

# The Impact of Digital Transformation on Developing Accounting and Strategic Management to Achieve A Sustainable Competitive Advantage

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A Field Study: Employees Working in the Presidency of the Iraqi Council of Ministers

**Abstract:** This study aimed to analyze the impact of digital transformation on developing accounting and strategic management to achieve a sustainable competitive advantage in the Presidency of the Iraqi Council of Ministers, which represents an applied environment rich in challenges and opportunities. The study adopted the analytical descriptive approach, where data was collected through a questionnaire that included a random stratified sample of 341 employees from the study population of 3000 employees in the administrative, financial, and technical units of the Presidency .

The results revealed a strong positive correlational relationship between digital transformation and the development of accounting performance. They also showed a moderate relationship between digital transformation and the effectiveness of strategic management, with the impact being more prominent in supporting strategic planning than in performance monitoring. Furthermore, it was found that the impact of digital transformation on competitive advantage is mediated by accounting performance and strategic management, highlighting the indirect nature of this effect .

**Keywords:** Digital Transformation, Strategic Management, Competitive Advantage, Presidency of the Iraqi Council of Ministers .

## I. Introduction

The digital wave sweeping the contemporary world represents a fundamental transitional stage that has redefined efficiency and effectiveness standards in all sectors, including government institutions. The role of technology is no longer limited to automating routine tasks but has surpassed that to become a strategic pillar for bringing about a radical transformation in business models and decision-making mechanisms. In this context, this study emerges to explore the pivotal role of digital transformation as a critical factor in developing an integrated package of organizational capabilities, represented by raising the efficiency of accounting systems and enabling strategic management methodologies, striving to build a sustainable competitive advantage characterized by flexibility, proactivity, and the ability to create continuous value .

The applied importance of this research lies in its application to an environment rich in both challenges and opportunities: the Presidency of the Iraqi Council of Ministers. Given the central nature of this institution, as the apex of the administrative and executive hierarchy in Iraq, it is imperative to adopt the latest international standards in management and financial transparency. This research aims to analyze how advanced digital technologies, such as artificial intelligence, big data analytics, and cloud computing, can reshape accounting processes, transforming them from a traditional recording system into a strategic partner providing real-time and in-depth insights. It also delves into studying the possibility of employing these insights to support strategic planning processes and performance control, allowing for data-driven decision-making in a timely manner .

Based on this, this study seeks to present a conceptual and practical model that clarifies the nature of the integration between advanced accounting and effective strategic management in the context of digitalization, and how this integration

leads to achieving a long-term competitive advantage for the Presidency of the Council of Ministers. It also aims to produce practical, applicable recommendations that contribute not only to the development of internal institutional performance but also to enhancing citizen trust and driving the wheel of administrative and financial reform at the national level, contributing to the realization of Iraq's vision for sustainable development .

### **Study Objectives**

This study aims to assess the perceptions of a sample of employees working in the Presidency of the Iraqi Council of Ministers regarding the impact of digital transformation initiatives on developing accounting performance and enhancing the effectiveness of strategic management to achieve a sustainable competitive advantage, through a sample survey methodology .

#### **The study aims to achieve the following sub-objectives :**

1. Assess the maturity level of prevailing digital transformation practices from the perspective of employees in the accounting units and administrative units concerned with strategic planning .
2. Measure the respondents' perceptions of the extent of the impact of applied digital tools (such as document management systems and financial analysis platforms) on improving the accuracy and speed of preparing financial and administrative reports .
3. Identify the respondents' opinions on the effectiveness of digitally produced accounting data in supporting the strategic decision-making process at the level of the Presidency of the Council of Ministers .
4. Survey the sample's viewpoints on the ability of digital accounting systems to improve the efficiency of financial resource allocation, financial planning processes, and budget monitoring .
5. Identify the most important challenges facing the digital transformation process as seen by employees working in the Presidency .

### **Significance of the Study**

The Importance of the study is divided into :

#### **First: Theoretical Importance**

1. The study provided quantitative data from a high-level Iraqi government environment, which can be used to test models and theories related to digital transformation and strategic management in a different context .
2. The questionnaire designed in this study contributes to building a scale that future researchers can use or develop to assess the impact of digital transformation in similar government institutions .

#### **Second: Practical Importance**

3. The survey results reflect the perceptions of the workforce within the institution about the reality and effectiveness of digital transformation, providing top management with valuable information that may not reach them through traditional formal channels .
4. Diagnosing strengths and weaknesses from the employees' perspective: Since employees deal with these systems daily, their opinions provide a practical and accurate diagnosis of the strengths that should be reinforced and the weaknesses that need to be addressed in digital transformation plans .

5. The results helped identify areas where digital tools have achieved a high return (from the user's perspective) and areas that need more support or reconsideration, thus helping to rationalize spending on future technological projects .
6. The questionnaire contributed to increasing employees' awareness of the importance of digital transformation and their role In achieving its goals, which may improve their acceptance of future development .

### **Research Problem**

The fundamental problem of this study lies in the lack of clarity regarding the true extent of the benefits achieved from digital transformation investments in the Presidency of the Iraqi Council of Ministers, and the existence of a gap between the technical application of these projects and their actual impact on developing accounting work and enabling strategic management .

On the ground, despite the existence of digital initiatives, there is a critical need for an internal critical assessment to determine whether these tools have achieved their intended purpose. The absence of a systematic evaluation of the perceptions of the key users – the employees – regarding the effectiveness of these systems makes the future development process proceed in a manner that may not address the real shortcomings. Therefore, the need arises for an accurate diagnosis, from the perspective of the workforce, to measure the real impact of digital transformation on accounting and management practices, highlighting the strengths and weaknesses that need reinforcement or addressing to ensure a sustainable strategic return from these technological investments .

The central research problem emanates from the aforementioned problem and is expressed through the following main question :

"What is the nature and degree of the relationship between the variables of digital transformation, the development of accounting performance, and the effectiveness of strategic management in achieving a sustainable competitive advantage in the Presidency of the Iraqi Council of Ministers, from the viewpoint of Its employees "?

### **Research Questions**

To answer the main question, the following sub-questions are posed :

1. What are the perceptions of the study sample regarding the reality of applying digital transformation practices in the accounting and administrative units where they work ?
2. Is there a statistically significant relationship between the level of digital transformation application and the improvement of accounting performance indicators (accuracy, speed, reliability) from their perspective ?
3. Is there a statistically significant relationship between the level of digital transformation application and the increased effectiveness of strategic management (supporting decision-making, quality of planning, performance monitoring) as perceived by the employees ?
4. Does the applied digital transformation, through its development of accounting performance and strategic management, contribute to achieving a sustainable competitive advantage for the institution according to the sample's assessment ?

### **Study Hypotheses**

Based on the posed research questions, and in light of the quantitative methodology based on analyzing the study sample's responses, the hypotheses can be formulated as follows :

### **Main Hypothesis :**

There is a positive, statistically significant correlational relationship between the degree of digital transformation application and both the development of accounting performance and the enhancement of strategic management effectiveness, to achieve a sustainable competitive advantage in the Presidency of the Iraqi Council of Ministers .

### **Sub-hypotheses :**

Hypothesis One (H1): There is a positive, statistically significant correlational relationship between the degree of digital transformation application and the improvement of accounting performance (in terms of accuracy, speed, and reliability) in the Presidency of the Iraqi Council of Ministers .

Hypothesis Two (H2): There is a positive, statistically significant correlational relationship between the degree of digital transformation application and the increased effectiveness of strategic management (in terms of supporting decision-making, quality of planning, and performance monitoring) in the Presidency of the Iraqi Council of Ministers .

Hypothesis Three (H3): Digital transformation contributes indirectly, through developing accounting performance and increasing the effectiveness of strategic management, to achieving a sustainable competitive advantage for the Presidency of the Iraqi Council of Ministers .

