

# Digital Transformation and its Impact on Project Management “Case Study Royal Jordanian Geographic Center”

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## Abstract

The study aimed to evaluate the impact of digital transformation (digital strategy, digital culture, digital leadership, digital capabilities, and digital infrastructure) on project management (project scope management, project schedule management, project cost management, project quality management, project resource management, and project risk management) at the Royal Jordanian Geographic Center in Jordan. The study used a descriptive-analytical approach by reviewing the previous literature and conducting interviews with 35 employees at the middle and upper administrative levels (project manager, department head, and director) to evaluate the impact of digital transformation on project management at the Royal Jordanian Geographic Center.

The study concluded with a set of findings, including: Digital transformation at the Royal Jordanian Geographic Center improves project management by reducing costs, determining the time required to complete the project, and improving project quality. It also helps improve operations, increase efficiency, and ultimately achieves project success. In addition, digital transformation helps achieve the strategic goals of the Royal Jordanian Geographic Center, such as improving quality and efficiency, increasing innovation, and improving customer service.

The study provided several recommendations, the most important of which are: Developing a digital transformation plan, defining project goals, timeline, and budget, providing training for employees on how to use new digital technologies in project management, conducting future studies on the impact of artificial intelligence in project management.

**Keywords:** Digital Transformation, Project Management, Royal Jordanian Geographic Center, Jordan.

**Introduction**

The world has witnessed many industrial revolutions over the past decades, culminating in the Fourth Industrial Revolution (Industry 4.0), which has affected the nature of organizations and driven them to keep pace with these developments by adapting to the outputs of these revolutions, including digital and informational innovations in addition to digital media, cloud computing, big data, and many other applications of the Fourth Industrial Revolution. These digital technologies have brought about many changes and disruptions in industries, which has driven organizations to adapt to these changes to ensure their continuity and maintain their dominance and control over markets (Margiono, 2020).

In the context of digital transformation, organizations are seeking to transform from traditional organizations to digital organizations through making many structural and operational changes in addition to changing the nature and form of their internal and external relationships to achieve radical changes in customer expectations and generate more opportunities and innovation by creating virtual markets that offer wide and rapid perspectives for communicating with organizations and understanding the nature of the services and products offered to customers (Verhoef et al., 2021).

Project management is the lifeblood and progress of organizations. It represents the main tool for achieving organizational goals. In addition, it plays a central role in developing economic and social forces, generating employment opportunities, and reducing unemployment rates in society. Therefore, projects need effective management to carry out the planning, organizing, executing, controlling, and closing of the project to achieve its goals through the optimal utilization of project resources and available possibilities. Project management also requires the existence of many advanced standards and techniques to achieve success in project management. The standards issued by the Project Management Institute (PMI) in addition to the standards issued by the International Organization for Standardization for project management (ISO 21502:2020) are considered to be the most important standards necessary for project success.

**Study Importance**

The importance of the study comes in two aspects:

- The scientific aspect: The importance of this study stems from the importance of the variables, as digital transformation is one of the important and necessary topics that have attracted the attention of researchers, especially after the recovery from the Corona pandemic. Transformation has become one of the basic and necessary requirements for survival in light of the radical transformations that are striking all current sectors, and the importance of the study also emerges in the success of organizations in project management to adapt and improve the level of services provided and improve performance, and achieve project goals through the optimal utilization of resources to reduce costs, improve quality, and complete projects on time.

By reviewing previous studies, the researchers noted the lack of studies linking their variables, as studies in this field are still insufficient. Therefore, the researchers hope that this study will be a qualitative addition that enriches knowledge in the field of its variables (Digital Transformation, Project Management), and contributes to filling something short of the Arab library in its field.

The practical aspect: The practical importance of the study lies in the extent to which the management of the Royal Jordanian Geographic Center will benefit from the results it will

reach regarding the concept of digital transformation and project management in its internal and external projects, and the importance of the study also comes from the importance of the sector in which it is located, as the public sector is part of the national economy because of its great importance in supporting the national economy. The researcher hopes that through this study, he will provide results and recommendations that will support the management of the Royal Jordanian Geographic Center in focusing on digital transformation, which can help it to improve its project management.

