



THE ROLE OF ACCOUNTING DIGITAL TRANSFORMATION IN REDUCING COSTS AND ITS IMPACT ON THE COMPANY'S PERFORMANCE: AN APPLIED STUDY

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Article history:	Abstract:
<p>Received: 28th May 2024 Accepted: 26th June 2024</p>	<p>The research purposes to identify the role of accounting digital transformation represented by (technologies, Process digitisation, databases, human resources) in reducing costs represented by (resource management, rationalization of losses, and continuous improvement) and its reflection on the company's performance represented in (employee satisfaction, improving productivity, and growth) among a sample of workers in the Kufa Cement Plant, and the research sought to address an important problem represented in What is the role of accounting digital transformation in reducing costs and its reflection on the performance of companies?, Aware of the basis of this adopted the research descriptive analytical approach in identifying and building variables, as the research adopted the questionnaire tool in collecting the data necessary to apply the variables at the Kufa Cement Factory and through that distributed (130) questionnaire to workers to measure the level of each variable of the research variables, and retrieved them (123) questionnaire, by (113) questionnaire valid for analysis, and (10) damaged questionnaires, To get the best results, the programme (SPSS&AMOS. V.28), and the research presented several results, foremost of which was the existence of an integrative role for the digital transformation of accounting in reducing costs and its reflection on the company's performance, and this in turn contributed to improving the capabilities of the research laboratory by focusing on the mechanisms of accounting digital transformation in determining its transactions in order to reduce costs and improve the performance of the laboratory, and accordingly the research recommended the need to adopt digital accounting systems that provide access to needed data and information anywhere, which reduces the costs of infrastructure, As well as the need to implement accounting analysis tools to extract valuable insights that improve financial performance and identify areas to improve the company's performance efficiently and effectively.</p>

Keywords: accounting digital transformation, cost reduction, company performance.

INTRODUCTION

Society in the current era is turning into a knowledge-based economy, as it requires high-level technological services and very advanced technologies resulting from advanced modern scientific discoveries (Matar & Al-Hamdani,2020:212), which requires the need to pay attention to human resources because the human element is the real resource for any production or service unit and the human being is the main factor in its success, but in the Gallic human character during the performance of the work entrusted to him is exposed to a set of errors (Salman et al., 2020:265), which led to the activation of research and studies aimed at forming and developing scientific principles and digital accounting systems to invest digital mechanisms that reduce these errors, which led to the emergence of accounting digital transformation, the main purpose of the accounting digital transformation is that the performance of a certain work is often accompanied by a waste rate, and the goal of each company or institution is to reduce the error rate, which directs it to digitization in the performance of its internal operations (Obaid, 2018:596).

Investing in mental and behavioral changes to bring about a drastic shift in the way that work is done is known as digital transformation. This is because it gives projects and businesses the chance to accomplish their objectives and realize their strategic visions in the shortest amount of time and money possible (Abbas et al.,2024:3), and digital transformation leads to a significant development in ability of projects, especially leadership in obtaining information and data, and the accounting system is one of the most important systems that have been introduced to the world of



digital development because of its great importance in projects as well as when It has a clear impact when adopting accounting digital transformation (Qarwash&Al-Sahli,2024:22). Hence, the research came to shack light on the role of accounting digital transformation in reducing costs and its reflection on the company's performance.

Part One: Research Methodology

First: Research Problem

In the era of advanced technology, the accounting digital transformation has an important role in influencing accounting work, as the accounting digital transformation represents one of the important foundations that improve the performance of companies by reducing costs, as the accounting digital transformation has a important influence on reducing the costs of purchasing raw materials and waste as a result, which facilitates the process of making decisions faster and the use of computer-based technologies in identifying available opportunities and saving costs to improve the performance of these companies, As well as providing transparent and high-quality accounting information.

Through the application of digital transformation techniques, companies can reduce costs related to accounting operations efficiently and effectively, and achieve effective benefits in order to meet the challenges that stand in front of the company in order to realize its objectives, the radical transformations in business environment prompted companies to use accounting digital transformation to resist change in the labor market, accounting digital transformation represents a powerful tool to enhance the efficiency of the company and reduce costs by developing the skills and capabilities of employees in the company and developing strategies that adopt and adapt to changes, Therefore, it is necessary to focus on explaining the role of digital transformation accounting on reducing costs and how it affects the company's performance, and from here the research problem can be formulated and this problem can be classified in an important question (What is the role of accounting digital transformation in reducing costs and its reflection on the company's performance at the Kufa Cement Plant?), and from this question several important questions stem:

1. What is the level of reliance of the research laboratory on accounting digital transformation techniques?.
2. What is the level of waste suffered by the factory, which pushes it to reduce costs as much as possible?.
3. What is the importance of applying accounting digital transformation in improving the company's performance by reducing costs?.
4. What is the nature of the relationship between accounting digital transformation, cost reduction, and company performance?.

Second: Importance of Research

The importance of research is highlighted because of the great role of digital transformation in keeping pace with rapid changes and technological developments, and its role in improving the efficiency of the company, reducing costs and enhancing its performance, and this transformation represents a deep understanding of how it affects the operational performance of the company, so studying the topic of the role of accounting digital transformation in reducing costs and its reflection on the company's performance is important to understand how to achieve large profits, The importance of the research topic also emerges in the following:

1. The importance of reducing costs and its reflection on the company's performance, which represents a key role in obtaining the largest market share in the target market.
2. Highlight the importance of accounting digital transformation in providing transparent and accurate data that carries predictive value that works to achieve employee satisfaction, improve productivity, and growth.
3. Facing the challenges faced by the company in light of the turbulent environment and rapid economic changes.

Third: Objectives of Research

The research seeks to achieve a major goal of identifying the role of accounting digital transformation in reducing costs and its reflection on the company's performance, and to achieve this goal, a set of sub-objectives can be achieved, which are as follows:

1. Identify the level of dependence of the research laboratory on the techniques of digital transformation accounting.
2. Determine the level of waste suffered by the factory, which pushes it to reduce costs as much as possible.
3. Measuring the level of importance of applying accounting digital transformation in improving the company's performance by reducing costs.
4. Identify the nature of the relationship between accounting digital transformation, cost reduction, and company performance.

Fourth: Research Model

Identifying the research problem and the goals that it seeks to achieve, and then highlighting the importance that it can add to the sample, requires building several hypotheses to achieve these goals and highlight this importance, and

Figure (1) clarified the research model through which variables can be identified that can benefit the company in reducing costs and improving its performance, as follows:

The independent variable: represented in **Accounting digital transformation**, and was measured through four dimensions "technologies, Process digitisation, databases, human resources" , and the scale was adopted "Abeer & Shaima, 2024" .

Dependent variables:

Cost reduction, measured based on three dimensions "resource management, rationalization of waste, continuous improvement" , and the research relied on a scale (Kholoud & Kholoud, 2023).

Company Performance: It was measured through three dimensions "employee satisfaction, productivity improvement, growth" , based on the scale "Mbore et al., 2019; Alkathiri et al.,2019" .