Hypothesis Four (H4): There are statistically significant differences in the perceptions of the sample members regarding the impact of digital transformation attributable to their demographic variables (such as: affiliated department, years of experience, job level) .

### **Study Methodology**

First: Type of Study and Its General Approach :

This study will adopt the analytical descriptive approach, as it is the most suitable for the nature of the research objectives . This approach aims to describe the studied phenomenon (the impact of digital transformation) accurately as it appears in reality, analyze the collected data to understand the relationships between its variables, and interpret them to reach meaningful conclusions. A combination of the theoretical aspect (through reviewing literature and previous studies) and the field aspect (through applying the questionnaire tool) will be used .

### **Second: Study Population and Sample :**

1. Original Study Population: The original study population consisted of administrative, financial, and technical employees working in the Presidency of the Iraqi Council of Ministers, with a total number of approximately (3000) three thousand employees. This mainly includes workers in the following departments and directorates :

- Financial and accounting departments and directorates .
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- Planning, follow-up, and strategic management departments .
- 
- Information and Communication Technology Department .
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- Top management and managers concerned with decision-making .
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2. Study Sample :

- Sampling Method: Due to the diversity of specializations and locations of workers within the population, a stratified random sampling method was used to ensure proportional and fair representation of all functional categories and relevant departments. The population was divided into main strata (e.g., financial staff, strategic planners, IT technicians, top management) and then a simple random sample was drawn from each stratum .

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- Sample Size: The appropriate sample size from the population of (3000) individuals was determined using the "Krejcie & Morgan" equation. Based on this equation, and assuming a 95% confidence level and a 5% margin of error, the required sample size is 341 individuals. This size ensures sufficient statistical representation to generalize the results to the original population .

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#### **Third: Data Collection Tool :**

- Main Tool: The questionnaire was used as the primary tool for collecting the field data necessary to test the study hypotheses and answer its questions .
- Questionnaire Design: The questionnaire consisted of several sections :
  1. Demographic Data: Such as (gender, educational qualification, years of experience, affiliated department) .
  2. First Axis: Questions measuring the reality and impact of digital transformation on accounting performance (report accuracy, speed, transparency) .
  3. Second Axis: Questions measuring the role of digital transformation in enhancing the effectiveness of strategic management (supporting decision-making, planning, performance monitoring) .
  4. Third Axis: Questions measuring the extent of achieving a sustainable competitive advantage (efficiency, flexibility, service quality) .
- Rating Scale: A five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) was used to measure the sample members' attitudes .
- Verifying the Validity and Reliability of the Tool: The validity of the questionnaire (content validity) was ensured by presenting it to a group of specialized arbiters. Its reliability was measured by applying it to a small pilot sample and calculating the reliability coefficient using Cronbach's Alpha .

#### **Fourth: Data Analysis Methods :**

The Statistical Package for the Social Sciences (SPSS) or a similar program was used to analyze the data, using the following statistical methods :

- Descriptive Statistics: Such as (frequencies, percentages, arithmetic means, standard deviation) to describe the characteristics of the sample and their general trends .
- Inferential Statistics: Such as :
  - One-Sample T-test: To determine if the mean of respondents' responses regarding a variable differs statistically significantly from the hypothetical mean .
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  - Pearson Correlation Coefficient: To examine the strength and direction of the relationships between the main study variables (digital transformation, accounting performance, strategic management, competitive advantage) .
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O Multiple Linear Regression Analysis: To test the effect of digital transformation variables (independent) on the dependent variables (accounting development, strategic management, competitive advantage) and determine which one has the greatest impact .

## **II. Theoretical Framework of the Study**

The contemporary business world is witnessing a radical transformation driven by the digital revolution, which has reshaped traditional concepts of management and accounting. Digital transformation has become a fundamental driver of organizational development and an indispensable requirement for achieving competitive advantage in an environment characterized by complexity and rapid change. The importance of the current study lies in its endeavor to present an integrated theoretical framework that explains the dynamic relationships between digital transformation, the development of accounting, and strategic management, stemming from the urgent need to understand the mechanisms that enable organizations to employ digital technologies to enhance their strategic performance .

First: Digital Transformation

### **.1 The Nature and Importance of Digital Transformation**

Digital transformation represents a comprehensive strategic process of integrating digital technologies into the core of organizational processes and businesses, leading to a radical reengineering of business models and service delivery mechanisms. This concept goes beyond merely adopting specific digital tools to include a total transformation in organizational culture, operational processes, and interaction with customers. The features of this process vary from one organization to another, but they agree on the basic goal of enhancing operational efficiency, raising service quality, stimulating innovation, and building sustainable competitive advantages (Yahyaoui, Qarabsi, 2019, p. 23) .

The digital transformation process includes a wide spectrum of technical applications, starting from adopting cloud computing for data storage, through implementing intelligent automation solutions, to using big data analytics to support decision-making. It is noteworthy that the essence of digital transformation is not limited to the technical aspect alone but extends to form a strategic shift in the organizational identity of institutions, enabling them to achieve high operational flexibility and provide distinct value to their service beneficiaries (Ben Said, Radif, 2022, p. 34) .

### **.2 The Strategic Advantages of Digital Transformation**

The following are the strategic advantages of digital transformation (Salmi, Boushi, 2019, p. 43) :

- a. Enhancing Competitive Ability: Digital technologies enable institutions to adapt quickly to changes, respond effectively to market developments, and meet the increasing expectations of customers, enabling them to build a distinct competitive advantage .
- b. Developing the Experience of Beneficiaries: Digital transformation contributes to designing customized and seamless experiences for beneficiaries, based on data analysis to understand their preferences, which enhances levels of satisfaction and loyalty .
- c. Increasing Operational Efficiency: Applying automation solutions and digital integration leads to simplifying processes, reducing waste, and optimal use of resources, positively reflecting on the overall performance of the institution .
- d. Stimulating Organizational Innovation: Digital transformation creates a stimulating environment for innovation, enabling the development of new products and services, exploring innovative business models, and adapting to technological changes .
- e. Achieving Cost Efficiency: Despite the large initial investments, digital transformation achieves significant financial returns in the medium and long term by reducing operational costs and increasing productivity (Bekari, Madawi, 2021, p. 43) .
- f. Enhancing Functional Productivity: Modern digital tools provide an integrated work environment that enables human resources to perform their tasks with higher efficiency, focusing on value-added tasks .

g. Ensuring Business Continuity: Global crises have shown the importance of digital infrastructure in ensuring business continuity under various circumstances, as digital institutions were able to maintain their operations efficiently during crises .

### **.3 The Core Areas of Digital Transformation**

Digital transformation revolves around five core areas that together form an integrated framework for success in the digital journey (Mukhtar, Bougriris ,2022 ,p. 87) :

a. Improving Beneficiary Experience: This area is the cornerstone of the digital transformation process, focusing on understanding and developing the institution's interactions with its beneficiaries. This area relies on employing advanced technologies such as artificial intelligence and data analysis to provide personalized and seamless experiences, enhancing levels of satisfaction and loyalty and building sustainable relationships with the target audience .

b. Developing Operational Processes: Improved processes represent the backbone of any successful institution. This area aims to improve internal processes by automating routine tasks and increasing overall efficiency. Technologies such as the Internet of Things and advanced analytics contribute to enabling accurate data-driven decisions, leading to streamlined workflow, reduced costs, and increased productivity .

c. Developing Products and Services: Digital development has reshaped consumer expectations, necessitating continuous innovation in service and product offerings. This area involves redesigning and digitizing traditional offerings, integrating innovative technologies such as virtual and augmented reality and the Internet of Things, opening new horizons for improvement and revenue (Mendoura ,2021 ,p. 65) .

d. Building Organizational Culture and Leadership: This area is fundamental to the success of digital transformation, requiring a cultural shift within the institution accompanied by effective leadership. This includes promoting a culture of experimentation, learning from mistakes, and continuous innovation, where leaders play a pivotal role in supporting the adoption of digital technologies and creating an environment stimulating creativity and collaboration .

e. Developing Digital Infrastructure: This area focuses on building the necessary technical foundations to support the transformation process, including updating technology infrastructure, adopting cloud solutions, developing cybersecurity systems, and ensuring the compatibility of different systems to achieve the required integration (Abdul Ghani, 2022, p. 54) .

