

Midocean University

Faculty of Management

Bachelor of Project Management



The Impact of Digital Transformation on Project Management

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Graduation Project – 1

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Introduction

Digital transformation has had a profound impact on project management, revolutionizing the way projects are planned, executed, and monitored. digital transformation has revolutionized project management by streamlining processes, enabling collaboration, facilitating data-driven decision making, and enhancing project outcomes. It has brought greater agility, efficiency, and effectiveness to project management practices, enabling organizations to deliver projects more successfully in an increasingly digital world.

Purpose: The purpose of this paper was to describe the digital transformation journey in an IT services company. The study aimed to examine the impact of project management styles on the success of the cloud-based ERP implementation in the company. This study was conducted using a qualitative case study method to analyze the project management styles and their influence on the success of the digital transformation of the company. The study discovered that the “visionary” and “affiliative” leadership styles are the key factors that affect the digital transformation of a company. The findings also highlighted the importance of the situational leadership style in the digital transformation journey. **Unique contribution to theory, practice, and policy:** The study concluded by suggesting a management competency framework that leadership team could further develop to successfully drive the digital transformation of the company. The study contributed to the literature by elaborating on a solid characterization of digital transformation journey. The study also offered useful insights to practitioners on how to execute effective and sustainable strategies for digital transformation.

While digital transformation has brought significant benefits to project management, there are still some gaps and challenges that organizations may face. Here are a few gaps related to the impact of digital transformation on project management: **Skills and Training:** Digital transformation requires project managers and team members to have the necessary skills and knowledge to effectively utilize digital tools and technologies. However, there may be a gap in the skill sets of existing project teams, requiring organizations to invest in training and upskilling initiatives to bridge this gap. **Change Management:** Implementing digital transformation in project management often involves significant changes in processes, workflows, and tools. Organizations may face challenges in managing this change effectively, including resistance from team members, difficulty in adopting new practices, and ensuring smooth transition and adoption of digital tools. Addressing these gaps requires a strategic approach, including investment in training and development, effective change management practices, robust cybersecurity measures, data management strategies, and a focus on cultural transformation. By addressing these gaps, organizations can maximize the benefits of digital transformation in project management and overcome challenges along the way.

This research aims to investigate the challenges faced by project managers during the adoption of digital transformation in project management and how these challenges impact project success. This research will contribute to the understanding of the impact of digital transformation on project management by uncovering the specific challenges faced by project managers during its implementation. The findings will help project managers and organizations better prepare for and navigate the digital transformation journey, leading to improved project success rates. Additionally, the research will provide insights into strategies and best practices that can be employed to overcome challenges and drive successful digital transformation in project management.

Research Significance: Assessing the Impact of Digital Transformation on Project Management Performance and Organizational Success. Digital transformation has become a prevalent phenomenon across industries, and its impact on project management practices is significant. Understanding the implications and outcomes of digital transformation initiatives in project management can provide valuable insights for organizations seeking to enhance their project performance and overall organizational success. **Improved Project Performance:** Investigating the impact of digital transformation on project management performance can help identify the specific areas where digital technologies and tools bring the most significant benefits. This knowledge can guide organizations in making informed decisions regarding the adoption and implementation of digital solutions, leading to improved project planning, execution, monitoring, and control. By conducting research on the impact of digital transformation on project management, organizations can gain valuable insights into the specific benefits, challenges, and strategies associated with digital adoption. This knowledge can guide their decision-making processes, improve project outcomes, and enable them to harness the full potential of digital technologies for organizational success in the digital age.

Research Problem

This research aims to investigate the challenges faced by project managers during the adoption of digital transformation in project management and how these challenges impact project success. This research will contribute to the understanding of the impact of digital transformation on project management by uncovering the specific challenges faced by project managers during its implementation. The findings will help project managers and organizations better prepare for and navigate the digital transformation journey, leading to improved project success rates. Additionally, the research will provide insights into strategies and best practices that can be employed to overcome challenges and drive successful digital transformation in project management.