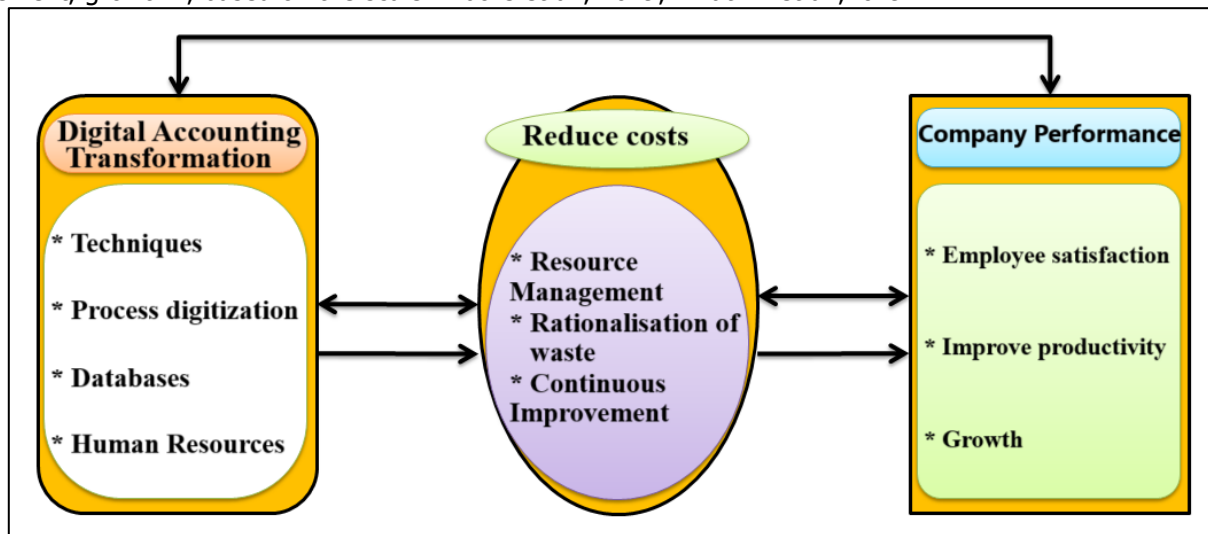


Figure 1 Research hypothesis scheme

Source: Researcher Preparation

Fifth: Research Hypotheses

H1: "There is a significant correlation between accounting digital transformation and cost reduction" , and several hypotheses branch out of it:

1. The existence of a significant correlation between the dimension of technologies and cost reduction in its dimensions "resource management, rationalization of losses, and continuous improvement"
2. The existence of a significant correlation between the dimension of digitization of operations and cost reduction in its dimensions "resource management, rationalization of waste, and continuous improvement"
3. The existence of a significant correlation between the dimension of databases and cost reduction in its dimensions "resource management, rationalization of losses, and continuous improvement"
4. The existence of a significant correlation between the dimension of human resources and cost reduction in its dimensions "resource management, rationalization of losses, and continuous improvement" .

H2: "The existence of a significant correlation between the accounting digital transformation and the company's performance" , and several hypotheses branch out of it:

1. The existence of a significant correlation between the dimension of technologies and the company's performance in its dimensions "employee satisfaction, productivity improvement, and growth"
2. The existence of a significant correlation between the digitisation of operations and the company's performance in its dimensions "employee satisfaction, productivity improvement, and growth"
3. The existence of a significant correlation between the dimension of databases and the performance of the company in its dimensions "employee satisfaction, improved productivity, and growth"
4. The existence of a significant correlation between the dimension of human resources and the performance of the company in its dimensions "employee satisfaction, improved productivity, and growth"

H3: The existence of a significant correlation between cost reduction and company performance, and several hypotheses branch:

1. The existence of a significant correlation between the dimension of resource management and the company's performance in its dimensions "employee satisfaction, improved productivity, and growth"



2. The existence of a significant correlation between the dimension of rationalization of losses and the performance of the company in its dimensions "employee satisfaction, improved productivity, and growth"

3. The existence of a significant correlation between the dimension of continuous improvement and the performance of the company in its dimensions "employee satisfaction, productivity improvement, and growth"

H4: The existence of a significant impact of the accounting digital transformation in reducing costs, and several hypotheses branch:

1. The existence of a significant impact of the dimension of technologies in reducing costs in its dimensions "resource management, rationalization of waste, and continuous improvement"

2. The existence of a significant impact of the dimension of Process digitisation in reducing costs in its dimensions "resource management, rationalization of losses, and continuous improvement"

3. The existence of a significant impact of the dimension of databases in reducing costs in its dimensions "resource management, rationalization of losses, and continuous improvement"

4. The existence of a significant impact of the dimension of human resources in reducing costs in its dimensions "resource management, rationalization of losses, and continuous improvement"

H5: The existence of a significant impact of cost reduction in the performance of the company, and several hypotheses branch:

1. The existence of a significant impact of the dimension of resource management on the performance of the company in its dimensions "employee satisfaction, improving productivity, and growth"

2. The existence of a significant impact of the dimension of rationalization of losses in the performance of the company in its dimensions "employee satisfaction, improved productivity, and growth"

3. The existence of a significant impact of the dimension of continuous improvement in the company's performance in its dimensions "employee satisfaction, productivity improvement, and growth"

H6: The existence of a significant impact of the accounting digital transformation in its dimensions "technologies, Process digitisation, databases, human resources" in reducing costs in its dimensions "resource management, rationalization of losses, and continuous improvement" and its reflection of the company's performance in its dimensions "employee satisfaction, productivity improvement, and growth"

Sixth: Research Sample

The research community was represented in the Kufa Cement Plant, while the research sample included workers in the Kufa Cement Plant, and accordingly it was distributed (130) questionnaire to workers to measure the level of each variable of the research variables, and retrieved from them (123) questionnaire, by (113) questionnaire valid for analysis, and (10) damaged questionnaires.

Part Two: Theoretical Framework

1. Accounting digital transformation

1.1 The Concept of Accounting digital transformation

Accounting digital transformation contributes to improving the efficiency and effectiveness of financial operations and enhancing the role of the accountant when making financial decisions, through the application of digital technology in preparing financial information and producing it in the form of high-quality reports in a short period of time, assisting in decision-making and comparing alternatives available by the owners of these projects (Begum, 2019:69). Ziadi & Felflan,2024:562) believes that digital transformation represents the process of employing information and communication technology in institutions and bodies in the government or private sector for the purpose of developing institutional performance and services, improving the efficiency of operational organizations, in addition to increasing their effectiveness and productivity, which contributes to the progress of productivity within the institution in all its departments and also in the institution's dealings with its customers and the public to improve services and facilitate access to them, which leads to saving time and effort from waste (Awad & Hamdy, 2024:110).

The transformation of institutions to digital has become the main trend within them, and it is a comprehensive management approach, and its application results in the development of institutions (Jöhnk,2020:5), and it was required as a result of the industrialized world's resort and transformation to the digital world, especially after the Corona virus pandemic, which accelerated the application of digital transformation as an urgent technological opportunity to manage the needs of institutions because the institution that does not keep pace with the new digital reality is unable to meet the challenges of the market. Information technology has increased the competitive advantage of various organizations in particular, organizations face a series of new digital challenges, such as cloud computing, mobile computing and artificial intelligence technology, and need to rethink their organizations and decision-making strategies to meet the new requirements of digitization and respond to digital transformation, which



is the backbone of technology infrastructure, and organizations need to understand the new and ever-changing requirements for successful digital transformation and achieve sustainable competitive advantage (Kraus&Schlegel, 2021:438).

Digital transformation has the potential to change the balance of competition between organisations because it directly affects the main structures of strategic management, and organisations can rely on many effective strategic options. Recent decades have seen the growth of digital capabilities to use electronic devices that help solve complex economic problems for all purposes in many areas of economic life (Kraus et al., 2022:10). Therefore, governments around the world have taken digital transformation as a strategic driver, using information technology and tools to improve service performance and consumer experience, and promote the development of organisational activities and processes to achieve strategic objectives (Magnusson et al., 2021:317).

From the above, it can be said that accounting digital transformation represents the process of adopting modern accounting technologies and activities with the aim of classifying them to improve the efficiency and accuracy of information, as well as automating and engineering the company's processes for analysing data and preparing relevant financial reports easily.

1.2 The Importance of Accounting digital transformation

Digital transformation in accounting eliminates the practice of repetitive manual work and its inefficient research implications, improves both the speed of completion of tasks and auditing, and reduces errors as much as possible (Mujiono,2021:1260), with the goal of growing the efficiency of the company's accounting processes. Digital transformation has become one of the main pillars for all institutions that aim to develop, improve their services and facilitate their access to beneficiaries (Chen et al.,2021:1030), as digital transformation does not only mean the application of technology within the institution, but it is a comprehensive program that touches the institution and touches the way and method of its work internally mainly and externally as well by providing services to the target audience to make services faster simpler and has become more important and urgent than ever before to transform accounting systems digitally (Nadkarni& Prügl,2021:233), The primary reason for this is the rapid advancement of information technology means and tools in all facets of life, including transactions with the public sector, the private sector, and individuals. Consequently, there is a clear imperative for institutions to enhance their services and make them accessible to all digital arts (Qarwash& Al-Sahli,2024:26).