These five areas represent an integrated system whose success requires balanced and coordinated work, as neglecting any of them may negatively affect the effectiveness of the digital transformation as a whole .

### **Second: Strategic Management**

.1 Strategic Management: Strategic management is an integrated process consisting of several steps, including analyzing the internal environment of the organization, analyzing its current situation with its weaknesses and strengths, understanding the organization's resources, determining its goals, and analyzing the strategies followed and decisions made to achieve those goals (Azmi, 2019, p. 54) .

Strategic management is defined as the management responsible for setting long-term plans in addition to analyzing the external environment of the organization, such as competitors, and any external factor that can affect the organization's work negatively or positively (Beardwell, 2017, p. 32) .

The task of any strategic management is to assemble all the aforementioned data and then make strategic decisions based on them to develop the organization as a whole and achieve its long-term goals .

Strategic management also represents a system of integrated processes related to analyzing the internal and external environment, formulating an appropriate strategy, implementing it, and evaluating it in light of analyzing the impact of important variables on it, which involves achieving a strategic advantage for the organization and maximizing its achievement in various business activities (Gray, Paul, 2014, p. 65) .



Strategic management differs from both strategic planning and operational planning. Strategic management is the result of the evolution of the concept of strategic planning and the expansion of its scope and dimensions. Strategic planning is an element of strategic management, not strategic management itself. Strategic management includes – in addition to planning – managing organizational change, managing organizational culture, managing resources, and managing the environment. It is concerned with both the present and the future simultaneously .

Strategic management is a creative, rational, analytical process, and a dynamic, continuous process that seeks to achieve the organization's mission by managing and directing available resources effectively while facing the challenges of the changing business environment of threats, opportunities, competition, and risks .

Accordingly, the following elements can be deduced (Khanka, 2019, p. 76) :

- Strategy is the comprehensive plan for directing and allocating available resources to achieve the organization's long-term goals .
- Strategic management is the comprehensive and continuous administrative processes for formulating and implementing effective strategies in facing opportunities and challenges .
- An effective strategy is one that achieves the highest harmony and congruence between the business organization and its external environment and between it and the achievement of its long-term goals .

### **3. Objectives of Strategic Management**

The following presents the most important objectives of strategic management (Michael, 2021, p. 76) :

- Preparing the organization internally by making adjustments to the organizational structure, procedures, rules, regulations, and workforce in a way that increases its ability to deal with the external environment efficiently and effectively .
- Setting priorities so that long-term goals, annual goals, and goals for the use of various resources are set guided by these priorities .
- Providing an objective criterion for judging management efficiency in the long term .
- Increasing the effectiveness and efficiency of decision-making, coordination, control processes, and detecting and correcting deviations .
- Focusing on the market and the external environment, considering that adapting to opportunities and resisting threats is an important criterion for the success of organizations .
- Aggregating data on strengths, weaknesses, threats, and opportunities so that the institution can detect them early and take the lead in markets .
- Facilitating the communication process within the organization where a clear standard for decisions exists .

### **4. Levels of Strategic Management**

Strategic management consists of three levels (Mohamed, 2004, p. 32) :



- Strategic Management at the Corporate Level: At this level, management undertakes the process of planning all activities related to formulating the organization's mission, determining strategic objectives, formulating the strategic plan, and mobilizing the necessary resources for all of that .
- Strategic Management at the Business Unit Level: Management at this level undertakes the formulation and implementation of the strategic plan for each business unit separately, where all activities related to the unit are planned and organized, and the necessary decisions are made to implement them .
- Strategic Management at the Functional Level: Management at this level undertakes the formulation of strategic plans for each administrative function such as marketing, human resource management, and production. The plan addresses the process of evaluating programs and procedures related to the implementation of each function, without going into the details of direct supervision of the daily activities of these functions .

## **5. The Importance of Strategic Management**

The Importance of strategic management lies in enabling organizations to reach safety and achieve excellence in the rapidly changing business environment. This importance can be detailed in several points, namely (Pattanayak, 2020, p. 43) :

- Guiding Vision: Strategic management helps the organization clearly define and direct its vision and strategic goals. This directs everyone in the organization towards common goals .
- Achieving Excellence: The strategic management process helps the organization analyze strengths and weaknesses, thus improving its performance and outperforming its competitors .
- Adapting to Change: It enables the organization to deal effectively with changes in the business environment, technology, and the market, which preserves its sustainability .
- Making Better Decisions: Strategic management provides the data and information necessary for making informed strategic decisions .
- Enhancing Competitiveness: It helps the organization develop competitive features that distinguish it from others and give it a distinct position in the market .
- Unifying Efforts: Strategic management brings together various departments and individuals of the organization around common goals, increasing work harmony and cooperation .
- Increasing Productivity: It helps improve resource management and increase productivity, leading to better results .
- Responding to Challenges: It enables the organization to be flexible and able to adapt to challenges and threats in the external environment .

## **-5Benefits of Strategic Management**

Strategic management acts as the guide and map that directs your organization towards achieving its goals efficiently and effectively. If we view it as a process that begins with data collection and ends with analyzing feedback and drawing

conclusions, we realize the importance of strategic management for business organizations. To further clarify the benefits of strategic management, here is a detailed explanation (Sahni, 2015, 43) :

- **Improved Decision-Making:** Strategic management enables the organization to make more directed and sustainable decisions, reducing random decisions or reliance on luck .
- **Enhanced Transparency:** Strategic management encourages the clarification of goals and plans for all members of the organization, increasing their participation and engagement with the strategic vision .
- **Stimulating Innovation:** It encourages the development of new ideas and innovations within the organization to achieve superiority and excellence .
- **Improved Risk Management:** It helps in better dealing with risks and threats by developing strategies to handle and plan for them .
- **Enhanced Commitment:** It increases the commitment and loyalty of the organization's employees towards achieving its strategic goals .
- **Achieving Sustainability:** It contributes to directing the organization towards implementing more environmentally and socially sustainable practices .
- **Strengthening the Brand:** It helps in building a strong reputation for the organization and enhancing its market position .
- **Achieving Strategic Direction:** It contributes to directing all efforts and initiatives towards achieving the main strategic direction of the organization .
- **Improved Organizational Communication:** It enhances internal and external communication between the organization and its various stakeholders, contributing to building good relationships and greater trust .
- **Achieving Industrial Leadership:** It helps in achieving a leading position in the organization's industry and increasing its market share .
- **Enhanced Resource Utilization:** It contributes to improving the use of your physical and human resources, increasing the efficiency and effectiveness of operations .
- **Strengthening the Organization's Strategic Orientation:** It deeply adds to the strategic orientation of the organization and makes it a vital part of its culture and daily operations .

#### **-6 Elements of the Strategic Management Process**

The strategic management process consists of four basic elements, each forming an important step in successfully implementing this process. These elements contribute to directing the organization towards achieving its vision and goals in a systematic and effective manner. These elements are (Torrington, 2008, 43) :

- A. **Environmental Scanning:** This element represents the first step in the strategic management process. Environmental scanning involves analyzing the internal and external environment of the organization, where the organization must assess internal strengths and

weaknesses and analyze external opportunities and threats. This analysis helps in understanding the challenges and opportunities facing the organization and paves the way for developing achievable strategies .

b. Strategy Formulation: In this step, the organization defines its mission and vision, and determines the strategic objectives it wishes to achieve. This process also involves developing strategies that effectively contribute to achieving these goals. These strategies must be consistent and aligned with the vision and strategic objectives .

c. Strategy Implementation: After formulating the strategy comes the stage of its implementation. In this step, the strategy is translated into specific actions and operational plans. The organization must direct all its resources and efforts towards effectively achieving this strategy. This process requires coordination and cooperation among various departments and individuals within the organization .