1. Theoretical gaps:

These gaps represent areas where further research can contribute to a deeper understanding of the topic. Here are a few theoretical gaps related to the impact of digital transformation on project management. There is a need for the development of comprehensive theoretical frameworks that explicitly capture the multifaceted nature of digital transformation in project management. Existing frameworks often focus on specific aspects, such as technology adoption or agile methodologies, but a holistic framework that integrates various dimensions of digital transformation and their impact on project management is lacking.

Addressing these theoretical gaps can contribute to a more comprehensive understanding of the impact of digital transformation on project management. It can help develop robust theoretical frameworks, provide insights into long-term effects, consider the organizational context and stakeholder perspectives, explore ethical and social implications, and facilitate cross-sector comparisons. By addressing these gaps, researchers can advance the knowledge in this field and provide practical recommendations for organizations undergoing digital transformation in project management.

2. Empirical gaps:

There is a need for longitudinal studies that track the impact of digital transformation initiatives on project management practices and outcomes over an extended period. Longitudinal research can capture the dynamic nature of digital transformation and provide insights into how its effects evolve over time, including potential challenges, benefits, and sustainability of the changes implemented. Evaluation of Digital Tools and Technologies: Empirical research can evaluate the effectiveness and impact of specific digital tools and technologies used in project management. Comparative

studies can compare different tools and technologies, assessing their suitability for different project types, team sizes, and organizational contexts. This empirical evidence can guide organizations in selecting and implementing the most appropriate digital tools for their project management needs. By conducting empirical research to address these gaps, scholars and practitioners can gain valuable insights into the impact of digital transformation on project management. These empirical studies can inform decision-making, provide evidence-based practices, and contribute to the knowledge base in this evolving field.

This study addresses the following main research question:

“How does digital transformation impact project management practices and project outcomes?”

Research Significant

Assessing the Impact of Digital Transformation on Project Management Performance and Organizational Success. Digital transformation has become a prevalent phenomenon across industries, and its impact on project management practices is significant. Understanding the implications and outcomes of digital transformation initiatives in project management can provide valuable insights for organizations seeking to enhance their project performance and overall organizational success.

Improved Project Performance: Investigating the impact of digital transformation on project management performance can help identify the specific areas where digital technologies and tools bring the most significant benefits. This knowledge can guide organizations in making informed decisions regarding the adoption and implementation of digital solutions, leading to improved project planning, execution, monitoring, and control. By conducting research on the impact of digital transformation on project management, organizations can gain valuable insights into the specific benefits, challenges, and strategies associated with digital adoption. This knowledge can guide their decision-making processes, improve project outcomes, and enable them to harness the full potential of digital technologies for organizational success in the digital age.

1. Theoretical gaps:

Digital transformation is influenced by various organizational factors, such as culture, leadership, and structure. However, there is a lack of research that examines the role of these contextual factors in shaping the impact of digital transformation on project management. Further research is needed to explore how organizational context interacts with digital transformation initiatives and how it influences project management practices and outcomes. While studies have examined the impact of digital transformation on project managers and project teams, there is a need for research that explores the perspectives of other stakeholders, such as clients, customers, and end-users. Understanding how digital transformation affects these stakeholders and their involvement in project management processes can provide valuable insights into the broader impact of digital transformation initiatives.

2. Empirical gaps:

While qualitative studies have provided valuable insights, there is a need for more quantitative analysis of project performance metrics in the context of digital transformation. Empirical research can explore how digital transformation initiatives affect project success factors such as cost, schedule, quality, and customer satisfaction. Quantitative analysis can provide more robust evidence and enable statistical comparisons across different projects and organizations. While some studies

have examined the benefits of digital transformation, there is a need for empirical research that specifically focuses on the challenges and barriers faced during the adoption and implementation of digital transformation initiatives in project management. Understanding the factors that contribute to successful or unsuccessful implementation can help organizations anticipate and address potential challenges. Empirical studies can explore the influence of organizational factors, such as culture, leadership support, and change management, on the impact of digital transformation on project management outcomes. These factors can significantly shape the success or failure of digital transformation initiatives, and empirical research can provide insights into their role and impact.

