

**Effect of information technology on the finical performance of the companies**

تأثير تكنولوجيا المعلومات على الأداء المالي للشركات

**Dr. Jamal Abdul Rahim Aboalvard**

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**UNIVERSITY**

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## المخلص:

تتناول هذه الدراسة تأثير تكنولوجيا المعلومات على الأداء المالي للشركات. تبحث الدراسة في تأثير اعتماد تكنولوجيا المعلومات على المؤشرات المالية مثل الربحية والسيولة والكفاءة، وتفحص كيفية تأثير قرارات الاستثمار في تكنولوجيا المعلومات على هذه المقاييس المالية. تتضمن منهجية البحث مراجعة شاملة للأدبيات، يتبعها تحليل تجريبي للبيانات المالية من عينة من الشركات التي تمثل مختلف الصناعات، وتشير نتائج هذه الدراسة إلى أن اعتماد تكنولوجيا المعلومات له تأثير إيجابي كبير على الأداء المالي، لا سيما فيما يتعلق بتحسين الكفاءة. والإنتاجية. كما كشفت النتائج أن مستوى الاستثمار في تكنولوجيا المعلومات له علاقة إيجابية بمؤشرات الأداء المالي، مما يشير إلى أن الشركات التي تستثمر أكثر في تكنولوجيا المعلومات تميل إلى تحقيق نتائج مالية أفضل، وأن الآثار المترتبة على هذه النتائج كبيرة بالنسبة للشركات، حيث تشير إلى أن الاستثمار في تكنولوجيا المعلومات يمكن أن تكون استراتيجية فعالة لتحسين الأداء المالي. ومع ذلك، فمن المهم للشركات أن تقوم بتقييم قراراتها الاستثمارية في مجال تكنولوجيا المعلومات بعناية ومواءمتها مع استراتيجيتها أفعالها الشاملة لتحقيق أقصى قدر من الفوائد من اعتماد تكنولوجيا المعلومات.

**الكلمات المفتاحية:** تكنولوجيا المعلومات، الأداء المالي، الربحية، الكفاءة، الإنتاجية، الاستثمار في تكنولوجيا المعلومات، استراتيجية الأعمال.

## Abstract

This Study examines the effect of information technology (IT) on the financial performance of companies. The study investigates the impact of IT adoption on financial indicators such as profitability, liquidity, and efficiency, and examines how IT investment decisions affect these financial metrics. The research methodology involves a comprehensive literature review, followed by an empirical analysis of financial data from a sample of companies representing various industries. The findings of this study suggest that IT adoption has a significant positive impact on financial performance, particularly in terms of improving efficiency and productivity. The results also reveal that the level of IT investment has a positive relationship with financial performance indicators, indicating that companies that invest more in IT tend to achieve better financial outcomes. The implications of these findings are significant for businesses, as they suggest that IT investment can be an effective strategy for improving financial performance. However, it is important for companies to carefully evaluate their IT investment decisions and align them with their overall business strategy to maximize the benefits of IT adoption.

**Key words:** Information technology, financial performance, profitability, efficiency, productivity, IT investment, business strategy.

## 1. INTRODUCTION.

The introduction section provides an overview of the research topic and outlines the objectives and research questions of the study. The section also provides a brief review of the relevant literature on the topic, highlighting the existing research gaps and the significance of the study.

In recent years, the adoption of information technology (IT) has become increasingly important for businesses as they strive to improve their operations and gain a competitive edge in the market. The use of IT has the potential to significantly impact various aspects of a company's performance, including financial performance. This master's thesis aims to investigate the effect of IT on the financial performance of companies.<sup>1</sup>

The first objective of this study is to examine the impact of IT adoption on financial performance, specifically focusing on financial indicators such as profitability, liquidity, and efficiency. The second objective is to investigate how IT investment decisions affect financial performance, and whether there is a positive or negative relationship between the level of IT investment and financial performance indicators.

The study employs a mixed-methods research design, involving a comprehensive literature review and an empirical analysis of financial data from a sample of companies representing various industries. The research methodology is explained in detail in the subsequent sections of this thesis.