1.3 Dimensions of Accounting digital transformation

Accounting digital transformation can be measured through several dimensions (Abeer & Shaima, 2024):

a. **Technologies:** It refers to the strategic roles of the digital technology pursued by the organisation in order to improve its ability to bring about change and enhance its capabilities in investing opportunities and addressing reports and financial breaches that can negatively affect the company (Otia & Bracci, 2022:253).

b. **Process digitisation:** Process digitisation is represented by defining and clarifying processes in the organisation in a way that gives them the opportunity to improve and raise their efficiency and allows time for creativity, continuous development and excellence (Abbas et al., 2024:418).

c. **Databases:** It represents one of the vital elements in the digital transformation process because of its effective role in improving the possibilities of using, analysing and classifying data for making decisions and making the right choice from a range of alternatives (Bresciani et al., 2021:205).

d. **Human resources:** Human resources are the main factor in achieving the desired goals of any organization, as they are the material transformation of resources into final products (Al-Qaragholy & Husein,2024:468; Daradkah et al.,2023:2618), The human factor is one of the basic dimensions of the success of any system, procedure or organization and consists of three main elements: competence, experience, training and previous digital experience (Martinidis et al.,2022:850), and the human factor is the main requirement for the application of digital transformation, by providing the human factor, qualified and well-trained cadres with basic capabilities, able to use and analyze data easily to process digital technology to make effective decisions and have the ability to communicate and the ability to create and innovate (Hien,2023:52).

2. Cost Reduction

2.1 The Concept of Cost Reduction

Cost is the economic sacrifice of a portion of an enterprise's resources, expressed in monetary or financial units, in order to obtain benefits and services whose use leads to the achievement of the objectives for which the enterprise was established, whether in exchange for monetary or financial spending or a future commitment (Nahal&Awaishiya, 2017:32). Therefore, if the establishment purchases raw materials, the price of these materials and what was spent on them until they reach the facility's warehouses is considered the cost. The same is the case with the purchase price of fixed assets, as it represents the amount paid or the amount of the cost obligation for these fixed assets and



when the assets are used in the enterprise's activity, and this use results in benefits and services for the enterprise. The depleted part of these assets is expressed in expenses, and therefore the raw materials used in production, wages paid to workers, and depreciation of various assets in production, all these elements are a depleted cost in the production process, as what results from this process, production, whether it is complete production or under operation, and then it is not called cost, but expense (Fakhr, 2014:16).

The process of reducing costs is one of the important tasks and the basis that business companies seek to excel in their management as it is one of the main pillars that definitively affect the returns and profits of the companies that achieve them, reducing costs is the responsibility of all departments and administrative units in the company, including employees within the company through the development of angel programs to reduce costs to the lowest possible level. This ultimately leads to an increase in profits (Popoola et al., 2024:1289), and noted that "Freimane et al., 2017:377; Wingerden et al., 2016:697" cost reduction is an important method used to lessen any added investment by the organization. refers to (Jünge et al., 2023:225) cost reduction as it expresses a planned and positive approach to improving efficiency, as well as eliminating waste, speeding up operations, and finding means and methods that would reduce the cost of one unit produced. said that reducing (Kurbatov et al. (2016:205) costs leads to an increase in the quantity in production by reducing the prices of one unit, which leads to an increase in the purchase of products by customers, and therefore the organisation resorts to producing as many products as possible preferred by customers, and this requires the organisation to make a change in production technology as a result of mass production. Increased focus on the use of inexpensive resources.

Bejjanki et al., 2018:611 argued that cost reduction is a key effort for organisations and decision-makers. Wallick et al., 2017:8 finds that cost reduction is a productive strategy in any investment environment. Serrano et al. (2017:2) believe that cost reduction is not a necessary or appropriate condition for maximising fair value but may lead to an increase in shareholder cash (which increases value) and risk (which reduces value), as a result of which cost reduction can increase risk and potentially destroy shareholder value. Wang & Wei, 2018:19-20 added that reducing costs is one of the strategic methods used to increase sales growth. Jia (2018:57) argues that cost reduction is the basic idea of agile management, as it maximises the use of every part of available resources, as the purpose of agile management is to reduce waste of productive materials.

From the above, it can be said that reducing costs is the result of the efforts made by employees and the company with the aim of reducing operational expenses without compromising the quality and efficiency of the products and services provided while ensuring improvement in operations and reducing waste in the use of resources.

2.2 The Importance of Cost Reduction

The measure of the success of any cost-reduction project is the amount of low cost unit of production or unit of work, ie the relative reduction of cost by raising production efficiency, which means either increasing the number of production units using the same resources or producing the same number and type of production units using less materials or cost or both together, and therefore cost reduction in the general sense is to reduce costs to the point beyond which they can not be controlled. The Cost Accounting Institute has defined the concept of cost reduction as achieving real and continuous savings in the unit cost of the manufactured goods or the service provided without affecting their suitability for the required use, as the definition refers to not exceeding the quality of the commodity in exchange for cost savings (Obaid, 2018: 600). The importance of cost reduction can also be identified in the following:

- a. Attracting customers by reducing product prices (Pagel, 2017:4; Qin, 2018:137).
- b. Contribute to competitive advantage (Gonçalves et al., 2018:378).
- c. Economic cost savings (Vatish et al., 2016:769).
- d. Cost reduction is more important than continuous access to accounting information (Bauer, 2017:8).
- e. Cost reduction is an important consideration for meeting customer needs (de Oliveira et al., 2016:36).
- f. Achieving Organizational Excellence (Burton et al., 2018:1029).

2.3 Dimensions of Cost Reduction

Cost reduction can be measured through several dimensions (Kholoud & Kholoud, 2023):

A. Resource management: The task of resource management is to receive, store and disburse materials, so it must be closely related to cost management, as cost management keeps the commodity inventory ledger in which the data of the receipt, disbursement and balances of materials is recorded, and warehouse management informs the cost management of what it receives from materials and what it disburses from them (Nahal&Awaishiya, 2017:37).

b. Rationalization of losses: that is, reducing waste of raw materials and processes used by the company in the production of its products, whether material, human or time resources, rationalization of losses works to analyze organizational activities and procedures in a way that contributes to identifying points that can be restructured and



improved and then raise the efficiency and performance of these activities and reduce costs as much as possible (Кубатко et al., 2021:77).

C. **Continuous improvement:** Continuous improvement (Kaizen) represents any continuous and gradual improvements to the production process, which is an approach used in the absence of the possibility of finding opportunities to make major innovations in the product, and continuous improvement means making improvements to reduce costs, and these improvements are usually by identifying a large number of small improvement opportunities that are paved for major improvements in the future, for example, Honda Motor uses Kaizen costs to help engineers implement improvements to product design. identified by workshop staff (Kholoud & Kholoud,2023:30).

3. Company Performance

3.1 The Concept of Company Performance

The company's performance is one of the important means used by the organization in order to achieve its goals that it seeks to achieve at the present time and in the future (Dobrin et al., 2012: 311), as the company's performance reflects the socially constructed concepts of organizational performance, which have become strongly organizational as legitimate aspects of achievement in organizational areas (Modell, 2019:428). and determined (Al Maani et al., 2020:501; Jadhav et al.,2015:217; Kajembe et al., 2016:26) that the performance of a company is indicative of the extent to which the organization's objectives are pursued and accomplished. Altanashat et al. (2019:1) believe that the performance of a company is indicative of the organization's capacity to assess the performance of its employees and mitigate the factors that contribute to their lack of proficiency. According to Esau (2016:686), the organization's performance encompasses all policies and legislation that regulate its operations, enhance its reputation, and facilitate its operations.