### **Study Objectives**

- Identify the impact of digital transformation in its dimensions (digital strategy, digital culture, digital leadership, digital capabilities, and digital infrastructure) on project management in its dimensions (project scope management, project schedule management, project cost management, project quality management, project resource management, and project risk management) in the Royal Jordanian Geographic Center.
- Identify the level of relative importance of digital transformation and project management in the Royal Jordanian Geographic Center.

### **Study Problem**

The problem of this study lies in project management, due to the strategic role that project management plays in the development of the economic and social forces of society. It represents the lifeblood and progress of organizations and the main tool for achieving their goals. It also plays an important role in generating employment opportunities and reducing unemployment rates in society. Therefore, projects need effective management to carry out the planning, organizing, executing, controlling, and closing of the project to achieve its goals through the optimal utilization of project resources and available possibilities. Project management also requires the existence of many advanced standards and techniques to achieve success in projects.

One of the most important challenges that project management has faced in the Fourth Industrial Revolution is the digital transformation process. The digital age requires organizations to undertake strategic renewal processes to transform their strategies and business models to generate value and maintain their competitive advantage to ensure their sustainability and survival. The Royal Jordanian Geographic Center was not immune to these transformations.

This study seeks to investigate project management in the Royal Jordanian Geographic Center, which can enable it to increase its effectiveness and efficiency in achieving its goals, and the ability to work within the dimensions of digital transformation represented in digital strategy, digital culture, digital leadership, digital capabilities, and digital infrastructure to transform from a traditional organization to a digital organization through project management. This is reflected in making many structural and operational changes in addition to changing the nature and form of internal and external relations to achieve radical changes in customer expectations, generate more opportunities and innovation, and provide wide and rapid horizons to increase efficiency and productivity, save time and cost, and complete projects to the fullest extent possible in conjunction with reducing errors and improving the nature and quality of services and products provided.

Based on foregoing, this study will focus on the concept of project management and the impact of digital transformation on it. Accordingly, the research problem can be determined by the following question:

- What is the impact of digital transformation on project management in the Royal Jordanian Geographic Center?

## **Theoretical Background**

### **Digital Transformation**

The concept of digital transformation refers to the comprehensive change that occurs at the level of the organization or sector, and includes cultural, organizational, and operational changes. This change is achieved through the intelligent integration of digital technologies, processes, and competencies. Digital transformation aims to achieve value and sustainability of competitive advantage (Lamarre et al., 2023, 19-22).

It also refers to the use of a set of digital technologies, innovations, and business models. This use aims to carry out continuous improvement in all the organization's activities and tasks (Steiber et al., 2020).

The concept of digital transformation can be viewed from three perspectives (Švarc et al., 2020):

- A technological perspective: This perspective focuses on the use of digital technologies, such as the Internet of Things, cloud computing, big data, artificial intelligence, and machine learning.
- A commercial perspective: This perspective focuses on the use of digital technologies to transform traditional business models into new models.
- A social perspective: This perspective focuses on the acceptance of technological progress by society and the development of digital skills and capabilities.

To understand the true meaning of digital transformation, it can be referred to two perspectives:

- The first perspective refers to the strategic exploitation of digital technologies to guide the organization, through building digital strategy, digital culture, and digital leadership, in addition to developing digital capabilities and infrastructure, such as mobile applications and social networks. This means using digital technology as a destination.
- The second perspective refers to the use of digital technologies to change the nature of the business that the organization performs, generate value for customers, and maintain competitive advantage.

Based on this, digitalization is an essential part of the digital transformation process, which represents the process of using technology to develop the strategies and business models of organizations, to create comprehensive cultural and societal changes, in order to reach the digital tipping point (Utomo et al., 2023; Lam and Law, 2019; Sarvari et al., 2017,98;).

### **Importance of Digital Transformation:**

Digital transformation is gaining importance by helping organizations to compete better and expand their business by targeting more opportunities and customers. It also affects the success of organizations, playing a critical role in improving competitive advantage and profitability for organizations through its contribution to (Sarvari et al., 2017, 96; Jnr et al., 2021):

- Creating a strategic alignment between technical and business strategies.