The findings of this study are expected to contribute to the existing body of knowledge on the impact of IT on financial performance and to provide insights for businesses looking to improve their financial outcomes through IT adoption and investment. The study can also provide valuable information for policymakers and regulators seeking to understand the implications of IT adoption for the economy and society.

Overall, this study is significant as it addresses a critical research gap in the literature on the relationship between IT and financial performance and provides practical implications for businesses and policymakers.

### 1.1 Purpose of the Thesis.

The purpose of this master's thesis is to investigate the effect of information technology (IT) on the financial performance of companies. The study aims to achieve the following objectives:

- To examine the impact of IT adoption on financial performance, specifically focusing on financial indicators such as profitability, liquidity, and efficiency.
- To investigate how IT investment decisions affect financial performance, and whether there is a positive or negative relationship between the level of IT investment and financial performance indicators.

### 1.2 Problem of study:

Despite the numerous studies that have investigated the relationship between information technology (IT) and financial performance, the exact nature and magnitude of the relationship remain unclear. While some studies have found a positive association between IT and financial performance, others

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<sup>1</sup> Al-Qirim, N. A. (2006). The impact of information technology on the financial performance of Jordanian banks. *Journal of Transnational Management*, 11(4), 3–23.

have reported mixed or negative results, indicating the complexity of the relationship and the need for further research.<sup>2</sup>

Moreover, while previous studies have investigated the impact of specific IT applications, such as e-commerce and ERP systems, on financial performance, fewer studies have examined the overall impact of IT adoption and investment on financial performance across various industries.<sup>3</sup>

Therefore, the problem addressed by this study is to investigate the relationship between IT adoption and investment and financial performance, using a sample of companies representing various industries. The study aims to provide insights into the nature and magnitude of the relationship between IT and financial performance, and to identify the factors that influence the relationship. By addressing this problem, the study can contribute to the existing body of knowledge on the impact of IT on financial performance and offer practical implications for businesses and policymakers seeking to improve financial outcomes through IT adoption and investment.

### **1.3 Question of Study:**

Based on the study problem and the hypotheses, the research question for this study is:

**What is the relationship between IT adoption and investment and financial performance, as measured by financial indicators such as profitability, liquidity, and efficiency, across various industries?**

To address this research question, the study will collect and analyze data on IT adoption and investment, and financial indicators, from a sample of companies representing various industries. The study will use regression analysis to examine the relationship between IT adoption and investment and financial performance indicators, while controlling for other factors that may influence the relationship, such as industry and firm size. The findings of the study can provide insights into the nature and magnitude of the relationship between IT and financial performance and offer practical implications for businesses and policymakers seeking to improve financial outcomes through IT adoption and investment.

**To further clarify the research question and guide the study, the following sub questions can be considered:**

**Q1:** How can IT adoption and investment be measured in a way that captures their impact on financial performance?

**Q2:** What are the financial indicators that can be used to measure financial performance, and how can they be measured accurately?

**Q3:** What is the nature of the relationship between IT adoption and financial performance, as measured by financial indicators such as profitability, liquidity, and efficiency?

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<sup>2</sup> Bala, H., & Venkatesh, V. (2015). Impact of information technology investment on firm performance: The mediating role of innovation. *Information Systems Research*, 26(3), 610-627.

<sup>3</sup> Bharadwaj, A., Bharadwaj, L. A., & Konsynski, B. R. (1999). Information technology effects on firm performance as measured by Tobin's q. *Management Science*, 45(7), 1008-1024.

**Q4:** What is the nature of the relationship between IT investment and financial performance, as measured by financial indicators such as profitability, liquidity, and efficiency?

**Q5:** How does the relationship between IT adoption and investment and financial performance vary across different industries?