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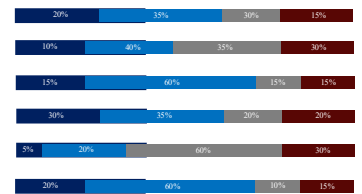
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Appendices List

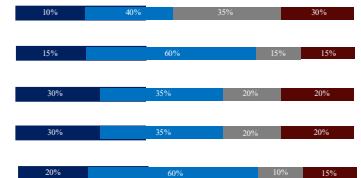
1st Questionnaire

We use technologies such as analytics and social media, to understand our customer better.
 In uncertain times, digital transformation becomes more, not less, important.
 Digital transformation investments are growing briskly, though more slowly than last year.
 Digital maturity's advantages go beyond traditional business benefits.
 Digitally native business units can be an incubator for transformation.
 Digital transformation continues to drive financial performance.



2nd Questionnaire

Does company have a formal Project Management Approach.
 Does company use any approach to verify the project complexity.
 ability to meet project objectives.
 Ability to make decisions.
 What changes have occurred in project cost management and resource allocation due to digital transformation.

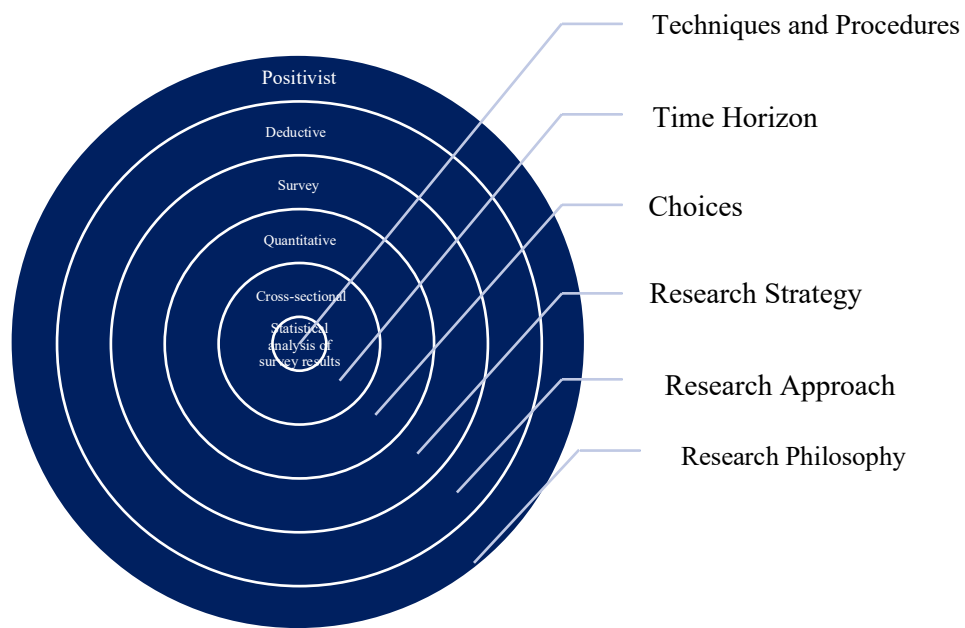


Strongly Agree
 Agree
 Disagree
 Strongly Disagree

Research Questions

- a) What is the extent of digital transformation adoption in project management?
 - To assess the level of digital transformation adoption in project management practices.
 - Hypothesis 1: Higher levels of digital transformation adoption in project management are associated with improved project performance and success rates.
- b) How does digital transformation affect project planning and execution processes?
 - To analyze the impact of digital transformation on project planning, execution, and monitoring processes.
 - Hypothesis 2: Digital transformation positively impacts project planning, execution, and monitoring processes, leading to increased efficiency and effectiveness.
- c) What are the challenges faced by project managers in implementing digital transformation initiatives?
 - To identify and understand the challenges faced by project managers during the implementation of digital transformation initiatives.
 - Hypothesis 3: Project managers face challenges related to change management, skill gaps, and resistance to new technologies during the implementation of digital transformation initiatives.
- d) What are the benefits and opportunities of digital transformation in improving project outcomes?
 - To explore the benefits and opportunities that digital transformation brings to project management, such as improved efficiency, cost savings, or better decision-making.
 - Hypothesis 4: Digital transformation brings benefits such as enhanced decision-making, improved resource allocation, and increased project success rates.
- e) e) How does digital transformation impact project team collaboration and communication?
 - To examine the impact of digital transformation on project team collaboration, communication, and knowledge sharing.
 - Hypothesis 5: Digital transformation improves project team collaboration, communication, and knowledge sharing, leading to better project outcomes.

Research Onion



Research Philosophy

The research on the impact of digital transformation on project management adopts a pragmatic research philosophy. Pragmatism emphasizes the practical implications and real-world applications of research findings. It recognizes the importance of bridging theoretical concepts with practical considerations to address complex phenomena such as the impact of digital transformation on project management.