- Improving operational efficiency, simplifying procedures, and improving the quality of services provided.
- Increasing the level of adaptation and responsiveness to the dynamic needs and wants of customers in order to generate more opportunities and provide innovative services.
- Reducing the rate of human errors and reducing costs through the use of artificial intelligence technologies.
- Improving the prediction of customer requests and identifying their needs.
- Increasing the level of transparency and information security and improving internal and external communications.

Digital transformation is a societal phenomenon for all sectors, as it aims to achieve growth and social welfare through measuring the level of well-being in the digital age. In addition to promoting digital innovation through the Internet of Things and investing in organizational capabilities in a way that allows them to be transferred and processed digitally. It is also worth noting the impact of digital transformation on the social, cultural, and economic environment and the developments it has brought about in production patterns. In addition to improving the customer value chain, which aims to generate value and improve competitive advantage.

#### **Dimensions of Digital Transformation:**

Scholars and researchers have proposed a number of different dimensions of digital transformation, depending on their perspectives and specialization. This explains the diversity of dimensions of digital transformation among researchers.

#### **Digital Strategy**

Digital strategy represents a long-term plan to achieve the organization's goals by relying on digital technologies to facilitate changes across different sectors to enable the organization to keep pace with environmental developments and succeed in the digital transformation process, in addition to its ability to develop business models to become dynamic, allowing for the simplification of processes and the enhancement of the organization's competitive capabilities. (Sarvari et al., 2017, 98).

Digital strategy is also known as the localization of the use of modern applications, which include big data, artificial intelligence, the internet of things, robotics, drones, and cloud computing, to improve business performance and to redesign current processes to achieve the organization's goals (Lamarre et al., 2023, 20; Mihu et al. 2023).

#### **Digital Culture**

The digital culture refers to the individuals' possession of the patterns and behaviors necessary to interact with the digital age. The digital culture represents the ability of individuals to interact with information technology and the Internet and use them in work and personal life to perform the required tasks. The concept also refers to many cultural changes that have resulted from the development and dissemination of digital technologies (Bregman, 2019,125-127).

The promotion of digital transformation through the presence of a strong and positive culture is essential to enhance the process of electronic sharing of skills, knowledge, learning, and development to encourage the members of the organization and its customers to adopt these modern practices. The culture of the organization is also linked to the development of

digital technologies, which will lead to the continuous development of the culture of the organization due to the rapid technological developments (Lamarre et al., 2023, 336).

### **Digital Leadership**

In the current era, digital developments are accelerating. Therefore, managers of transforming organizations must realize that the transformation that the organization is going through is an ongoing process. It is a strategy associated with change in business models, organizational structure, and the role of leadership. Digital leadership is defined as the extent to which the organization's leaders contribute to the transition to a knowledge-based society and their knowledge in the field of digital technologies. Digital leadership also represents the process of strategic use of digital assets to solve problems and meet the needs of work in organizations (Dinsmore, 2019, 188).

Digital leadership requires that organizational leaders have the ability to build a strong communication network using technology, in addition to having a clear and strong vision to achieve goals using digital technologies. They must also work to eliminate digital illiteracy among organizational members, build digital capabilities within their organizations, and discover talents to adapt to the organization's digital strategy (Lamarre et al., 2023, 39). In addition, digital leaders must have a deep understanding of how technology works and learn more about it to use it to improve the organization's performance. They are able to think outside the box and innovate new solutions to the problems they face. They develop their critical thinking skills, build trust and empathy with others, and are prepared to lead change during the developments that business organizations are witnessing.

### **Digital Capabilities**

Digital capabilities refer to the ability of an organization to leverage digital technologies and processes to achieve the goals and objectives of work and projects through a set of skills, knowledge, and behaviors that enable individuals and teams to use digital technologies effectively and efficiently.

