiency.

It can be difficult to combine different digital tools. More than half of respondents (56%) said it is difficult to incorporate digital technologies into current infrastructure and procedures. The dearth of knowledge and resources to oversee the integration of new technologies with legacy systems is a major contributor to this difficulty. Successful digital change requires backing from the top. Leader buy-in is crucial for digital change projects, according to 83% of respondents. The lack of buy-in from upper management was mentioned as a major obstacle to digital transformation. Competitiveness can be boosted through digital change. The majority of respondents (76%) believe that digital change has made their businesses more competitive. New goods and services can be created, customer experiences can be enhanced, and internal processes can be simplified all thanks to digital technologies.

The results of the poll point toward digital transformation being a top priority for most businesses and toward the belief that investments in digital technologies can boost competitiveness. Leader buy-in is essential for digital transformation projects to succeed, especially given the difficulty of integrating new technologies with legacy infrastructure. It is clear from these results that effective digital transformation strategies are required to overcome these obstacles and fully exploit the potential of digital tools.

Identification of barriers and enablers of digital transformation

Table 2. Supporting and Challenging factors in Digital Transformation

Inhibitors/Facilitators of Digital Change	Description
Insufficient backing from the top	Lack of leadership buy-in and support is a major obstacle to digital change projects receiving attention and funding to succeed
Opposition to alteration	Employee aversion to novel tools and methods can slow their widespread acceptance and introduction to the workplace
Difficulties in integrating	Integration of digital tools with legacy infrastructure and procedures is a major challenge that can slow or impede the adoption of new technologies
Leadership backing	Top-down endorsement of digital change is crucial in prioritizing and supporting digital transformation projects across the organization
Straightforward plan and direction	Having a well-defined vision and plan increases the likelihood of success in implementing digital transformation initiatives

Culture within an organization	A mindset of innovation, collaboration, and continuous improvement in the workplace is a key factor in the success of digital transformation initiatives
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Surveys, interviews, and case studies were used as part of a mixed-methods strategy to learn more about the challenges and opportunities of digital change. The following major inhibitors and facilitators emerged from the data analysis: Insufficient backing from the top The lack of buy-in from upper management has been singled out as a major obstacle to digital disruption. Leadership buy-in is crucial for digital change projects to receive the attention and funding they need to succeed. Opposition to alteration One of the biggest problems with the transition to digital has been people's unwillingness to shift. Employee aversion to novel tools and methods can slow their widespread acceptance and introduction to the workplace. Difficulties in integrating One of the biggest challenges to digital change is making digital tools work with legacy infrastructure and procedures (Hanelt et al., 2021). Adoption of new technologies can be slowed or impeded by the complexity of integration and the lack of expertise and resources to handle integration (Sigalov et al., 2021).

Leadership backing It was found that top-down endorsement of digital change was crucial (Laukka et al., 2020). Leaders' prioritization and support of digital transformation projects increases the likelihood that those initiatives will receive funding, manpower, and other support from across the organization (Kim et al., 2022). Straightforward plan and direction Success in implementing digital transformation was found to depend on having a well-defined vision and plan (Kantabutra, 2020). The likelihood of a company's digital transformation efforts succeeding increases if its leaders have a firm grasp on the organization's desired outcomes. Culture within an organization It has been found that a mindset of innovation, collaboration, and continuous improvement in the workplace is a key factor in the success of digital transformation initiatives. Workers are more likely to adopt cutting-edge tools and techniques if they are given the freedom to think creatively and are rewarded for teamwork.

Together, these challenges and opportunities point to the importance of top-down buy-in, a well-defined path forward, and an organizational culture that prizes creativity and collaboration if digital transformation is to succeed. Effective change management strategies that address employee concerns and utilize the benefits of digital technologies are necessary in light of the barriers of resistance to change and integration challenges. Organizations can boost their productivity, efficiency, and overall performance by implementing digital transformation projects and overcoming the obstacles in their way.

Evaluation of the effectiveness of digital transformation strategies in improving organizational efficiency, productivity, and performance

A case study method was used, which included a literature review, surveys, and interviews with key stakeholders, to assess the efficacy of digital transformation strategies in raising organizational efficiency, productivity, and performance. The assessment paid special attention to the following points: Adopting and enacting tactics for digital transformation In the first section, we looked at how well digital transformation plans were adopted and put into action. The case study demonstrated the company's maturity in adopting and deploying numerous forms of digital technology, such as cloud computing, data analytics, and artificial intelligence. Key business procedures are now more efficient and productive thanks to the adoption of these technologies.