By adopting a pragmatic research philosophy, this study acknowledges the dynamic and evolving nature of digital transformation and project management practices. It recognizes the need to investigate and understand the practical implications of digital transformation initiatives on project management processes, outcomes, and stakeholder experiences.

Pragmatism allows for the integration of both quantitative and qualitative research methods, enabling the exploration of various dimensions of the research topic. It encourages a flexible and adaptive approach to data collection and analysis, considering the diversity and complexity of digital transformation initiatives and project management contexts.

This research philosophy also emphasizes the importance of collaboration and engagement with practitioners and industry stakeholders. It recognizes their expertise and practical insights as valuable inputs in understanding the impact of digital transformation on project management. By involving stakeholders in the research process, the study aims to generate actionable recommendations and best practices that can inform decision-making and practice in project management.

Overall, the pragmatic research philosophy adopted in this study aims to provide a balanced and practical understanding of the impact of digital transformation on project management. It seeks to bridge the gap between theory and practice by exploring real-world scenarios, considering multiple perspectives, and generating knowledge that can contribute to the effective adoption and implementation of digital transformation initiatives in project management contexts.

Research Approach

The research on the impact of digital transformation on project management adopts a mixed-methods approach. This approach combines both quantitative and qualitative research methods to provide a comprehensive and nuanced understanding of the research topic.

Quantitative research methods will be employed to gather numerical data and measure the impact of digital transformation on various project management metrics. Surveys and questionnaires will be used to collect quantitative data from a large sample of project managers and practitioners. This data will enable the identification of trends, patterns, and statistical relationships between digital transformation initiatives and project management outcomes. Quantitative analysis techniques such as regression analysis and statistical modeling will be applied to analyze the data and draw meaningful conclusions.

Qualitative research methods, such as interviews, focus groups, and case studies, will be utilized to gather in-depth insights into the experiences, perceptions, and challenges related to the impact of digital transformation on project management. These methods will allow for a deeper exploration of individual perspectives, organizational contexts, and the complexities associated with digital transformation initiatives. Qualitative data analysis techniques, such as thematic analysis and content analysis, will be employed to identify common themes, emerging patterns, and contextual factors that influence the impact of digital transformation on project management.

The mixed-methods approach will enable triangulation of data, where quantitative findings can be validated and enriched by qualitative insights. It will provide a more holistic understanding of the research topic by capturing both the quantitative measurements of digital transformation impact and the qualitative narratives behind those measurements. By integrating quantitative and qualitative data, this approach aims to provide a comprehensive and robust assessment of the impact of digital transformation on project management.