Digital capabilities also represent the ability of employees in the organization to use digital technology and modify it to adapt to the development of processes, change business models, and change the products and services provided by the organization. Digital technologies help the organization acquire an innovative culture and capabilities that enable it to keep pace with technological developments and changes. Digital capabilities also represent a process of flow of digital data, in addition to the ability to generate value, technical knowledge in the digital field, the technical skills and abilities of employees, and the ability of employees to explore new technologies and benefit from social networks to generate added value for the organization (Lamarre et al., 2023, 49-56).

### **Digital Infrastructure**

Digital infrastructure is an essential element in the modern economy, as it supports many of the daily activities of organizations. Digital infrastructure refers to the physical and digital components that an organization owns to support digital systems within the organization, such as networks, programs, and storage devices, in addition to the individuals responsible for operating these systems. It contributes to achieving



digital capabilities, building organizational culture, and supporting the organization's leadership and digital business strategy (Lamarre et al., 2023, 174).

Digital infrastructure also works to increase the speed of response to customer requests, increase the agility of the organization, and provide an environment conducive to digital transformation. The infrastructure is considered the foundation and an essential requirement for digital transformation in order to improve operational efficiency, promote innovation, and improve communication and collaboration between members of the organization. (Porter & Heppelmann, 2015)

### **Project Management**

Project management is one of the modern management concepts that emerged to find solutions to the problems faced by organizations when undertaking projects. The Project Management Institute (PMI) defines it as the process of applying knowledge, skills, and techniques to achieve the requirements and objectives of the project (A Guide to the Project Management Body of Knowledge, 2017, 10). The International Organization for Standardization (ISO) defines it as a set of processes and activities that work together (planning, organizing, directing, and controlling) to achieve the optimal use of resources in order to achieve its objectives efficiently and effectively within the time, cost, and quality standards of the project, taking into account the environmental variables surrounding the project (International Standard ISO 21500, 2012, 4). Al-Hadidi (2020) defines project management as the process of organizing human and material resources and all project inputs to achieve the project goal within the specified budget and specifications. Unegbu et al. (2022) also define it as the process of completing activities within the standards of time, cost, quality, and customer satisfaction, and working to complete it with the least possible scope without disrupting the main workflow and changing the organization's culture.

### **The Importance of Project Management**

The importance of project management for organizations and individuals lies in the fact that it represents the main axis for the success and distinction of organizations, which is represented in (Al-Hadidi, 2020; A Guide to the Project Management Body of Knowledge, 2017, 10):

- Optimal utilization of resources, which contributes to achieving the competitive advantage of organizations.
- Improving the quality of processes and services provided by organizations.
- Organizations become more efficient and effective in achieving their goals.
- Reducing conflicts and providing mechanisms to find solutions to the problems facing organizations.
- Empowering employees to make decisions that serve the interests of the organization and the project and contribute to achieving their goals and success.
- Monitoring the stages of work on the project and finding solutions to the problems encountered and responding to project risks.
- Keeping pace with technological developments through the use of modern tools and mechanisms used in project management.

### **Dimensions of Project Management**

The Project Management Institute (PMI) has identified ten knowledge areas that govern and control project management processes, namely: Project integration management, Project

scope management, Project cost management, Project quality management, Project resource management, Project schedule management, Project procurement management. Project risk management, Project communications management, Project stakeholder management (A Guide to the Project Management Body of Knowledge, 2017, 23-24).

The researcher in this study relied on six major project management areas, namely: Project scope management, Project schedule management, Project cost management, Project quality management, Project resource management, Project risk management (A Guide to the Project Management Body of Knowledge, 2017,23-34).

### **Project Scope Management**

Project scope management is the process of defining, documenting, and managing the work that needs to be done to complete a project successfully. It involves determining what is included and excluded from the project, as well as the work's sequence, duration, cost, and resources. Project scope management includes the following processes: Scope planning, Requirements gathering, Scope definition, Work breakdown structure (WBS) development, Scope verification, Scope change control (A Guide to the Project Management Body of Knowledge, 2017, 129-137).

### **Project Time Management**

**Project Time management** is the process of planning, organizing, and managing the project schedule to achieve the project objectives within the specified time constraints. It is one of the most important factors in project success, as it ensures that the project is completed on time (International Standard ISO 21500, 2012,13).