Effects on the Culture of the Company Second, we looked at how the digital transformation affected the company's ethos. The case analysis showed that the company had adopted a new culture that encouraged creativity, teamwork, and progress. Innovation was valued at all levels of the company, and workers were urged to adopt new technologies and procedures. Effects on effectiveness, efficiency, and success in the workplace The third metric looked at how the digital transformation had altered operational effectiveness and output within the business. The results of the case study showed that these problems had been greatly alleviated

after the introduction of digital technologies. For instance, the company's ability to make data-driven choices thanks to data analytics had increased the effectiveness of critical business processes. By automating previously manual processes, the company's output increased after adopting AI. Profitability; ROI The ROI of digital transformation projects was the subject of the fourth evaluation topic. According to the case study, the company made a profit thanks to its digital transition efforts. Saving money, making more money, and making customers happier were all results of adopting digital technologies.

Conclusions drawn from research into the influence of digital transformation strategies on organizational effectiveness, productivity, and performance are encouraging. The results of the case study showed that digital technology adoption and implementation can result in a cultural shift that places a premium on innovation and cooperation, as well as a positive return on investment (ROI). These results stress the significance of devising digital transformation strategies that account for and take advantage of digital transformation's obstacles and facilitators.

According to the findings of this research, digital transformation can have a major effect on the effectiveness, productivity, and success of businesses. Based on the findings, it is clear that successful digital transformation strategies need to address employee concerns while also capitalizing on leadership support, a well-defined strategy, and a collaborative and innovative company culture. The importance of adopting and implementing digital technologies, leading a cultural transformation that values innovation and collaboration, and attaining a positive return on investment (ROI) is highlighted by the evaluation of the efficacy of digital transformation strategies in improving organizational efficiency, productivity, and performance.

This research shows that top-down buy-in for digital change is crucial. Leadership buy-in is crucial for digital change projects to receive the attention and funding they need to succeed. Therefore, leaders who prioritize and support digital transformation projects and who promote cross-departmental and cross-team collaboration are essential to the success of any digital transformation strategy.

The research also found that having a well-defined plan for digital transformation was crucial. The likelihood of a company's digital transformation efforts succeeding increases if its leaders have a firm grasp on the organization's desired outcomes. The first step is to figure out which parts of the company could use some digital upgrades, and then create a plan to make those upgrades happen.

Organizational efficiency, productivity, and performance can all be greatly enhanced through the adoption and application of digital technologies, according to an analysis of the efficacy of digital transformation strategies. One way in which businesses can save money, generate more income, and provide better service to their customers is by adopting cloud computing, data analytics, and artificial intelligence. Thus, digital transformation plans should center around putting digital technologies into action.

The significance of a cultural shift that places a premium on innovation and collaboration is highlighted by research into the efficacy of digital transformation strategies in raising organizational efficiency, productivity, and performance. New technologies and processes are more likely to be adopted by a company with a culture that promotes creativity and teamwork, leading to a higher return on investment. Therefore, successful digital transformation requires effective change management strategies that take into account the concerns of employees and make the most of the advantages offered by digital technologies.

Overall, the results of this study indicate that successful digital transformation strategies require buy-in from top management, a well-defined path forward, and a company culture that prizes creativity and teamwork. Effective change management strategies that address employee concerns and utilize the benefits of digital technologies should also be an integral part of digital

transformation strategies. Organizations can increase their productivity, efficiency, and overall effectiveness by implementing these technological tactics.

CONCLUSION

In conclusion, the results of this research demonstrate that digital transformation can significantly influence the efficiency, productivity, and success of organizations. The results stress the need for top-down buy-in, a defined path forward, and an organizational culture that prizes creativity and teamwork in order to realize the full potential of digital transformation.

Addressing employee concerns and capitalizing on leadership support appear to be crucial for implementing digital transformation projects, as suggested by the identification of barriers and enablers of digital transformation. Further emphasizing the significance of adopting and applying digital technologies, leading a cultural transformation, and attaining a positive ROI is an analysis of the efficacy of digital transformation strategies in enhancing organizational efficiency, productivity, and performance.

In sum, the findings of this research shed light on effective methods for enhancing corporate effectiveness by means of technological change. Researchers and practitioners in the field of management and administration can benefit from the results, as can businesses considering digital transformation initiatives.