The research approach will also involve a collaborative and iterative process, engaging with project management professionals, stakeholders, and experts throughout the research journey. This engagement will help validate findings, gain practical insights, and ensure that research outcomes are meaningful and applicable in real-world project management contexts.

Overall, the mixed-methods approach adopted in this research seeks to capture the multifaceted nature of the impact of digital transformation on project management. It combines the strengths of quantitative and qualitative research methods to provide a comprehensive, rigorous, and practical understanding of the research topic.

Research Strategy

The research strategy for investigating the impact of digital transformation on project management adopts an exploratory and descriptive approach. This strategy aims to explore and describe the current state, trends, and implications of digital transformation initiatives in project management practices.

Literature Review: A comprehensive review of existing literature will be conducted to understand the theoretical foundations, conceptual frameworks, and key themes related to digital transformation and project management. This review will help identify gaps in the literature and provide a foundation for the research study.

Data Collection: Data will be collected from multiple sources to capture a wide range of perspectives and insights. This may include surveys, interviews, case studies, and document analysis. Surveys will be administered to project managers and professionals to gather quantitative data on the adoption of digital transformation initiatives, perceived impacts, and challenges. Interviews and case studies will be conducted with practitioners and industry experts to obtain qualitative data, exploring their experiences, best practices, and lessons learned.

Data Analysis: Quantitative data collected through surveys will be analyzed using statistical techniques to identify trends, correlations, and statistical significance. Qualitative data from interviews, case studies, and document analysis will undergo thematic analysis to identify key themes, patterns, and emerging insights. The analysis will be an iterative process, allowing for the refinement of research questions and further exploration of significant findings.

Triangulation: Findings from quantitative and qualitative data will be triangulated to validate and complement each other. This process will involve comparing the results to enhance the overall understanding of the impact of digital transformation on project management. Triangulation will help ensure the reliability and validity of the research outcomes.

Reporting and Recommendations: The research findings will be compiled into a comprehensive report, presenting the key insights, trends, and implications of digital transformation on project management. The report will provide a descriptive analysis of the impact, highlighting both the benefits and challenges associated with digital transformation initiatives. Based on the findings, practical recommendations and best practices will be formulated to guide organizations in effectively integrating digital transformation into their project management practices.

Dissemination: The research findings will be disseminated through academic publications, conferences, and industry forums. This will contribute to the existing body of knowledge on digital transformation and project management, while also providing actionable insights to practitioners and organizations seeking to navigate the digital landscape.

Choices

When studying the impact of digital transformation on project management, researchers have several choices to consider. These choices can shape the scope, methodology, and focus of the research. Here are some key choices that researchers may need to make:

Research Focus: Researchers can choose to focus on specific aspects of digital transformation that impact project management. For example, they may explore the influence of emerging technologies like artificial intelligence, Internet of Things (IoT), or cloud computing on project management practices. Alternatively, they may investigate the organizational and cultural changes required for successful digital transformation in project management.

Research Methodology: Researchers can choose between quantitative, qualitative, or mixed-methods approaches to gather and analyze data. Quantitative methods, such as surveys or statistical analysis, can provide numerical insights into the impact of digital transformation on project management metrics. Qualitative methods, such as interviews or case studies, can offer in-depth understanding of experiences, perceptions, and challenges associated with digital transformation. A mixed-methods approach combines both quantitative and qualitative methods for a comprehensive analysis.

Sample Selection: Researchers must decide on the appropriate sample for their study. They may choose to target project managers, project team members, or executives involved in digital transformation initiatives. The sample can be selected from a specific industry, organization size, or geographical location to provide context-specific insights. Researchers may also consider including diverse perspectives to capture a broad range of experiences and viewpoints.

Ethical Considerations: Researchers should consider ethical considerations related to data privacy, consent, and confidentiality. They should ensure that participants' information is protected and that the research follows ethical guidelines and regulations. Informed consent should be obtained from participants, and their anonymity or confidentiality should be maintained throughout the research process.