The organization's performance is the integrated system that governs its operations in relation to its internal and external environment, and it encompasses the performance of individuals within their respective organizational units (AlDeeb et al., 2019:141). claimed that (Alsharah et al., 2020:2) the company's performance is one of the creative methods and makes the organisation able to respond quickly to environmental changes and thus outperform its competitors. noted that (Tuama,2014:82) a company's performance is the result of both individual and organisational unit performance as well as the impacts of the social, economic and cultural environment.

Improving company performance reduces the double obsolescence of the organisation's internal processes (Efendic & Pugh, 2015:503), improves the growth and development of the organisation, promotes openness among employees towards developing their potential (Chaudhry et al., 2019:60), improves worker well-being (Novayanti et al., 2017:2), and improves eventual goal of management leadership (Jimad et al., 2020:23).

From the above, it can be said that the company's performance signifies extent of the success of Al-Shakra in achieving its goals using strategies that can achieve high revenues and profits while ensuring the efficiency of its internal operations.

3.2 The Importance of Improving Company Performance

The company's performance is of high importance to business organizations and this importance is reflected in a set of important points:

A. Strengthening the organization's link to the various stages of its life cycle, as the organization goes through a set of successive stages and goes beyond the stage of growth and progress to a more advanced stage, depending on the level of effectiveness and efficiency, and moves to the stage of emergence, then the stage of survival, then the stage of stability, then the stage of pride, then the stage of excellence, then the last stage, which is the stage of leadership, and these stages collectively express the elevation and excellence of the organization (Amina, 2017:32).

b. The need for organizations to interact with each other in order to achieve goals through outputs by providing services with a focus on the human resource that transforms resources into high-performance value outputs (Gerhart & Feng, 2021:1797).

c. Improving performance reports as they represent one of the management tools that are related to the lives of employees through the employee's career journey during the issuance of the employee's appointment decision until the issuance of the employee's service termination in the organization (Meijerink et al.,2022:171).

D. The performance of the company is of high importance in knowing the quality of high performance and in participating in decision-making and by which the organization makes sure that most of the employees have been treated fairly and objectively and have been working to help them equally and with equal performance, performance works on guidance, encouragement, organization and planning to raise the level of individuals working and reduce the weaknesses suffered by the organization (Nisar et al., 2021:1062).

3.3 Dimensions of Company Performance



The performance of the company can be measured done several dimensions "Mbore et al.,2019; Alkathiri et al.,2019"

- a. **Employee satisfaction:** A mix of emotional responses to differing expectations of what employees should and shouldn't get at work versus what they actually receive constitutes employee satisfaction (Chinomona & Mofokeng, 2018:649).
- b. **Productivity improvement:** Productivity represents the ratio of outputs to inputs, such as the number of services provided per unit cost or time, and productivity measures the efficiency of public organisations using their resources to produce services (Jamal, 2024:xii). Productivity improvement depends on exploring joint productivity opportunities in the organisation in order to bring about product developments (Abolhassani, 2017:1), as worker productivity represents the ratio between work done and the hours spent implementing FAO projects (Chaudhary et al., 2020:390).
- c. **Growth:** The growth rate is one of the important foundations in making managerial and financial choices in various companies (Paldor et al., 2016: 1), as the growth rate of the company contributes to a change in the skills and knowledge of the company, investing opportunities and avoiding the threats it faces (Nordholt et al., 2017: 2; Liu et al.,2017:199).

Part Three: Practical Aspect
First: Coding and Description of Variables

The importance of this paragraph is highlighted in introducing the reader, writers and researchers to the research variables and the results it provides by replacing these variables with a set of symbols to facilitate their analysis and interpretation with accuracy, transparency and objectivity, and Table (1) illustrates the coding of the research variables.

Table (1) Coding of Research Variables

Variables	Dimensions	Paragraphs	Code
Accounting digital transformation	Techniques	4	DTAT
	Process digitisation	4	DTAP
	Databases	3	DTAD
	Human Resources	3	DTAH
Reduce costs	Resource Management	5	CRRM
	Rationalisation of waste	5	CRWR
	Continuous Improvement	5	CRCI
Company Performance	Employee satisfaction	5	CPES
	Improve productivity	5	CPPI
	Growth	4	CPGR

Second: - Testing the Normal Distribution of the Study

The results of Table (2) indicate that the test of the normal distribution of the withdrawn data has been accepted, where the significant values of the two tests appear higher than (0.05). Thus, it can be concluded that the data studied meet the conditions for normal distribution, allowing the results of study to be generalised to community.

Table (2) Results of the normal distribution test for internal variables

	الابعاد									
	DTAT	DTAP	DTAD	DTAH	CRRM	CRWR	CRCI	CPES	CPPI	CPGR
Kolmogorov-Smirnov Z	0.264	0.28	0.361	0.277	0.215	0.240	0.213	0.096	0.180	0.110
	Accounting digital transformation				Reduce costs			Company Performance		
	0.235				0.244			0.110		
Sig.	0.161	0.208	0.225	0.177	0.154	0.132	0.127	0.081	0.088	0.077
	Accounting digital transformation				Reduce costs			Company Performance		
	0.167				0.174			0.151		

Third: - Testing the Stability and Reliability of the Measurement Tool

The stability of the measuring instrument is a common test, as it aims to measure the degree of homogeneity and stability of the extracted data. As for honesty, it refers to the reliability of respondents' answers to research questions.



One of the most prominent measures used in these tests is the Cronbach alpha coefficient, which requires the extracted values to be higher than (0.70) to classify the data as stable and reliable. Table (3) shows the Cronbach alpha coefficients for variables studied.

Table (3) Cronbach's Alpha Coefficients for the Input Variables

		Cronbach's Alpha	
DTAT1	0.780	0.817	0.845
DTAT2	0.833		
DTAT3	0.828		
DTAT4	0.909		
DTAP1	0.916	0.835	
DTAP2	0.844		
DTAP3	0.850		
DTAP4	0.766		
DTAD1	0.814	0.887	
DTAD2	0.864		
DTAD3	0.838		
DTAH1	0.844	0.881	
DTAH2	0.840		
DTAH3	0.812		
CRRM1	0.842	0.807	0.823
CRRM2	0.772		
CRRM3	0.766		
CRRM4	0.819		
CRRM5	0.791		
CRWR1	0.851	0.875	
CRWR2	0.807		
CRWR3	0.819		
CRWR4	0.824		
CRWR5	0.904		
CRCI1	0.864	0.829	
CRCI2	0.897		
CRCI3	0.836		
CRCI4	0.926		
CRCI5	0.784		
CPES1	0.900	0.923	0.901
CPES2	0.774		
CPES3	0.913		
CPES4	0.832		
CPES5	0.911		
CPPI1	0.905	0.876	
CPPI2	0.835		
CPPI3	0.920		
CPPI4	0.902		
CPPI5	0.870		
CPGR1	0.856	0.891	
CPGR2	0.860		
CPGR3	0.800		



CPGR4	0.909		
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The results of Table (3) indicate that measurement instrument is characterised by internal consistency and relative constancy because the research variables obtain stability values higher than (0.70) and by (0.845) for the accounting digital transformation variable, and (0.823) for the cost reduction variable, and (0.901) for the company's performance variable, and this shows the consensus of the research sample towards the questionnaire and that the paragraphs of the measurement tool explain what it was developed for.

Fourth: - Descriptive Statistics of the Data

The results of Table (4) indicate that the accounting digital transformation variable obtained an arithmetic mean of (3.95) with a standard deviation equal to (0.70), and this came as a result of the interest of the sample surveyed in the dimension of digitization of DTAP processes and contributed to achieving an arithmetic mean of (4.29) and a standard deviation of (0.56), and this represents a good indicator of the capabilities of the sample towards the use of digital devices in the performance of its daily and internal operations. While DTAH came after human resources in last place with an arithmetic mean of (3.80) and a standard deviation of (1.01), this indicates the investment of digital technologies in order to use and analyze accounting and financial reports faster, which improves the ability and ability of management to provide appropriate solutions at the right time and place, leading to the need to adopt digital accounting systems that provide access to the necessary data and information anywhere, which reduces infrastructure costs.