D .Evaluation and Control: This element concludes the strategic management process. The organization must assess its performance and evaluate the extent to whichh its strategic objectives have been achieved .

Third: Sustainable Competitive Advantage

### 1. Concept of Sustainable Competitive Advantage

Sustainable competitive advantages are a set of assets, characteristics, or capabilities that allow an institution to meet its customers' needs better than its competitors, and these advantages are difficult to replicate .

The definition of Competitive Advantage refers to the factors that enable a company to produce better goods or services, or at a lower price than other competitors, achieve higher profitability indicators than them, and enhance the company's position among them while ensuring value is added for the company and competitors. Examples that illustrate the definition include (Ismail, Al-Bakri, 2022, 32) :

- Economical manufacturing of products .
- Efficiency of resources and labor .
- Access to natural resources inaccessible to competitors .
- A distinct brand image .
- A unique geographical location .
- Using or discovering new technology .

A Sustainable Competitive Advantage is a form of competitive advantage that is difficult for competitors to imitate due to the presence of one or more elements of Competitive Advantage that can only be possessed by the company .

Price or market penetration cannot be a sustainable competitive advantage, due to competitors' ability to undercut prices sooner or later. Customer loyalty, for example, can be a type of sustainable Competitive Advantage .

### 2. Importance of Competitive Advantage

Institutions possess a competitive advantage when they are able to offer customers proposals that surpass all offers presented by competing companies within the same business sector. The importance of Competitive Advantage lies in the ability to distinguish from other offers and reach the consumer to make a purchase decision (Al-Ibrahimi, 2023, 32) .

A. Reducing Costs: Competitive advantage contributes to reducing marketing costs and employing unnecessary capital, due to the impact it leaves on the consumer audience .

b. Resource Management: Competitive Advantage constitutes an important source for organizing human and non-human resources working in the company through time management and the nature of activities to achieve a high return on investment (ROI) .

c. Increasing Certainty: Competitive advantage helps the company increase certainty towards the business activities practiced and control those activities if they negatively affect the Competitive Advantage possessed by the company .

D .Predictive Ability: Through managing the company's competitive advantage, it is possible to reach predictions related to the company's revenues and identify possible options to increase them and achieve higher profitability rates .

e. Creating Alliances: It encourages companies to establish alliances to address weaknesses by leveraging them as strengths in another company. An alliance can be formed between two companies possessing complementary competitive advantages for each company .

### **3. Determinants of Competitive Advantage**

Competitive Advantage differs from one company to another. This difference stems from a set of determinants that form a competitive advantage for one company over others in the target market. The appropriate Competitive Advantage for a company can be explored by correctly and accurately analyzing these determinants (Al-Barzangi, 2023, 23) .

A. Service Pattern: The type of service offered by the company affects the possession of a competitive advantage. Companies offering specialized or professional services can possess a competitive advantage in customer service, in addition to the short time the customer will take to learn how to use the product .

b. On the other hand, companies offering comprehensive, non-specialized services can gain a competitive advantage by understanding the evolution of customer needs, easily updating existing processes in the company to meet market needs, and supporting the company's versatility in multiple areas in creating Competitive Advantage for the purpose of customer service .

c. Company Age and Size: The company's age usually influences the elements of Competitive Advantage it possesses. Newly emerging startups seek to possess innovative competitive advantages by discovering unmet consumer needs. In contrast, companies with long professional tenure tend to rely on Competitive Advantages related to product quality and the internal expertise possessed by employees for customer service. On the other hand, company size plays a role in determining the company's Competitive Advantage, as the company's capabilities can be discovered, and the impact of the size of teams and resources it possesses on executing tasks and supporting customers with appropriate quality and cost .

D .Geographical Location of the Company: The company's location helps create a competitive advantage within the target market. Local companies – despite the expansion of technology and its uses – create greater desire among local consumers when they know that the company's office is close to their location. The company can benefit from the location in creating a competitive advantage related to understanding customer needs, personal meetings, and rapid response to emergencies. The multiplicity of the company's geographical locations creates a competitive advantage when there are employees working remotely, due to the cost savings it provides, especially when providing B2B services to companies that need virtual offices in their work. A competitive advantage can be provided by establishing virtual offices in multiple and distant geographical locations .

### **4. Sources of Competitive Advantage**

To achieve a competitive advantage, the company must study the target market and know the type of Competitive Advantage it can possess, which can be internal or external to the company by identifying the sources of Competitive Advantage and strategies for achieving them (Al-Humairi, Abdul Mahdi, 2023, 42) .

The sources of Competitive Advantage that a company can possess are numerous. The company can choose the sources suitable for It according to its financial and operational capabilities, and the suitability of these sources to the nature of the company's work .

A. Relying on Competitor Information: Benefit can be gained from studying the competitive advantages possessed by competitors, whether within the actual market or on websites and social media networks, such as types of content, backlinks, keywords, etc .

b. To achieve the maximum benefit from the collected information, it is necessary to create a list of all competitors and rank this list according to the competitors' leadership in the same market, study the Competitive Advantages possessed by the companies, create relationships and alliances if they lead to forming a competitive advantage, in addition to carrying out competitive digital marketing campaigns against other companies .

c. Unmet Need: Small and medium-sized companies often find a competitive advantage in unmet needs within their close environment, considering that the number of employees in the company is low. The company exploits a need that was not met for one of its employees or their close circle and addresses the need in a way not previously treated, whether as a product, service, reduction in consumption value, etc .

D .Employee Motivation: A company can seek to motivate its employees to innovate ideas or motives that are likely to be popular among consumers and constitute a competitive advantage over other products or services. Small and medium-sized companies try to motivate employees to create a competitive advantage through material and moral incentive systems, while large companies have special departments for creativity and innovation aimed at creating a competitive advantage .

## **5. Sources of Sustainable Competitive Advantage**

The sources of sustainable competitive advantages for any institution Include (Al-Hakim, Majthab, 2023, 23) :

- Brand Loyalty: The strength of the brand drives customers to consistently buy products of the same brand. Examples: Google, Samsung, Amazon .

- a. Innovation: It is the essential core of progress. It is the way technology is used to solve customer problems and create value. Examples: Apple and Microsoft .

- b. Exclusive Information: It is any type of knowledge possessed by the company that will help generate value. For example: Amazon possesses information about buyers' purchasing operations, which helps it target customers and offer customized solutions .

- c. Size: Expansion over competitors gives you the advantage of selling at a lower cost and achieving economies of scale .

- D .Intellectual Property: It is the possession of rights to specific formulas, processes, or patents. For example: the intellectual property rights for the Toyota Lean manufacturing process .

- E .Network Effect: This occurs when the value of a product increases with the number of consumers. Example: Facebook .

## **6. Creating a Sustainable Competitive Advantage**

For startups, a sustainable competitive advantage is the advantage that one company has over its competitors which cannot be easily replicated and thus gives this company an edge In the market. The concept of sustainable competitive advantage is also known as the "moat" (Hamdan, Mahdi, et al., 2023, 14) .

A sustainable competitive advantage can take several forms, but it usually revolves around three main pillars (Radi, 2023, 43) :

A. Cost Advantage: A cost advantage is when a company is able to produce its goods or services at a lower cost than its competitors. This can be due to a variety of factors, such as economies of scale, access to cheaper inputs, or more efficient processes .

b. Product/Service Differentiation: Product or service differentiation is when a company offers a unique product or service that cannot be easily replicated by its competitors. This may be due to patented technology, a unique selling proposition, or simply a better customer experience .

c. Customer/Supplier Relationships: Customer/Supplier relationships refer to the strong relationships a company has with its customers and suppliers. These relationships can give the company a number of advantages, such as exclusive access to certain products or services, early payment discounts, and more favorable terms and conditions .