Project Time management consists of the following key processes: Activity definition, Activity sequencing, Activity resource estimating, Activity duration estimating, Schedule development, Schedule control (RaKaban & Salama, 2020; A Guide to the Project Management Body of Knowledge, 2017, 173-228 ).

### **Project Cost Management**

**Project cost management** is the process of planning, estimating, budgeting, managing, and controlling costs to achieve the project objectives within the approved budget. It is one of the most important factors in project success, as it ensures that the project is completed within budget (Schwalbe, 2015,256).

Project cost management includes the following processes: Cost planning, Cost estimating, Cost budgeting, Cost control (A Guide to the Project Management Body of Knowledge, 2017, 231-268).

### **Project Quality Management**

**Project quality management** is the process of planning, organizing, and managing the quality of the project to ensure that it meets the requirements of the project stakeholders. It includes all activities and processes that the organization or project team undertakes to define quality policies, responsibilities, and objectives. It also supports continuous improvement activities to ensure that project requirements are met (A Guide to the Project Management Body of Knowledge, 2017, 271)

In addition, project quality management processes include the following key processes: Quality planning, Quality assurance, Quality control (Schwalbe, 2015,306).



### **Project Resources Management**

**Project resource management** is the process of acquiring and managing the resources needed to achieve the project objectives, such as people, equipment, tools, materials, and infrastructure. It helps to ensure that the necessary resources are available at the right time and place (International Standard ISO 21500, 2012, 13).

In addition, project resource management processes include the following: Resource planning, Resource estimation, Resource acquisition, Team development, Team management, Resource control (A Guide to the Project Management Body of Knowledge, 2017,307-357).

### **Project Risk Management**

Project risk management is the process of identifying, assessing, and responding to risks that may impact the project. It involves identifying potential risks, assessing their likelihood and impact, and developing plans to mitigate those risks.

The project risk management process consists of the following steps: risk management plan, risk identification, qualitative risk analysis, quantitative risk analysis, risk response plan, and risk monitoring and control (A Guide to the Project Management Body of Knowledge, 2017, 395-457).

### **Relationship between Digital Transformations and Project Management**

Kozarkiewicz (2020) and Zhang et al. (2023) have pointed out that digital transformation has a positive impact on project management, by improving project efficiency, which is represented by cost reduction, time reduction, and proper resource selection and allocation. It also contributes to shortening the project delivery time thanks to automation and new tools that support project management, the ability to use large amounts of current data and process data quickly, in addition to mobility and the possibility of remote collaboration between team members, flexibility of work and results, and improving risk management processes in the project and responding quickly to threats. Thanks to updated data and digital transformation based on artificial intelligence tools, project managers can now have a clear vision and predict expected risks and reduce them. Therefore, external factors and expected project risks will no longer be as concerning as they were before for project managers; thanks to digital tools that help to track project results, in addition to visualizing the shape of information dashboards and improving innovation and setting performance indicators (KPIs) more clearly to take the necessary measures in projects before expected fluctuations occur. It has also contributed to improving the relationship with stakeholders and identifying and predicting customer needs and expectations better, which has contributed to improving competitive strength in the markets, increasing customer satisfaction, and gaining a sustainable competitive advantage. (Van Tonder et al., 2021)

### **Literature Review**

Mia et al. (2023) focused on measuring the impact of the application of international project management standards by small and medium-sized enterprises (SMEs) in the Syrian coast in achieving project quality as an indicator of competitive advantage. The study adopted a descriptive analytical approach to represent the study population, while the simple random sample of the study amounted to (113) project managers and owners. The questionnaire was distributed to service, industrial, and tourism projects, which were analyzed using the SPSS. The study reached a set of results, the most important of which were: The existence of a

strong and statistically significant positive relationship between international project management standards and the quality indicator of competitive advantage in small and medium-sized enterprises in the Syrian coast, The study also provided several recommendations, the most important of which were: The need to hold training courses and workshops for owners and managers of small and medium-sized enterprises on the tools and techniques of international project management standards to ensure the success of the project professionally.