The results of Table (4) also showed that the cost reduction variable obtained an arithmetic mean of (4.00) with a standard deviation equal to (0.57), and this came as a result of the interest of the sample surveyed in the CRRM resource management dimension, which contributed to achieving an arithmetic mean of (4.21) and a standard deviation of (0.66), and this represents an indicator of the capabilities of the sample surveyed towards not depleting resources and using them in a way that enables the organization to achieve as high revenues as possible. While CRCI came in last place with an arithmetic mean of (3.72) and a standard deviation of (0.96), and this indicates a need to improve continuous improvement strategies within the organization, and this shows the laboratory's interest in improving the cash flow tool through the use of the best forecasting tools available in the labor market, which increases the transparency of financial operations and increases confidence among stakeholders.

It is also noted from the results of Table (4) that the company's performance variable obtained an arithmetic mean of (3.80) and a standard deviation equal to (0.38), and this came as a result of the interest of the sample surveyed in the CPGR growth dimension, which contributed to achieving an arithmetic mean of (3.93) and a standard deviation of (0.57), and this represents an indicator of the capabilities of the sample surveyed towards providing appropriate digital analysis tools that have a valuable vision about financial performance. Which contributes to making efficient and effective strategic decisions that achieve the required goals, and while CPES came after employee satisfaction in last place with an arithmetic mean of (3.69) and a standard deviation of (0.52), and this indicates a need to improve employee satisfaction levels and enhance the work environment by supporting the process of innovation and creativity by investing new horizons and vision for innovation in the provision and production of goods and services, Which gives a distinctive character to the factory's products and builds a positive reputation in the labour market.

Table (4) Analysis Descriptive

NO.	S.D	Mean	NO.	S.D	Mean	NO.	S.D	Mean
DTAT1	3.68	1.25	CRRM1	3.67	1.07	CPES1	3.67	1.25
DTAT2	3.46	1.26	CRRM2	3.81	0.99	CPES2	3.58	1.09
DTAT3	3.44	1.22	CRRM3	4.72	0.80	CPES3	4.04	0.74
DTAT4	4.72	0.80	CRRM4	4.56	0.84	CPES4	3.50	1.11
DTAT	3.83	0.92	CRRM5	4.29	0.85	CPES5	3.64	1.00
DTAP1	4.56	0.84	CRRM	4.21	0.66	CPES	3.69	0.52
DTAP2	4.29	0.85	CRWR1	4.00	0.60	CPPI1	3.86	1.10
DTAP3	4.00	0.60	CRWR2	3.85	0.97	CPPI2	3.95	1.27
DTAP4	4.33	1.06	CRWR3	4.35	0.99	CPPI3	3.78	1.12
DTAP	4.29	0.56	CRWR4	4.17	0.87	CPPI4	3.82	0.89
DTAD1	4.04	0.91	CRWR5	4.03	0.73	CPPI5	3.46	1.09
DTAD2	3.77	0.89	CRWR	4.08	0.51	CPPI	3.77	0.67
DTAD3	3.85	0.97	CRCI1	4.05	1.16	CPGR1	3.56	1.13
DTAD	3.88	0.83	CRCI2	3.88	1.04	CPGR2	4.26	0.86



DTAH1	3.72	1.08	CRCI3	3.58	0.92	CPGR3	3.73	1.17
DTAH2	3.92	1.17	CRCI4	3.50	1.13	CPGR4	4.17	1.02
DTAH3	3.77	1.10	CRCI5	3.61	1.15	CPGR	3.93	0.57
DTAH	3.80	1.01	CRCI	3.72	0.96	CP	3.80	0.38
DTA	3.95	0.70	CR	4.00	0.57			

Fifth:- Hypothesis Test

It is noted from the results of the table () that there is a strong correlation between the accounting digital transformation and cost reduction of (0.843) and this shows the validity of the first main hypothesis, and between the existence of a significant correlation between the accounting digital transformation and the company's performance by (0.647), and this shows the validity of the second main hypothesis, and between cost reduction and the company's performance by (0.643) and this shows the validity of the third main hypothesis, and this generated great interest among workers in the research laboratory towards improving the capabilities of workers in the use of digital transformation to reduce costs and improve the performance of Lab.

The findings in Table (5) also demonstrate a correlation between the research variables' dimensions, with the dimension of continuous improvement showing the highest correlation and the company's performance in its dimensions (growth, productivity improvement, and employee satisfaction) showing the lowest correlation, through (0.503), which is attributable to the first sub-hypothesis of the third main hypothesis, and the dimension of resource management showing the lowest correlation with the company's performance in its dimensions (growth, productivity improvement, and employee satisfaction), according to (0.811), hence the validity of the main hypothesis (H1, H2, H3).

Table (5) Research Hypotheses Test

Hypotheses	Sub-Hypotheses		Main Hypotheses
H1	1	0.609	0.843
	2	0.790	
	3	0.782	
	4	0.700	
H2	1	0.634	0.647
	2	0.644	
	3	0.642	
	4	0.754	
H3	1	0.503	0.643
	2	0.544	
	3	0.811	

Source: Output (SPSS. V.28)

H4: The existence of a significant impact of the accounting digital transformation in reducing costs.

The results of Table (6) indicate that there is a significant impact of the accounting digital transformation in reducing costs, and this means that the more the laboratory realizes the importance of applying the accounting digital transformation in its internal operations, the more this leads to reducing costs, meaning that further improving the capabilities of workers in the research laboratory towards accounting digital transformation by one unit leads to a cost reduction by (0.692), With a critical value of (16.476) and a standard error (0.042), this shows that the accounting digital transformation is an effective tool to achieve higher financial efficiency in industrial enterprises, and with a comparative degree (F) calculated equal to (271.619), which is higher than the tabular value.

The fourth main hypothesis (H4) is supported by Table (6), which also demonstrates how the accounting digital transformation influences the interpretation of (0.710) of the cost reduction variation.

The results also indicate that there is an impact on the dimensions of the accounting digital transformation in reducing costs, as the highest weight in the impact of the digitization of processes in reducing costs in its dimensions (resource management, rationalization of losses, and continuous improvement), and means that increasing the dimension of digitization of operations by one unit leads to cost reduction by (0.809), and with a critical value (13.483) and standard error (0.060), on the other hand, the lowest standard weight in the impact of the dimension of technologies in reducing costs in their dimensions (resource management, Rationalization of losses, and continuous improvement),



which means that increasing the dimension of technologies by one unit leads to cost reductions by (0.380), critical value (8.085) and standard error (0.047), and this shows the laboratory's focus on investing digital technologies in order to use and analyze accounting and financial reports faster, which improves the ability and ability of management to provide appropriate solutions at the right time and place.

With a comparative degree (F) calculated equal to (184.558), which is higher than the tabular value, Table (6) further demonstrates how the dimensions of the accounting digital transformation contributed to the interpretation of (0.624) of the variation in cost reduction in its dimensions (resource management, rationalization of losses, and continuous improvement). As a result, the validity of the sub-hypotheses can be accepted.

H5: The existence of a significant impact of cost reduction in the performance of the company.

The results of Table (6) indicate that there is a significant impact of cost reduction in the company's performance, and this means that the more the factory realizes the importance of reducing costs in its production dealings, the more this leads to an improvement in the company's performance, meaning that further improving the capabilities of workers in the research laboratory towards reducing costs by one unit leads to improving the company's performance by (0.822). With a critical value of (14.172) and a standard error (0.058), this shows that cost reduction is an effective tool to achieve outstanding performance of the plant, and with a comparative degree (F) calculated equal to (170.293), which is higher than the tabular value, as Table (6) indicates that cost reduction contributes to the explanation of (0.413) of the variation in the company's performance, and this shows the validity of the fourth main hypothesis (H5).