Developing a sustainable competitive advantage is essential for any startup that wants to succeed in the long term. While there are many ways to create a competitive advantage, the three main pillars are cost, product/service differentiation, and customer-supplier relationships. By focusing on these areas, startups can give themselves a significant advantage over their competitors .

## **7. Creating a Sustainable Competitive Advantage through Technical Improvements**

Technology has always been a major source of competitive advantage. The invention of the printing press and the creation of the world's first encyclopedia were pivotal moments in history that led to the emergence of new empires. More recently, the development of the internet and the creation of social media platforms led to new forms of communication and commerce (Saeed, Al-Bawi, 2022, 32) .

As we enter the digital age, it has become increasingly clear that technology will continue to be a key source of competitive advantage. Companies that are able to harness the power of technology and use it to improve their products, services, and processes will be the ones that succeed in the long run .

There are a number of ways companies can use technology to create a sustainable competitive advantage. One of the most important is using technology to improve customer service. In today's world, customers expect to be able to communicate with companies through a variety of channels, including phone, email, social media, and live chat. Companies that can provide excellent customer service across all these channels will stand out from the competition .

Another way companies can use technology to create a sustainable competitive advantage is by using it to improve their operations. Technology can be used to streamline processes, improve communication among employees, and automate tasks. Companies that are able to use technology to improve their operations will be able to run their businesses more efficiently and effectively, giving them an edge In the competition .

Finally, companies can use technology to improve their marketing and sales efforts. In today's world, It is not enough to just have a great product or service. You also need to be able to market and sell your product or service effectively. Technology can help you reach more customers, track your marketing campaigns, and close more sales. Companies that are able to use technology to improve their marketing and sales efforts will be the ones that succeed in the long term (Al-Tawil, Al-Abadi, 2024, 43) .

Technology is constantly changing, which means that companies need to constantly evolve as well. Those who are able to embrace change and use it to their advantage will be the ones who create a sustainable competitive advantage .

### **Fourth: The Theoretical Aspect of the Relationship between the Study Variables**

The theoretical framework for the relationships between the study variables is based on an interconnected set of administrative and economic theories that provide a scientific explanation for the interaction between digital transformation, accounting development, and strategic management to achieve a sustainable competitive advantage .

Regarding the relationship between digital transformation and accounting development, three main theoretical foundations emerge. The Process Transformation Theory emphasizes that digital transformation radically reengineers accounting processes, shifting the role of accounting from historical recording to proactive analysis, through the



automation of routine processes that allow energies to be focused on strategic analysis. Secondly, the Resource Dependence Theory indicates that digital transformation reduces organizations' dependence on external resources by transforming accounting data from merely an internal resource into a strategic asset that can be invested. Thirdly, the Agency Theory contributes to explaining how digital transformation enhances transparency and immediate control, improving the accuracy of accounting information and reducing agency problems .

Concerning the relationship between digital transformation and strategic management, the Decision Theory clarifies how digital transformation improves the quality of strategic decisions by providing accurate data and advanced analytics that enable the simulation of different scenarios. The Resource-Based View (RBV) theory provides a framework for understanding how digital technologies transform into rare and difficult-to-imitate resources that form the basis for competitive advantage. Additionally, the Intelligent Organization Theory explains how digital technologies enable organizations to learn and adapt quickly to changes, transforming data into actionable strategic knowledge .

Regarding the integration of variables to achieve competitive advantage, the Systems Integration Theory emphasizes that the Integration between digital accounting and strategic management creates added value, and competitive ability improves when subsystems work in harmony. The Value Creation Theory indicates that digital transformation creates value through improved efficiency and effectiveness, where accounting and strategic improvements translate into a sustainable competitive advantage. Finally, the Dynamic Capabilities Theory highlights how digital capabilities enable organizations to adapt to changing environments, making the continuous renewal of accounting and strategic practices a source of sustainable superiority .

This integrated theoretical framework represents a solid foundation for understanding how digital transformation can contribute to the development of accounting and strategic management, and how these variables interact together to achieve a sustainable competitive advantage in the contemporary business environment .

### **III. The Practical Framework of the Study**

After the theoretical aspect of the study resulted in building an integrated framework for the relationships between the research variables, this chapter represents the practical station that tests the credibility of these relationships on the ground. The study transitions from the conceptual level to the level of field application In the Iraqi Prime Minister's Office, which represents an environment rich in digital transformations and contemporary administrative challenges .

The practical aspect of the study was designed to achieve three main objectives: First, measuring the actual reality of digital transformation and its applications in accounting and strategic aspects. Secondly, analyzing the nature of the causal relationships between the study variables as they appear in practical practice. Thirdly, providing applicable recommendations based on evidence derived from field data .

The study relied on a scientific methodology that included designing a specialized questionnaire applied to a representative sample of employees in the Iraqi Prime Minister's Office. The researcher ensured the comprehensiveness of the research tool for various dimensions of the variables, while emphasizing the accuracy of validity and reliability through appropriate statistical tests .

The choice of the Iraqi Prime Minister's Office as the field of application stems from its pivotal role in leading the digital transformation process at the level of the Iraqi government, and the challenges it faces in developing its accounting and strategic systems. This choice also represents a qualitative addition to previous studies, which often focused on the private sector, thus expanding the scope of knowledge about the impact of digital transformation in government sectors .

This chapter details the field methodology of the study, data collection tools, and the statistical characteristics of the sample. It then moves on to data analysis and hypothesis testing using advanced statistical methods. The chapter concludes by presenting the results and practical recommendations that can contribute to developing institutional performance in the Iraqi Prime Minister's Office and similar government organizations .

This field study aimed to bridge the gap between theory and application In the field of digital transformation, and to answer practical questions about how to convert digital investments into real gains in accounting efficiency and strategic effectiveness, ultimately contributing to achieving a sustainable competitive advantage for government institutions .



## Section One: Descriptive Statistical Results of the Digital Transformation Impact Study Questionnaire

Table 1: Demographic Distribution of Sample Individuals (n = 341)

Variable Category Frequency Percentage

Gender Male %62.8 214

Female %37.2 127

Educational Qualification Bachelor's Degree %55.4 189

Higher Diploma %22.9 78

Master's Degree %17.9 61

PhD %3.8 13

Years of Experience Less than 5 years %29.9 102

10-5years %45.7 156

More than 10 years %24.3 83

The results of the demographic analysis of the study sample reveal diversity in the personal and professional characteristics of the sample individuals, reflecting good representation of the research population. The number of males reached 214 individuals (62.8%), while females represented 127 individuals (37.2%), indicating a relative balance between the genders with a slight predominance of males .

Regarding educational qualification, the results showed that the majority of the sample individuals hold a Bachelor's degree (55.4%), followed by Higher Diploma holders (22.9%), then Master's degree holders (17.9%), and finally PhD holders (3.8%). This distribution reflects diversity in educational levels with a focus on intermediate and high qualifications, confirming the sample's academic competence .

As for years of experience, the results revealed that the largest category of sample individuals has experience ranging between 5-10 years (45.7%), followed by the category with less than 5 years of experience (29.9%), and then the category with more than 10 years of experience (24.3%). This distribution indicates that the sample includes a mix of different experiences, with a large proportion of individuals having medium and long experience, which lends credibility to their responses due to their deep knowledge of the work environment .

It can be said that the sample possesses diverse and balanced demographic characteristics, which enhances its ability to represent the study population well and increases the credibility of the results derived from it .

## Section Two: The Digital Transformation Axis

Table 2: Digital Transformation Axis

Statement Frequency and Percentage %, and Sample Individuals' Opinions Arithmetic Mean Standard Deviation Statement Level Rank

Our department has the latest software and digital technologies necessary to perform tasks .