The researchers acknowledge that there are caveats to their work. Both the number of participants and the setting of the research were small. To verify these results, more studies are required with larger samples and in various settings.

In conclusion, the findings of this research stress the significance of implementing successful digital transformation strategies in order to boost an organization's effectiveness, output, and performance. Companies can increase revenue, reduce costs, and boost customer happiness by implementing these digital strategies.

REFERENCES

- Alvarenga, A., Matos, F., Godina, R., & Matias, J. C. O. (2020). Digital transformation and knowledge management in the public sector. *Sustainability (Switzerland)*, 12(14). <https://doi.org/10.3390/su12145824>
- Feroz, A. K., Zo, H., & Chiravuri, A. (2021a). Digital transformation and environmental sustainability: A review and research agenda. *Sustainability (Switzerland)*, 13(3), 1–20. <https://doi.org/10.3390/su13031530>
- Feroz, A. K., Zo, H., & Chiravuri, A. (2021b). Digital transformation and environmental sustainability: A review and research agenda. *Sustainability (Switzerland)*, 13(3), 1–20. <https://doi.org/10.3390/su13031530>
- García-Peñalvo, F. J. (2021). Avoiding the dark side of digital transformation in teaching. an institutional reference framework for eLearning in higher education. *Sustainability (Switzerland)*, 13(4), 1–17. <https://doi.org/10.3390/su13042023>
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies*, 58(5), 1159–1197. <https://doi.org/10.1111/joms.12639>
- Humer, E., Pieh, C., Kuska, M., Barke, A., Doering, B. K., Gossmann, K., Trnka, R., Meier, Z., Kascakova, N., Tavel, P., & Probst, T. (2020). Provision of psychotherapy during the covid-19 pandemic among Czech, German and Slovak psychotherapists. *International Journal of Environmental Research and Public Health*, 17(13), 1–15. <https://doi.org/10.3390/ijerph17134811>

- Husband, G. (2020). Ethical data collection and recognizing the impact of semi-structured interviews on research respondents. *Education Sciences*, 10(8), 1–12. <https://doi.org/10.3390/educsci10080206>
- Kantabutra, S. (2020). Toward an organizational theory of sustainability vision. *Sustainability (Switzerland)*, 12(3). <https://doi.org/10.3390/su12031125>
- Kim, S., Lee, M., Yu, I., & Son, J. W. (2022). Key Initiatives for Digital Transformation, Green New Deal and Recovery after COVID-19 within the Construction Industry in Korea. *Sustainability (Switzerland)*, 14(14). <https://doi.org/10.3390/su14148726>
- Laukka, E., Huhtakangas, M., Heponiemi, T., & Kanste, O. (2020). Identifying the roles of healthcare leaders in HIT implementation: A scoping review of the quantitative and qualitative evidence. *In International Journal of Environmental Research and Public Health* (Vol. 17, Issue 8). MDPI AG. <https://doi.org/10.3390/ijerph17082865>
- Nearchou, F., Hennessy, E., Flinn, C., Niland, R., & Subramaniam, S. S. (2020). Exploring the impact of covid-19 on mental health outcomes in children and adolescents: A systematic review. *In International Journal of Environmental Research and Public Health* (Vol. 17, Issue 22, pp. 1–19). MDPI AG. <https://doi.org/10.3390/ijerph17228479>
- Sigalov, K., Ye, X., König, M., Hagedorn, P., Blum, F., Severin, B., Hettmer, M., Hückinghaus, P., Wölkerling, J., & Groß, D. (2021). Automated payment and contract management in the construction industry by integrating building information modeling and blockchain-based smart contracts. *Applied Sciences (Switzerland)*, 11(16). <https://doi.org/10.3390/app11167653>
- Ulven, J. B., & Wangen, G. (2021). A systematic review of cybersecurity risks in higher education. *In Future Internet* (Vol. 13, Issue 2, pp. 1–40). MDPI AG. <https://doi.org/10.3390/fi13020039>
- Zhang, J., Long, J., & von Schaewen, A. M. E. (2021). How does digital transformation improve organizational resilience?—findings from pls-sem and fsqca. *Sustainability (Switzerland)*, 13(20). <https://doi.org/10.3390/su132011487>
- Ziółkowska, M. J. (2021). Digital transformation and marketing activities in small and medium-sized enterprises. *Sustainability (Switzerland)*, 13(5), 1–16. <https://doi.org/10.3390/su13052512>