On the other hand, Abugabel (2023) study examined the direct impact of digital transformation on sustainable development in private hospitals in the coastal governorates of Egypt, and to explore the mediating role of developing human resources management practices in this relationship. To answer the research problem, the study adopted a descriptive approach through a questionnaire developed for this purpose, with a sample size of (384) employees working at all administrative levels (senior, middle, and executive) in private hospitals in the coastal governorates of Egypt, which were analyzed using structural equation modeling (SEM). The study reached a set of results, the most important of which were: Digital transformation has a positive direct impact with statistical significance on sustainable development in private hospitals in the coastal governorates of Egypt, There is a direct impact of digital transformation on the development of human resources management practices (recruitment, selection, training, development, compensation system, and performance management), Developing human resources management practices plays a mediating role in the relationship between digital transformation and sustainability. The study also recommended the need to focus on digital transformation in hospitals to achieve sustainable development by building a clear and objective digital transformation strategy, providing the necessary needs for the transformation process (human resources, financial, and material), and providing support from senior management to support the digital transformation process.

In another study conducted by Zhang et al. (2023) in which they tried to verify the impact of digital transformation on project management to accurately map the scientific landscape of digital transformation and sustainability in the field of project management to achieve a smart and sustainable environment. The study adopted a qualitative approach by reviewing the existing literature on the exploitation of digital transformation and sustainability in project management. A bibliometric review was conducted using a scientific mapping approach. The study reached a set of conclusions, the most important of which were: There is an increasing interest in conducting research on the use of digital transformation in sustainability-based projects over the past few years, especially in developing countries, The cluster labels of the timeline citation map include digital technology, sustainability, sustainable innovation, sustainable projects, agile management, business integration, and stakeholder collaboration, The results obtained represent insightful accounts for both project managers and academics. They can enlighten project managers about renewing business models or designing digital strategies for sustainable projects.

The study by Van Tonder et al. (2021) aimed to determine whether business model innovation through digital transformation affects business performance and whether strategic renewal positively moderates the effect of business model innovation through digital transformation on business performance for small and medium-sized enterprises (SMEs) in South Africa and the Netherlands. The study adopted a quantitative approach through survey studies by conducting research on SMEs in South Africa and the Netherlands through an electronic questionnaire prepared for this purpose, with a sample size of (200) companies, which were

analyzed using the SPSS statistical package for the social sciences. The study reached a set of conclusions, the most important of which were: Business model innovation (BMI) through digital transformation has a positive impact on business performance, Strategic renewal as a mediating variable positively increases the effect of the relationship in SMEs in South Africa and the Netherlands.

### **Study Hypothesis**

Based on the question of the study and their objectives, the following hypothesis can be determined:

H: There is an impact of digital transformation in project management in the Royal Jordanian Geographic Center.

### **Methodology**

#### **- Sample and collect data**

The study population consisted of 35 employees working in the middle and upper management levels at the Royal Jordanian Geographic Center. Interviews were conducted with employees at the following administrative levels: project manager, department head, and directorate manager, in addition to reviewing the previous literature on the subject of the study.

### **Study Tool**

The interview was used as a tool for the study, and the following questions were adopted:

1. How can digital transformation improve project management at the Royal Jordanian Geographic Center?
2. What are some examples of how the Royal Jordanian Geographic Center is applying digital transformation to project management?
3. What skills should a successful project manager have within the context of digital transformation?
4. How can digital transformation help the Royal Jordanian Geographic Center achieve its strategic objectives?
5. What challenges may face project management at the Royal Jordanian Geographic Center when applying digital transformation?
6. What are some steps that the Royal Jordanian Geographic Center can take to mitigate these challenges?
7. What is your outlook for the future of project management in the digital world?

### **Discussion**

Digital transformation can improve project management at the Royal Jordanian Geographic Center in the following ways:

- Improved operations: Digital technologies can help improve the operational processes of project management, such as scope management, schedule management, quality management, and risk management. Project management tools can help improve project planning and tracking.
- Increased efficiency: Digital technologies can help increase the efficiency of project management, leading to improved cost, time, and quality. This is done by using artificial intelligence to analyze data and make decisions.