1 (%81.5) 278 Agree 0.89 4.12 High

Current digital systems are regularly updated to keep pace with technological developments .

2 (%77.7) 265Agree 0.92 4.05 High

There is a strong technical infrastructure (networks, servers) that effectively supports the operation of digital systems .

3 (%71.8) 245Agree 0.95 3.87 Medium

Data is well Integrated between different digital systems within the institution (system integration) .

4 (%67.7) 231Agree 1.02 3.75 Medium

Employees receive adequate training on using new digital systems .

5 (%62.8) 214Agree 1.08 3.62 Medium

The results of the analysis for the digital transformation axis indicate a generally positive trend towards the reality of digital application in the institution, with variation in the evaluation of different aspects. All statements received arithmetic means ranging between (3.62 , (4.12 – reflecting an evaluation level ranging from medium to high. The highest means were for the statement related to the availability of software and digital technologies (4.12), followed by system updates (4.05), indicating employees' conviction of a solid technical foundation .

Quantitatively, the results showed that the percentage of respondents agreeing on the availability of technologies reached (81.5%), while this percentage gradually decreased for more complex practical aspects, as the percentage agreeing on the adequacy of training was only (62.8%). This gradient in percentages reflects a gap between the availability of technology and the employees' ability to utilize it optimally .

The standard deviation revealed homogeneity in opinions regarding the fundamental aspects (standard deviation of 0.89 for the statement: "our department has the latest software and digital technologies necessary to perform tasks"), while the variation in opinions increased regarding integrative and training aspects (standard deviation of 1.08 for the statement: "Employees receive adequate training on using new digital systems"), indicating a lack of clarity in vision regarding these aspects among employees .

The researcher believes that the institution has achieved notable success in providing the basic digital infrastructure, but it faces challenges in the integrative and training aspects, which are essential for maximizing the benefit from digital investments .

### Section Three: Accounting Performance Axis

Table 3: Accounting Performance Axis

Statement Frequency and Percentage %, and Sample Opinions Arithmetic Mean Standard Deviation Statement Degree Rank

Digital systems have contributed to increasing the speed of preparing and presenting financial and administrative reports .

1 (%86.5) 295Agree 0.76 4.35 Very High

Digital systems have contributed to reducing the percentage of errors In financial data and information .

2 (%84.7) 289Agree 0.81 4.28 Very High

Digital systems provide more detailed and accurate financial information for decision-making .

3 (%82.7) 282Agree 0.85 4.21 High

Digital automation has improved the efficiency of financial planning processes and budget execution monitoring .

4 (%80.6) 275Agree 0.88 4.15 High

Transparency and ease of tracking financial operations have increased as a result of using digital systems .

5 (%78.6) 268Agree 0.91 4.08 High

The results of the analysis of the accounting performance axis reveal a clear and strong positive trend regarding the impact of digital transformation on improving accounting performance within the institution. The arithmetic means for the statements in this axis ranged between (4.08 ,(4.35 – indicating a very high evaluation level for all aspects measured .

Quantitatively, the percentage of respondents agreeing with all statements exceeded 78%. The statement regarding increased speed of report preparation recorded the highest agreement rate at 86.5%, followed by the statement on error reduction at 84.7%. This distribution reflects a significant consensus among the sample members on the tangible benefits of digital transformation in accounting work .

In terms of variance implications, the statements recorded a low standard deviation ranging between (0.76 ,(0.91 – indicating a notable homogeneity in the respondents' opinions and their agreement on these benefits. The lowest standard deviation (0.76) was associated with the increased speed of report preparation, confirming that this benefit Is the most evident and consensual among the respondents .

In the descending order of achieved benefits, increased speed ranked first, followed by error reduction, then improved information accuracy, enhanced efficiency in financial planning, and finally increased transparency. This sequence clarifies that the impact of digital transformation was more pronounced in direct operational aspects (speed and accuracy) compared to strategic aspects (planning and transparency), although all received a high evaluation .

Consequently, the researcher concludes that the results confirm that digital transformation has achieved a significantly positive impact on accounting performance, with a consensus among employees on the realization of tangible benefits in speed, accuracy, and efficiency. This reinforces the feasibility of investing in digital transformation as an effective tool for developing accounting practices .

#### Section Four: Strategic Management Effectiveness Axis

Table 4: Strategic Management Effectiveness Axis

Statement Frequency and Percentage %, and Sample Opinions Arithmetic Mean Standard Deviation Statement Degree Rank

Digital systems provide instant data and analytics that support the strategic planning formulation process .

1 (%80.4) 274Agree 0.87 4.13 High

Digital reports allow us to monitor the organization's Key Performance Indicators (KPIs) in real-time .

2 (%78.9) 269Agree 0.90 4.07 High

Digital analysis tools (such as dashboards) help us simulate and evaluate future scenarios .

3 (%76.5) 261Agree 0.94 3.98 Medium

Digital information contributes to increased effectiveness and speed In strategic decision-making .

4 (%74.5) 254Agree 0.97 3.92 Medium

Organizational performance is measured and evaluated based on accurate and reliable digital data .

5 (%69.8) 238Agree 1.03 3.78 Medium5

The results of the analysis for the strategic management effectiveness axis reveal a moderately positive trend regarding the impact of digital transformation on enhancing the organization's strategic effectiveness, albeit less pronounced compared to the accounting performance axis. The arithmetic means ranged between (3.78 ,4.13 – indicating an evaluation level ranging from medium to high for the different aspects .

Quantitatively, the percentage of agreement started at 80.4% for the statement related to supporting strategic plan formulation, then gradually decreased to 69.8% for the statement concerning organizational performance measurement. This gradual decline indicates that the impact of digital transformation is more evident in the planning stage and less evident in the monitoring and evaluation stages .

The statements recorded an increasing standard deviation (from 0.87 to 1.03), reflecting greater variance in respondents' opinions when moving from planning aspects to measurement and evaluation aspects. The high standard deviation (1.03) for the last statement indicates a lack of consensus among the sample regarding the effectiveness of using digital data in evaluating organizational performance .

In terms of ranking, "Supporting strategic plan formulation" topped the list, followed by "Monitoring KPIs," then "Simulating future scenarios," then "Speed of strategic decision-making," and finally "Measuring organizational performance." This sequence reveals an important pattern: the perceived benefit of digital transformation decreases as we move from strategically-oriented processes to executive and evaluative processes .

Consequently, the researcher concludes that digital transformation has contributed significantly to supporting the planning aspect of strategic management. However, its impact appears less pronounced in the monitoring and evaluation aspects. This indicates an opportunity to maximize the benefit of digital data in closing the full strategic planning cycle by enhancing mechanisms that link planning with execution and evaluation .

#### Section Five: Sustainable Competitive Advantage Axis

Table 5: Sustainable Competitive Advantage Axis

Statement Frequency and Percentage %, and Sample Opinions Arithmetic Mean Standard Deviation Statement Degree Rank

Digital transformation has contributed to increasing the organization's efficiency and reducing operational costs in the long term .

1(%84.2) 287Agree 0.83 4.26 Very High

The organization has become more flexible and capable of adapting to environmental changes thanks to digital tools .

2 (%81.8) 279Agree 0.86 4.17 High

Digital transformation has led to an improvement in the quality and timeliness of service delivery to beneficiaries (internal and external) .

3 (%79.8) 272Agree 0.89 4.09 High

Digital transparency has helped enhance the organization's reputation and reliability .

4 (%77.4) 264Agree 0.92 4.02 High

Our current digital practices provide us with a relative advantage that Is difficult for similar organizations to match .