The results also indicate that there is an impact on the dimensions of cost reduction in the company's performance, as it represents the highest weight in the impact after rationalizing losses in the company's performance in its dimensions, and means that reducing after rationalizing losses by one unit leads to improving the company's performance by (0.821), and a critical value (12.074) and standard error (0.068), on the other hand, it represents the lowest standard weight in the impact after continuous improvement in the company's performance in its dimensions, which means that increasing the dimension of continuous improvement by one unit leads to improving the company's performance by (0.527), with a critical value of (14.243) and standard error (0.037), and this shows the laboratory's interest in investing in digital transformation technologies in order to ensure the reduction of human errors, which leads to increasing the accuracy and reliability of productivity and data used in the internal operations of the plant.

Table (6) also shows that the cost reduction contributes to the explanation of (0.658) of the variation in the company's performance, and with a comparative degree (F) calculated equal to (194.671), which is higher than the tabular value, and thus the validity of the sub-hypotheses can be accepted.

Table (6) Final Results of Testing the Fourth and Fifth Hypotheses

P	F	(R ²)	C.R.	S.E.	Estimate	Path			Hypotheses
						CR	<---	DTA	
0.001	271.619	0.710	16.476	0.042	0.692	CR	<---	DTA	
0.001	184.558	0.624	8.085	0.047	0.380	CR	<---	DTAT	1
0.001			13.483	0.060	0.809	CR	<---	DTAP	2
0.001			13.220	0.041	0.542	CR	<---	DTAD	3
0.001			10.256	0.039	0.400	CR	<---	DTAH	4
0.001	170.293	0.413	14.172	0.058	0.822	CP	<---	CR	
0.001	194.671	0.658	12.340	0.047	0.580	CP	<---	CRRM	1
0.001			12.074	0.068	0.821	CP	<---	CRWR	2
0.001			14.243	0.037	0.527	CP	<---	CRCI	3

H6: The existence of a significant impact of the accounting digital transformation in its dimensions "technologies, Process digitisation, databases, human resources" in reducing costs in its dimensions "resource management, rationalization of losses, and continuous improvement" and its reflection of the company's performance in its dimensions "employee satisfaction, productivity improvement, and growth"

To test this hypothesis, a structural model was built that shows the nature and type of relationship between accounting digital transformation, cost reduction and company performance, as Figure (2) adopts clarifying the structural structure of the overall impact of accounting digital transformation in reducing costs and its reflection on the company's performance, as Table (7) shows that the more the research laboratory realizes the importance of applying the accounting digital transformation, the better the efficiency of the laboratory in reducing costs, and this in turn leads to improving the company's performance. In other words, increasing the accounting digital transformation by one unit leads to reducing costs and improving the company's performance by one standard weight of (0.680) and

a critical value of (24.286) and a standard error (0.028), which means that the research laboratory realizes the importance of applying the mechanisms of accounting digital transformation in order to ensure cost reduction and improve the company's performance, and this in turn shows the existence of an integrative role for the accounting digital transformation in reducing costs and its reflection on the company's performance. This, in turn, contributed to improving the capabilities of the research laboratory by focusing on the mechanisms of accounting digital transformation in determining its transactions in order to reduce costs and improve the performance of the laboratory. Table (7) also shows that accounting digital transformation contributes to the interpretation of the amount of (0.463) of the variation in cost reduction and its reflection on the company's performance, while the remaining value is due to factors not included in the study, hence the validity of the sixth main hypothesis can be accepted.

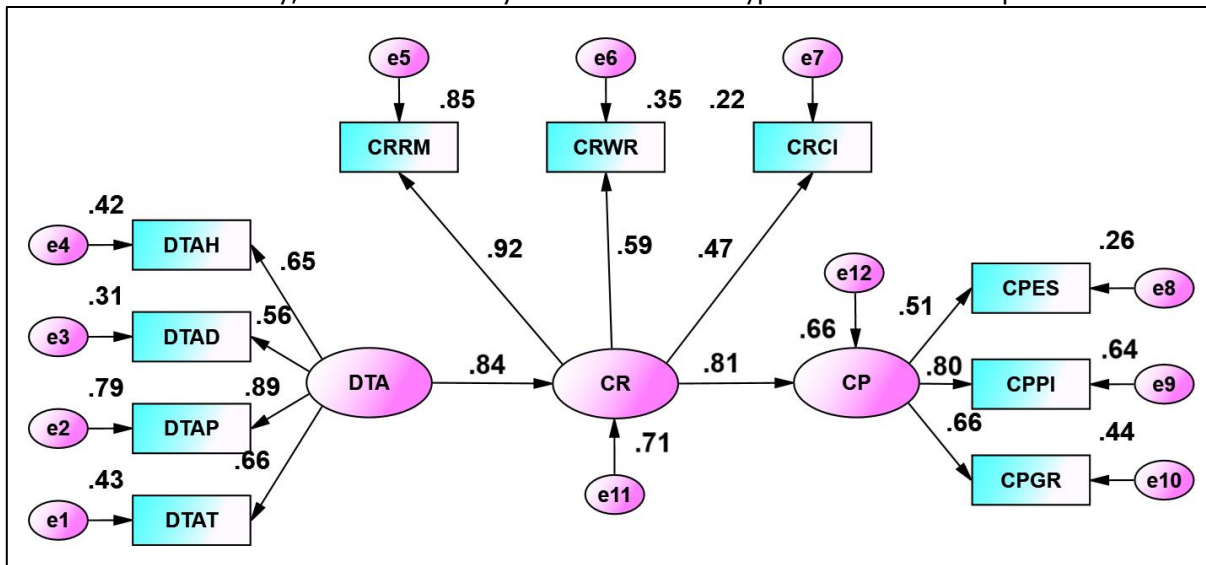


Figure (2) Structural Model of the Impact of Accounting digital transformation on Reducing Costs and Its Reflection on Company Performance

Table (7) Final Results of the Impact of Accounting digital transformation on Reducing Costs and Its Reflection on Company Performance

Hypotheses	Path		Estimate	S.E.	C.R.	(R ²)	P
H6	DTA	<--- CR <--- CP	0.680	0.028	24.286	0.463	0.001

Part Four: Conclusions and Recommendations

First: Conclusions

1. The existence of an integrated role for the accounting digital transformation in reducing costs and its reflection on the company's performance, and this in turn contributed to improving the capabilities of the research laboratory by focusing on the mechanisms of accounting digital transformation in determining its transactions in order to reduce costs and improve the performance of the laboratory.
2. The laboratory is keen to improve its operational efficiency by automating procedural tasks and reducing waste and time spent in completing accounting operations.
3. The laboratory's interest in investing in digital transformation techniques in order to ensure the reduction of human errors, which leads to increasing the accuracy and reliability of productivity and data used in the internal operations of the laboratory.
4. The laboratory's focus on reducing the need for human and material resources and resources by focusing on digitization and databases to ensure employee satisfaction, improve productivity and continue to grow and develop in a way that leads to improving the company's performance.
5. The laboratory is keen to provide appropriate digital analysis tools that have a valuable vision about financial performance, which contributes to making efficient and effective strategic decisions that achieve the required goals.
6. The lab focuses on investing in digital technologies in order to use and analyse accounting and financial reports faster, which improves the ability and capability of management to provide appropriate solutions at the right time and place.



7. The laboratory is interested in improving the cash flow tool through the use of the best forecasting tools available in the labour market, which increases the transparency of financial operations and increases confidence among stakeholders.

8. The laboratory focuses on supporting the process of innovation and creativity by investing in new horizons and vision for innovation in the provision and production of goods and services, which gives a distinctive character to the factory's products and builds a positive reputation in the labour market.

Second: Recommendations

1. The need to adopt digital accounting systems that provide access to the necessary data and information anywhere, which reduces infrastructure costs.

2. The need to implement accounting analysis tools to extract valuable insights that improve financial performance and identify areas to improve the company's performance efficiently and effectively.

3. A unified digital system should be developed to achieve the integration of accounting systems in the research laboratory with other business systems to ensure the accuracy and integrity of the information and data used.