Limitations and Implications: Researchers should acknowledge the limitations of their study, such as sample size, generalizability, or potential biases. They should discuss the implications of their findings for project management theory, practice, and policy. Recommendations for organizations, project managers, or stakeholders can be provided to address the challenges and leverage the opportunities brought about by digital transformation.

Time Horizon

In studying the impact of digital transformation on project management, a longitudinal study with an extended time horizon is a valuable approach. This allows researchers to examine the changes, trends, and effects of digital transformation initiatives on project management practices over a significant period.

Pre-Transformation Phase: The study can begin by examining the project management practices and dynamics within organizations before the implementation of digital transformation initiatives. This phase provides a baseline understanding of traditional project management approaches and their associated challenges.

Implementation Phase: Researchers can then observe and analyze the implementation of digital transformation initiatives within organizations. This phase involves tracking the adoption of digital technologies, changes in project management processes, and the introduction of new tools and methodologies. By collecting data at multiple intervals during this phase, researchers can capture the evolving nature of digital transformation and its immediate impact on project management practices.

Maturation Phase: As digital transformation initiatives become more established within organizations, the study can focus on the maturation phase. Researchers can examine the long-term effects of digital transformation on project management, including changes in project success rates, productivity, stakeholder engagement, and collaboration. This phase enables the assessment of sustained benefits and challenges associated with digital transformation.

Adaptation Phase: Digital transformation is an ongoing process that requires continuous adaptation and improvement. Researchers can explore how organizations and project management practices adapt to the evolving digital landscape. This phase involves examining the strategies, lessons learned, and adjustments made to optimize the impact of digital transformation on project management.

By employing a longitudinal study design, researchers can gain a comprehensive understanding of the impact of digital transformation on project management over time. It allows for the identification of both short-term and long-term effects, as well as the exploration of the dynamics and complexities that arise during different phases of digital transformation implementation. Additionally, a longitudinal study provides insights into the sustainability and durability of digital transformation initiatives and their influence on project management practices in the long run.

Techniques and Procedures

Techniques and Procedures for Studying the Impact of Digital Transformation on Project Management involve a combination of data collection, analysis, and interpretation methods. Here are some key techniques and procedures commonly used in this area of research:

Literature Review: Conducting a thorough literature review is an essential step to understand the existing body of knowledge regarding digital transformation and project management. This involves searching and analyzing relevant academic articles, books, industry reports, and other authoritative sources. The literature review helps identify research gaps, theoretical frameworks, and key concepts to guide the research study.

Surveys and Questionnaires: Surveys and questionnaires are valuable techniques for collecting quantitative data from a large sample of project managers or professionals involved in digital transformation initiatives. These instruments can be designed to measure variables such as the extent of digital transformation adoption, perceived impacts on project management performance, challenges faced, and success factors. Statistical analysis techniques, such as descriptive statistics, correlation analysis, and regression analysis, can be applied to analyze the survey data.

Interviews: Conducting in-depth interviews with project managers, stakeholders, and experts allows for a deeper exploration of their experiences, perspectives, and insights related to the impact of digital transformation on project management. Structured, semi-structured, or open-ended interview formats can be used to gather qualitative data. Transcripts of interviews can be analyzed using qualitative data analysis techniques, such as thematic analysis or content analysis, to identify patterns, themes, and key findings.

Case Studies: Case studies involve in-depth investigation of real-world projects or organizations that have undergone digital transformation. Multiple sources of data, including interviews, documents, and observations, are collected to provide a rich and detailed understanding of the impact of digital transformation on project management in specific contexts. Case studies allow for the exploration of contextual factors, challenges, and best practices associated with digital transformation.

Document Analysis: Analyzing relevant documents, such as project reports, policies, guidelines, and project documentation, can provide valuable insights into the impact of digital transformation on project management. Document analysis helps uncover changes in project management processes, tools, and strategies resulting from digital transformation initiatives. It also allows for the identification of success stories, lessons learned, and organizational adaptations.