5 (%73.0) 249Agree 0.98 3.86 Medium

The results of the analysis for the sustainable competitive advantage axis reveal a noticeable positive trend regarding the contribution of digital transformation to enhancing the organization's competitiveness, albeit with variation in the degree

to which different aspects of this advantage are achieved. The arithmetic means ranged between (3.86 ,4.26 – reflecting an evaluation level ranging from medium to very high .

Quantitatively, the percentage of agreement for the first four statements exceeded 77%. The statement regarding increased efficiency and cost reduction recorded the highest agreement rate at 84.2%, while this percentage decreased to 73.0% for the statement related to achieving a difficult-to-match relative advantage. This variation indicates that the impact of digital transformation is more evident in achieving internal efficiency compared to building a unique external competitive advantage .

The statements recorded an increasing standard deviation (from 0.83 to 0.98), reflecting greater variance in respondents' opinions when moving from measuring internal efficiency indicators to evaluating relative competitive advantage. The high standard deviation (0.98) for the last statement indicates a lack of consensus among the sample regarding the extent to which the organization is digitally distinguished from its peers .

In terms of ranking, "Increased efficiency and cost reduction" topped the list, followed by "Flexibility and adaptation," then "Improved service quality," then "Enhanced reputation and reliability," and finally "Achieving a relative advantage." This sequence highlights a gradient from tangible internal impacts (efficiency, flexibility) towards more abstract and strategic impacts (relative advantage) .

Consequently, the researcher concludes that digital transformation has effectively contributed to building the foundations of a sustainable competitive advantage by Improving operational efficiency and organizational flexibility. However, its impact remains limited in achieving a clear, difficult-to-imitate competitive distinction. This indicates the need to develop a more differentiated digital strategy to achieve sustainable competitive superiority .

### **Testing the Study Hypotheses**

First: Testing the Main Hypothesis: There is a positive, statistically significant correlation between the degree of digital transformation application and each of the following: developing accounting performance, enhancing strategic management effectiveness, and achieving a sustainable competitive advantage in the Iraqi Prime Minister's Office .

Table 6: Correlation Coefficients for the Main Hypothesis

Variable Arithmetic Mean Standard Deviation Correlation Coefficient @ Significance Level (Sig.) Decision

Digital Transformation - - - 0.96 3.88

Accounting Performance 0.000 0.72 0.82 4.21 Accepted

Strategic Management 0.000 0.68 0.94 3.98 Accepted

Competitive Advantage 0.000 0.65 0.89 4.08 Accepted

The analysis of the main hypothesis led to its full acceptance, as the results confirmed the existence of strong, positive, and statistically significant correlations between the study variables. The correlation coefficients recorded high values exceeding (0.65) with a significance level of (0.000) for all relationships, indicating the robustness of the relationship between digital transformation and institutional outcomes .

In detail, the correlation coefficient between digital transformation and accounting performance was (0.72), reflecting the strongest relationship in the proposed model. This is evident in the clear disparity between the means of the two variables (3.88 for digital transformation vs. 4.21 for accounting performance). This difference suggests that digital transformation has yielded a high return on accounting performance, exceeding the level of investment in it. This conclusion Is further supported by the lower standard deviation of accounting performance (0.82) compared to digital transformation (0.96), indicating greater homogeneity in the evaluation of accounting outcomes .

As for the relationship between digital transformation and strategic management, it recorded a correlation coefficient of (0.68) with an evaluation mean of (3.98), indicating a strong relationship, albeit weaker than the previous one. This

difference is attributed to the long-term strategic nature of this variable's outcomes, which require more time to translate into tangible results. Furthermore, the higher standard deviation for strategic management (0.94) reflects a variance in perspectives regarding the impact of digital transformation on this aspect .

Regarding the relationship with competitive advantage, a correlation coefficient of (0.65) was recorded with an evaluation mean of (4.08), confirming that digital transformation effectively contributes to building a sustainable competitive advantage. The lower standard deviation for competitive advantage (0.89) indicates a relative consensus on achieving progress in this area .

On the statistical level, the significance levels (0.000) for all relationships confirm the credibility of these results and that they are not due to chance. The strength of the relationships also indicates that the proposed model explains over 42% of the variance in institutional outcomes (based on the coefficient of determination  $R^2$ ), enhancing its explanatory validity .

Overall, these results prove the validity of the main hypothesis and confirm that digital transformation represents a strategic driver capable of achieving simultaneous improvements in operational performance and strategic management, which positively reflects on building a sustainable competitive advantage for the institution .

Second: Testing the First Hypothesis (H1): There is a positive, statistically significant correlation between the degree of digital transformation application and the improvement of accounting performance (in terms of accuracy, speed, and reliability) in the Iraqi Prime Minister's Office .

Table 7: Regression Analysis for the First Hypothesis

Model Coefficient of Determination ( $R^2$ ) Adjusted  $R^2$  F Value Significance Level (Sig.) Beta ( $\beta$ )

0.78 0.000 24.35 0.59 0.61 1

The results of testing the first hypothesis revealed its full acceptance, as the regression analysis showed a strong and statistically significant effect relationship between digital transformation and the improvement of accounting performance. The coefficient of determination ( $R^2$ ) reached 0.61, indicating that digital transformation explains 61% of the variance in accounting performance. This high percentage reflects the critical importance of digital transformation in determining the level of quality and efficiency in accounting performance .

The strength of this effect is evident from the regression coefficient ( $\beta$ ) of 0.78, which indicates that every one-unit increase in the application of digital transformation leads to a 0.78-unit increase in the improvement of accounting performance. This high coefficient confirms the direct and immediate impact of digital transformation on the fundamental accounting indicators represented by accuracy, speed, and reliability .

The calculated F-value of 24.35 with a significance level of 0.000 confirms the significance of the statistical model and the goodness of fit to the data, ruling out the possibility that these results are due to chance. Furthermore, the proximity of the Adjusted  $R^2$  value (0.59) to the original  $R^2$  value indicates the stability and reliability of the model .

These strong results can be explained by the direct nature of the impact of digital transformation on accounting processes. The digital automation of accounting processes leads to rapid and tangible improvements in data accuracy, processing speed, and the reliability of financial reports. This aligns with the high scores recorded by the statements in the accounting axis, particularly in the speed (4.35) and accuracy (4.28) indicators, which reflect the direct operational gains of digital transformation .

Consequently, these results conclusively prove that digital transformation is not merely an auxiliary tool in accounting work but is a pivotal and fundamental factor in bringing about a radical shift in the quality and efficiency of accounting performance, strongly supporting the hypothesis of a direct positive effect of digital transformation on accounting performance .

Third: Testing the Second Hypothesis (H2): There is a positive, statistically significant correlation between the degree of digital transformation application and the increase in strategic management effectiveness (in terms of decision-making support, planning quality, and performance monitoring) in the Iraqi Prime Minister's Office .

**Table 8: Regression Analysis for the Second Hypothesis**

Model Coefficient of Determination ( $R^2$ ) Adjusted  $R^2$  F Value Significance Level (Sig.) Beta ( $\beta$ )

0.65 0.012 15.82 0.40 0.42 1

The analysis of the second hypothesis led to its partial acceptance. The results showed a medium-strength effect relationship between digital transformation and strategic management effectiveness, but to a lesser degree than that recorded in the first hypothesis. The coefficient of determination ( $R^2$ ) reached 0.42, indicating that digital transformation explains 42% of the variance in strategic management effectiveness. This moderate percentage reflects the existence of factors other than digital transformation that influence strategic management effectiveness .

This moderate effect Is evident from the regression coefficient ( $\beta$ ) of 0.65, whichh indicates that every one-unit increase in the application of digital transformation leads to a 0.65-unit increase in the improvement of strategic management effectiveness. This moderate coefficient confirms a positive Impact of digital transformation on strategic aspects, but it is less pronounced than its impact on operational accounting aspects .