4. The need to evaluate monetary performance periodically complete use of digital accounting analysis to make appropriate improvements and increase financial transparency, which contributes to making good decisions.

5. The need to apply digital billing systems in order to ensure the achievement of a desired level of reducing costs related to analyzing accounting data and anticipating trends, which helps to reduce costs and improve performance.

6. Big data analysis techniques should be used accurately in order to reduce waste and improve the efficiency of laboratory performance.

7. The need to provide continuous training programs for employees to use modern technologies, which enhances the skills and capabilities of workers in a way that leads to improving overall performance and improving the effectiveness of laboratory productivity.

8. Accounting digital transformation should be used to improve the customer experience of the products provided by the laboratory through the introduction of process automation and engineering, which increases the factory's revenues and reduces costs.

REFERENCES

1. Abbas, A.S, Al-Abbasi, E & Jad, M, 2024, The role of digital transformation in developing the management of educational institutions, *Journal of the Faculty of Education, University of Bou Said*, Issue 47.
2. Abbas, Z. M., Jasim, S. A., & Alguraibawi, M. (2024, March). Investment of spiritual marketing in support of sustainable development: An applied study of opinions of a sample of employees at technical institute of dewaniya. In *AIP Conference Proceedings* (Vol. 3092, No. 1). AIP Publishing.
3. Abeer, H & Shaima, B, 2024, The impact of digital transformation on innovation and institutional performance: a case study, Master's thesis, University of Martyr Sheikh Al-Arabi Al-Tabasi, Faculty of Economics, Business and Management Sciences.
4. Abolhassani, A. (2017). *Developing Statistical Models to Assess Productivity in the Automotive Manufacturing Sector*.
5. Al Maani, A. I., Al Adwan, A., Areiqat, A. Y., Zamil, A. M., & Salameh, A. A. (2020). Level of administrative empowerment at private institution and its impact on institutional performance: a case study. *Entrepreneurship and Sustainability Issues*, 8(2), 500.
6. AlDeeb, H., Al Samman, A., & Ali, D. A. (2019). Total Quality Management Approach and how it Affects the Institutional Performance a Case Study from the Kingdom of Bahrain. *International Journal of Social and Administrative Sciences*, 4(2), 141-154.
7. Alkathiri, M. A. M., Othman, K. B., & Mahyuddin, M. K. B. (2019). Strategic Planning Activity On Institutional Performance Through Knowledge Management And Training In The Office Of The Minister Of State And The Governor Of Dhofar. *International E-Journal of Advances in Social Sciences*, 5(14), 1080-1096.
8. Al-Qaragholy, S & Husein, H, 2024, The role of digital transformation in promoting proactive behavior: An Analytical Study, *Journal of Business Economics for Applied Research*, Volume (6), Issue (1), Part (1), 459-478.
9. Alsharah, A. M. T. (2020). Impact of Strategic Agility Determinants and Dimensions on Institutional Performance Excellence in Government Institutions in the Hashemite Kingdom of Jordan. *International Journal of Business Administration*, 11(5).
10. Altanashat, M., Al Dubai, M., & Alhety, S. (2019). The impact of enterprise risk management on institutional performance in Jordanian public shareholding companies. *Journal of Business and Retail Management Research*, 13(3).



11. Amina, H, 2017 AD "Organizational culture and its impact on job performance: a field study of the Mother and Child Hospital in Djelfa" Master's thesis in Political Science, specialization in Human Resources Management.
12. Awad, N & Hamdy, M, 2024, Digital transformation and its impact on journalistic institutions, *Humanities Journal*, Issue 62.
13. Bauer, K. (2017). Is financial reporting in the SME sector moving towards transparency? The evidence from Poland. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie*, (10 (958)), 5-20.
14. Begum, D. (2019). Digital transformation of accounting in India. *Emperor International Journal of Finance and Management Research*, 5(10).
15. Bejjanki, H., Mramba, L. K., Beal, S. G., Radhakrishnan, N., Bishnoi, R., Shah, C., ... & Rand, K. (2018). The role of a best practice alert in the electronic medical record in reducing repetitive lab tests. *ClinicoEconomics and outcomes research: CEOR*, 10, 611-618.
16. Bresciani, S., Huarng, K. H., Malhotra, A., & Ferraris, A. (2021). Digital transformation as a springboard for product, process and business model innovation. *Journal of Business Research*, 128, 204-210.
17. Burton, R. A., Lallemand, N. M., Peters, R. A., & Zuckerman, S. (2018). Characteristics of Patient-Centered Medical Home Initiatives that Generated Savings for Medicare: A Qualitative Multi-Case Analysis. *Journal of general internal medicine*, 1028 -1034.
18. Chaudhary, A., Singh, A. K., & Meena, M. L. (2020). Productivity improvement of an electrical appliance industry by implementing lean manufacturing tools and a low-cost intervention (a case study). *International Journal of Productivity and Quality Management*, 31(3), 390-411.
19. Chaudhry, I. S., Ali, S., Faheem, M., & Farooq, F. (2019). Institutional Performance and Trade-Led Growth Hypothesis: Evidence from Pakistan. *Review of Applied Management & Social Science*, 2(2), 59-72.
20. Chen, C. L., Lin, Y. C., Chen, W. H., Chao, C. F., & Pandia, H. (2021). Role of government to enhance digital transformation in small service business. *Sustainability*, 13(3), 1028.
21. Chinomona, E., & Mofokeng, T. (2018). The influence of workplace condition and employee satisfaction on employee committee in South African Companies. *Journal of Social Sciences (COES&RJ-JSS)*, 4(1), 649-663.
22. Daradkah, A., Mahmoud, A., AL-Momani, M., Al-nemrat, A., Badarneh, H., Hamadin, K., ... & Mahmoud, S. (2023). Degree of the requirements for improving human capital management in Arab universities as a gateway to achieving sustainable development. *Information Sciences Letters*, 12(10), 2617-2640.
23. de Oliveira, C., Cheng, J., Vigod, S., Rehm, J., & Kurdyak, P. (2016). Patients with high mental health costs incur over 30 percent more costs than other high-cost patients. *Health Affairs*, 35(1), 36-43.
24. Dobrin, C., Popescu, G., Popescu, V., Popescu, C., 2012 "The concept of performance in business organization – case study on the employee performance in Romanian business organizations" performance of the 6th bucharest, romania, PP.310-316.
25. Efendic, A., & Pugh, G. (2015). Institutional effects on economic performance in post-socialist transition: a dynamic panel analysis. *Acta Oeconomica*, 65(4), 503-523.
26. Esau, M. V. (2016). Exploring institutional trust and organizational performance through the case of the City of Cape Town. *International Journal of Public Administration*, 39(9), 686-693.
27. Fakhr, N, 2014, *Atta Allah Muhammad Al-Qatish, Industrial Cost Accounting*, Osama House for Publishing and Distribution, Amman, 1st ed.
28. Freimane, J., Mezitis, M., & Mihailovs, F. (2017). Maneuver Movements' Safety Increase Using Maneuver Locomotive Identification and Distance Control. *Procedia computer science*, 104, 375-379.
29. Gerhart, B., & Feng, J. (2021). The resource-based view of the firm, human resources, and human capital: Progress and prospects. *Journal of management*, 47(7), 1796-1819.
30. Gonçalves, T., Gaio, C., & Silva, M. (2018). Target costing and innovation-exploratory configurations: A comparison of fsQCA, multivariate regression, and variable cluster analysis. *Journal of Business Research*, 89, 378-384.
31. Hien, B. T. T. (2023). Training High-Quality Human Resources: From The Perspective Of Development Policy And Strategy. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(5), 51.
32. Jadhav, P. M., Kulkarni, S. S., & Telsang, M. T. (2015). Impact of IUCEE on Institutional Performance: A Case Study of Rajarambapu Institute of Technology. In *Proceedings of the International Conference on Transformations in Engineering Education* (pp. 217-224). Springer, New Delhi.
33. Jamal, Z, 2024, The role of digital transformation in improving the performance of public organizations, Master's thesis, Mohamed Khider University, Faculty of Economics, Business and Management Sciences.