- Improved communication: Digital technologies can help improve communication between stakeholders, leading to improved collaboration, resource allocation, and decision-making. This is done by using social media tools to share information and documents between stakeholders.

The Royal Jordanian Geographic Center is implementing digital transformation in project management by:

- Using project management tools to improve project planning, tracking, and budgeting.
- Using project management tools to manage project resources and future project risks.

**Utilize digital technologies to improve collaboration and communication between project workers and stakeholders as well.**

A successful project manager needs to have a variety of skills, including:

- Technical skills: The project manager must be familiar with the digital technologies used in project management.
- Leadership skills: The project manager must be able to lead a team in a digital environment.
- Analytical skills: The project manager must be able to analyze digital data to make sound decisions.

Digital transformation also contributes to the achievement of the strategic objectives of the Royal Jordanian Geographic Center in many ways, including:

- Improved efficiency: Improving the operational efficiency of the Royal Jordanian Geographic Center, leading to improved cost and delivery time. This can be done by automating repetitive tasks, which can save time and resources.
- Increased innovation: Innovating new products and services through collecting and analyzing data to better understand customer needs.
- Improved customer service: Providing online customer service, making it easier for customers to get the services they need.

Project management at the Royal Jordanian Geographic Center faces the following challenges when implementing digital transformation:

- Technical challenges: The geographic center faces technical challenges in implementing digital technologies, such as incompatibility of systems or insufficient employee skills. For example, the difficulty of integrating different systems or training employees on new technologies.
- Cultural change challenges: The Royal Jordanian Geographic Center faces difficulty in changing the organizational culture to deal with digital technologies, such as resistance to change or distrust of new technologies. Some employees worry about losing their jobs due to digital transformation.
- Financial challenges: The cost of implementing digital technologies is high for the Royal Jordanian Geographic Center. The cost of purchasing and maintaining new systems and software is expensive.

The Royal Jordanian Geographic Center is taking several steps to mitigate these challenges, including:

- Good planning: Developing a digital transformation plan that takes into account potential challenges.
- Employee engagement: Engaging employees in the digital transformation process to reduce resistance to change. This includes creating workgroups with representatives from all departments to help develop a digital transformation plan.

- Training: Providing training for employees on how to use digital technologies.
- Continuous measurement and improvement: Measuring the progress of digital transformation and making necessary improvements.

The future of project management in the digital world is bright. Digital technologies will continue to evolve, which will open up new opportunities to improve project management in the future. These opportunities include:

- Artificial intelligence: Helping managers make more efficient decisions.
- Machine learning: Analyzing digital data and identifying future trends.
- Virtual reality: Improving communication and collaboration between project stakeholders.

### **Result**

Based on the answers to the above questions, we can draw the following conclusions about the impact of digital transformation on project management at the Royal Jordanian Geographic Center:

- Digital transformation at the Royal Jordanian Geographic Center is improving project management by reducing costs, defining the time required to complete a project, and improving project quality.
- Digital transformation at the Royal Jordanian Geographic Center is helping to improve operations, increase efficiency, and thus achieve project success.
- A successful project manager needs to possess a variety of skills, including technical, leadership, and analytical skills.
- Digital transformation is helping the Royal Jordanian Geographic Center achieve its strategic objectives, such as improving quality and efficiency, increasing innovation, and improving customer service.
- The Royal Jordanian Geographic Center faces some challenges in implementing digital transformation, such as technical challenges, difficulty in changing culture, and financial challenges.
- The Royal Jordanian Geographic Center is taking several steps to mitigate these challenges, such as good planning, employee engagement, and providing training.
- The future of project management in the digital world will be bright and distinctive as a result of the continuous development of digital technologies.

### **Recommendations**

- Develop a digital transformation plan, defining project goals, timeline, and budget.
- Involve stakeholders in the digital transformation process in project management to ensure success.
- Provide training for employees on how to use new digital technologies in project management.  
Continuously measure and improve the progress of digital transformation in project management.
- Conduct future studies on the impact of artificial intelligence in project management.

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