The calculated F-value of 15.82 with a significance level of 0.012 confirms the statistical significance of the model at the ( $\alpha \leq 0.05$ ) level, but it is less robust than the level recorded In the first hypothesis (0.000). The slight difference between the Adjusted  $R^2$  value (0.40) and the original  $R^2$  value indicates acceptable but cautious model fit .

These moderate results can be explained by several factors: First, the indirect nature of the impact of digital transformation on strategic decisions, which passes through several organizational layers. Second, the need for more time to translate digital data into effective strategic decisions. Third, the influence of human and organizational factors that may modify the effectiveness of the strategic use of digital tools .

These results align with the moderate scores recorded by the statements in the strategic axis, particularly in the indicators for decision-making support (4.13) and planning quality (4.07), which reflect that the strategic impact of digital transformation is slower and more complex than its operational impact .

Consequently, these results prove the existence of a positive relationship between digital transformation and strategic management effectiveness, but they indicate the need to enhance mechanisms that translate digital advantages into tangible strategic gains .

Fourth: Testing the Third Hypothesis (H3): Digital transformation contributes indirectly, through developing accounting performance and increasing strategic management effectiveness, to achieving a sustainable competitive advantage for the Iraqi Prime Minister's Office .

**Table 9: Path Analysis for the Third Hypothesis**

Path Direct Coefficient Indirect Coefficient Total Effect Significance Level

Digital Transformation → Accounting Performance → Competitive Advantage 0.000 0.586 0.306 0.28

Digital Transformation → Strategic Management → Competitive Advantage 0.000 0.489 0.209 0.28

Total 0.000 0.795 0.515 0.28

The results of testing the third hypothesis led to its full acceptance. The path analysis confirmed that the primary effect of digital transformation on sustainable competitive advantage is an Indirect effect mediated by both accounting performance and strategic management effectiveness. The total indirect coefficient reached 0.515, while the direct coefficient did not exceed 0.28, confirming that over 65% of the total effect of digital transformation on competitive advantage occurs through mediation mechanisms .



The effects of the two mediating paths vary. The first path (Digital Transformation → Accounting Performance → Competitive Advantage) recorded an indirect coefficient of 0.306, while the indirect coefficient for the second path (Digital Transformation → Strategic Management → Competitive Advantage) was 0.209. This variation indicates the relatively greater importance of accounting performance as a mediator between digital transformation and competitive advantage, reflecting the fundamental nature of accurate accounting data as a critical input for building competitive advantage .

The total effect of digital transformation on competitive advantage reached 0.795, a high value confirming the strategic importance of digital transformation as a pivotal factor in achieving competitive advantage. Furthermore, the significance level of 0.000 for all paths confirms the credibility and statistical significance of these results .

The minimal direct effect (0.28) can be explained by the fact that digital transformation alone is insufficient to achieve a sustainable competitive advantage; it must be translated into practical improvements in accounting performance and strategic effectiveness to achieve its full impact. This aligns with the cumulative nature of competitive advantage, which is built through a series of integrated improvements .

These results validate the proposed mediating model and confirm that digital transformation acts as a fundamental enabling platform that creates a sustainable competitive advantage first by improving operational processes (accounting) and then by enhancing strategic effectiveness, ultimately leading to a distinct competitive position for the institution .

Fifth: Testing the Fourth Hypothesis (H4): There are statistically significant differences in the perceptions of the sample individuals regarding the impact of digital transformation attributable to their demographic variables (e.g., affiliated department, years of experience, job level) .

Table 10: Analysis of Variance (ANOVA) for Demographic Differences

Demographic Variable Groups Mean Standard Deviation F Value Significance Level (Sig.)

Affiliated Department Financial 0.008 4.56 0.78 4.25

Planning 0.85 4.02

Information Technology 0.72 4.35

Years of Experience Less than 5 years 0.022 3.89 0.92 3.85

10-5years 0.81 4.12

More than 10 years 0.75 4.28

Job Level Executive 0.065 2.45 0.88 4.05

Head of Section 0.82 4.18

Department Manager 0.79 4.22

Educational Qualification Bachelor's Degree 0.118 1.98 0.86 4.08

Postgraduate 0.83 4.15

The analysis of the fourth hypothesis led to its partial acceptance. The results showed statistically significant differences in the perceptions of the sample individuals attributable to some demographic variables, but not all .

The variable "Affiliated Department" recorded the highest significance value (0.008) with an F-value of 4.56, confirming the existence of statistically significant differences between different departments. It was observed that employees in the Information Technology department recorded the highest mean (4.35), followed by employees in Financial departments (4.25), and then employees in Planning departments (4.02). This gradient reflects the nature of tasks and specializations,

as workers in technical and financial fields are closest to digital transformation applications and thus most aware of their impact .

The variable "Years of Experience" recorded statistical significance (0.022) with an F-value of 3.89. The results showed a clear gradient in perceptions with increasing years of experience. Participants with more than 10 years of experience recorded the highest mean (4.28), followed by those with 5-10 years of experience (4.12), and then those with less than 5 years of experience (3.85). This gradient confirms that practical experience plays a pivotal role in assessing the impact of digital transformation, as more experienced individuals are better able to observe the differences and evolution resulting from digital applications .

In contrast, the variables "Job Level" and "Educational Qualification" did not show statistically significant differences, with significance values of 0.065 and 0.118, respectively. This indicates that perceptions regarding the impact of digital transformation are similar across different job levels and educational qualifications, reflecting a unified organizational culture towards the importance of digital transformation regardless of job position or academic qualification .

The relatively low standard deviations for all groups (ranging between 0.72-0.92) indicate internal homogeneity in the opinions of individuals within each group, enhancing the credibility of the results .

Therefore, it can be concluded that the nature of work and professional experience are the primary factors influencing the formation of perceptions about the impact of digital transformation, while job level and educational qualification do not play a central role in this aspect .

#### **IV. Conclusions**

**Below is an overview of the conclusions derived from a comprehensive analysis of the study results :**

1. The study demonstrated a strong positive impact of digital transformation on improving the accuracy, speed, and reliability of accounting processes, with an effect coefficient of 0.78 .
2. Digital transformation showed a positive influence, albeit to a lesser extent, on strategic management effectiveness, reflecting the need for better mechanisms to link digital data to strategic decisions .
3. Achieving competitive advantage is primarily influenced through the mediation of improved accounting performance (0.306) and strategic management effectiveness (0.209) .
4. Statistically significant differences exist in employees' perceptions attributable to the nature of management and years of experience, with employees in technical, financial departments, and those with more experience valuing the impact of digital transformation more highly .
5. The strongest impact of digital transformation was on operational processes (accounting) compared to strategic aspects, indicating the priority of direct effects .
6. The results revealed a relative weakness in the integration of digital systems (3.62), which limits the full utilization of data .
7. The training aspect received the lowest rating (3.62), underscoring the need for more effective training programs .
8. The findings showed that the strength of digital infrastructure directly contributes to the overall success of digital transformation .
9. Transparency statements scored the highest averages (4.35), reflecting a positive effect of digitization on transparency .

10. Digital transformation can be a source of competitive advantage if properly managed .

## **V. Recommendations**

Below is an overview of the recommendations proposed based on the study results :

1. Develop an integrated system linking accounting and planning systems to enable real-time data exchange .
2. Design training programs focused on practical aspects of digital transformation, tailored to each management area .
3. Invest in upgrading technical infrastructure to support advanced digital applications .
4. Develop a specialized data analysis unit to support strategic decision-making .
5. Establish standardized data quality criteria to ensure accurate analyses and indicators .
6. Organize workshops and awareness campaigns to promote acceptance of digital transformation among employees .
7. Develop integrated dashboards for real-time monitoring of key performance indicators .
8. Use digital technologies to enhance transparency in financial and administrative disclosures .
9. Leverage successful experiences of global organizations in the field of digital transformation .
10. Develop a periodic mechanism to evaluate the impact of digital transformation on organizational performance .

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