34. Jia, D. (2018, October). The Management Innovations of Business Based on Lean Management Analysis. In 8th International Conference on Management and Computer Science, Advances in Computer Science Research, volume 77. Atlantis Press..56-60
35. Jimad, H., Maarif, M. S., Affandi, M. J., & Sukmawati, A. (2020). Leadership Strategy of State University Public Service Agency to Increasing Organizational Performance in Indonesia. *International Business and Accounting Research Journal*, 4(1), 23-36.
36. Jöhnk, J. (2020). Managing digital transformation: Challenges and choices in organizational design and decision-making (Doctoral dissertation).
37. Jünge, G., Alfnes, E., Nujen, B., Emblemsvag, J., & Kjersem, K. (2023). Understanding and eliminating waste in Engineer-To-Order (ETO) projects: a multiple case study. *Production Planning & Control*, 34(3), 225-241.
38. Kajembe, G. C., Vedeld, P., Babili, I. H., & Mosha, D. B. (2016). Institutional Sustainability in the Face of Climate Change: Empirical Insights from Irrigation Institutions in the Iringa Rural District, Tanzania. In *Climate Change and Multi-Dimensional Sustainability in African Agriculture* (pp. 23-41). Springer, Cham.
39. Kholoud, Q & Kholoud, N, 2023, The role of accounting for resource consumption in reducing the costs of the economic institution: A case study of the Tebessa Cement Company, Master's thesis, University of Martyr Sheikh Al-Arabi Al-Tebesi, Faculty of Economics, Commercial Sciences and Management Sciences.
40. Kraus, P., & Schlegel, D. (2021). Digital transformation and management control-an analysis of the reciprocal relationship. In 14th Annual Conference of the EuroMed Academy of Business (pp. 437-453).
41. Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International journal of information management*, 63.
42. Kurbatov, V. L., Naumenko, S. M., & Halina, M. V. (2016). Conceptual View of the Mechanism of Innovative Development by the Level in the Economy. *International Review of Management and Marketing*, 6(1S), 201-207.
43. Liu, D., Zhang, H., Li, Y., Chen, X., & Liu, Y. (2017). Effects of composition and growth rate on the microstructure transformation of β -rods/lamellae/ α -rods in directionally solidified Mg-Li alloy. *Materials & Design*, 119, 199-207.
44. Magnusson, J., Elliot, V., & Hagberg, J. (2021). Digital transformation: why companies resist what they need for sustained performance. *Journal of Business Strategy*, 43(5), 316-322.
45. Martinidis, G., Komninos, N., & Carayannis, E. (2022). Taking into account the human factor in regional innovation systems and policies. *Journal of the Knowledge Economy*, 13(2), 849-879.
46. Matar, Z & Al-Hamdani, B, 2020, The Role of Resource Consumption Accounting (RCA) in Reducing Costs, *Journal of Management and Economics*, Volume 12, Issue 126.
47. Mbore, C. K., Sang, J., & Komen, J. (2019). Management control system, organizational processes and institutional performance of technical training institutions in Kenya. *International Journal of Research in Business and Social Science* (2147-4478), 8(6), 229-239.
48. Meijerink, J. G., Beijer, S. E., & Bos-Nehles, A. C. (2022). A meta-analysis of mediating mechanisms between employee reports of human resource management and employee performance: different pathways for descriptive and evaluative reports?. In *Strategic Human Resource Management and Organizational Effectiveness* (pp. 170-218). Routledge.
49. Modell, S. (2019). Constructing institutional performance: a multi-level framing perspective on performance measurement and management. *Accounting and Business Research*, 49(4), 428-453.
50. Mujiono, M. N. (2021). The shifting role of accountants in the era of digital disruption. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(11), 1259-1274.
51. Nadkarni, S., & Prügl, R. (2021). Digital transformation: a review, synthesis and opportunities for future research. *Management Review Quarterly*, 71, 233-341.
52. Nahal, I & Awaihiya, K, 2017, The role of using management accounting methods in reducing costs: Target costing approach, value chain, Master's thesis, University of Arab Tebessi, Faculty of Economics, Business and Management Sciences.
53. Nisar, Q. A., Nasir, N., Jamshed, S., Naz, S., Ali, M., & Ali, S. (2021). Big data management and environmental performance: role of big data decision-making capabilities and decision-making quality. *Journal of Enterprise Information Management*, 34(4), 1061-1096.
54. Nordholt, N., Van Heerden, J., Kort, R., & Bruggeman, F. J. (2017). Effects of growth rate and promoter activity on single-cell protein expression. *Scientific reports*, 7(1), 1-11.
55. Novayanti, N., Sriati, S., Yamin, Y., & Minha, A. (2017). Institutional performance analysis of UPPB on rubber trade system in South Sumatra, Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 62(2).



56. Obaid, I, 2018, The Impact of Human Resources Accounting on Reducing Costs, *Journal of Economic and Administrative Sciences*, Volume 24, Issue 103.
57. Otia, J. E., & Bracci, E. (2022). Digital transformation and the public sector auditing: The SAI's perspective. *Financial Accountability & Management*, 38(2), 252-280.
58. Pagel, C. (2017). Health Care: What Do Republican and Democratic Legislators Really Want to Achieve?. *Harvard Health Policy Review*, 1-5.
59. Paldor, I., Chen, A. S., & Kaye, A. H. (2016). Growth rate of vestibular schwannoma. *Journal of Clinical Neuroscience*, 32, 1-8.
60. Popoola, O. A., Adama, H. E., Okeke, C. D., & Akinoso, A. E. (2024). The strategic value of business analysts in enhancing organizational efficiency and operations. *International Journal of Management & Entrepreneurship Research*, 6(4), 1288-1303.
61. Qarwash, K & Al-Sahli, N, 2024, The importance of applying accounting digital transformation in entrepreneurial projects: a field study, *Journal of Sustainable Research in the Humanities*, Volume 1, Issue 2.
62. Salman, A., Fakhraldeen, S. A., Chun, S., Jamil, K., Gasana, J., & Al-Hunayan, A. (2020, August). Enhancing research and development in the health sciences as a strategy to establish a knowledge-based economy in the State of Kuwait: a call for action. In *Healthcare* (Vol. 8, No. 3, p. 264). MDPI.
63. Serrano, A., Oliva, R., & Kraiselburd, S. (2017). On the cost of capital in inventory models with deterministic demand. *International Journal of Production Economics*, 183, 1-21.
64. Tuama, H. Y., & Alqhiwi, L. A. (2014). The Impact of Application of Business Process Reengineering on Improvement the Institutional Performance Effectiveness A Field Study on the Jordanian Pharmaceutical Companies. *European Journal of Scientific Research*, 122(1), 81-98.
65. Vatish, M., Strunz-McKendry, T., Hund, M., Allegranza, D., Wolf, C., & Smare, C. (2016). sFlt-1/PIGF ratio test for pre-eclampsia: an economic assessment for the UK. *Ultrasound in Obstetrics & Gynecology*, 48(6), 765-771.
66. Wallick, D. W., Clarke, A. S., Berkowitz, D. B., DiCiurcio, K. J., & Stockton, K. A. (2017). Getting More from Less: Three Levers for a Low-return World. 1-31.
67. Wang, X., & Wei, S. (2018). The Monitoring Role of Institutional Investors: Geographical Proximity and Investment Horizon. 1-49.
68. Wingerden, J. V., Bakker, A. B., & Derks, D. (2016). A test of a job demands-resources intervention. *Journal of Managerial Psychology*, 31(3), 686-701.
69. Ziadi, M & Felan, A, 2024, Digital transformation and its impact on improving employee performance in companies, *Arab Journal of Arts and Humanities*, Volume 8, Issue 32.
70. Кубатко, О., Кубатко, О., Сахненко, Т., & Олувасеун, О. (2021). Organization of Business Activities with Account to Environmental and Economic Aspects. *Mechanism of an economic regulation*, (2 (92)), 76-85.