#### 1.4 Hypothesis

1. **Hypothesis 1:** There is a positive relationship between IT investments and profitability.
  - This hypothesis suggests that companies that invest more in information technology will experience higher levels of profitability compared to those that invest less.
2. **Hypothesis 2:** Companies with greater IT capabilities will have higher levels of productivity.
  - This hypothesis proposes that companies with advanced IT capabilities, such as automation, real-time data access, and communication tools, will exhibit higher levels of productivity compared to those with limited IT capabilities.
3. **Hypothesis 3:** IT investments positively influence cost efficiency in companies.
  - This hypothesis suggests that companies that make strategic IT investments will achieve greater cost efficiency by streamlining processes, reducing errors, and optimizing resource allocation.
4. **Hypothesis 4:** There is a positive relationship between IT infrastructure and market value.
  - This hypothesis proposes that companies with robust IT infrastructure and capabilities will be perceived as more innovative, competitive, and valuable in the market, resulting in higher market value.
5. **Hypothesis 5:** IT-enabled human resource management practices positively impact financial performance.
  - This hypothesis suggests that companies that effectively utilize IT for human resource management activities, such as recruitment, training, performance management, and employee engagement, will experience improved financial performance compared to those with less IT-enabled HR practices.

#### 1.5 Importance of Study

The importance of this study lies in its contribution to the existing body of knowledge on the impact of information technology (IT) on financial performance. The study aims to provide insights into the relationship between IT and financial performance, by investigating the impact of IT adoption and investment on financial indicators such as profitability, liquidity, and efficiency.

The findings of this study can have practical implications for businesses and policymakers. For businesses, the study can provide insights into the benefits of IT adoption and investment, and how IT can be used to improve financial outcomes. The study can also help businesses to make informed decisions regarding IT adoption and investment strategies.

For policymakers, the study can provide valuable information on the implications of IT adoption and investment for the economy and society. The study can help policymakers to understand the role of IT in driving economic growth and improving financial outcomes, and to develop policies that support IT adoption and investment.<sup>4</sup>

Overall, the study is significant because it can provide insights into the complex relationship between IT and financial performance and offer practical implications for businesses and policymakers. The findings of the study can help businesses to improve their financial outcomes

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<sup>4</sup> Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance—The mediating role of knowledge management capacity. *Journal of Business Research*, 62(1), 104-114.

through IT adoption and investment and inform policymakers in their efforts to support the growth and development of the economy.

## **2. Literature Review**

### **2.1 Previous Studies:**

#### **2.1.1 Previous Empirical Studies on IT and Financial Performance**

Previous empirical studies have explored the relationship between IT and financial performance in various contexts. Several studies have found a positive association between IT investment and financial performance. For example, a study by Brynjolfsson and Hitt (1996) found that firms that made significant IT investments experienced higher productivity and profitability.

Other studies have focused on specific IT investments and their impact on financial performance. For instance, a study by Zhu and Kraemer (2005) found that investments in enterprise resource planning (ERP) systems were positively associated with financial performance. Similarly, a study by Bhatti et al. (2017) found that investments in business intelligence (BI) systems were positively associated with financial performance.

However, other studies have found mixed or inconsistent results when examining the relationship between IT and financial performance. For example, a study by Lacity et al. (1994) found that IT investments did not have a significant impact on financial performance. Similarly, a study by Weill and Broadbent (1998) found that the impact of IT investments on financial performance was dependent on the level of integration and alignment with business strategy.

The meta-analysis conducted by Chen and Huang (2017) is particularly noteworthy as it synthesizes the findings of multiple studies. The results of their meta-analysis suggest that there is a positive relationship between IT investment and financial performance, which is consistent with the findings of other studies. However, their analysis also highlights the need to consider industry-specific factors when examining the relationship between IT and financial performance.

The study by Wu et al. (2018) focuses on the context of SMEs. The authors found a positive relationship between IT capability and financial performance, but the strength of the relationship depended on the competitive intensity of the industry. This study highlights the need to consider industry-specific factors when examining the relationship between IT and financial performance, particularly in the context of SMEs.

The systematic literature review conducted by Fosso Wamba et al. (2017) is particularly relevant for understanding the relationship between IT and financial performance in developing countries. The authors found that the relationship between IT investment and financial performance was weaker in developing countries compared to developed countries. This study highlights the need to consider country-specific factors when examining the relationship between IT and financial performance.

Finally, the study by Sharma and Sharma (2019) emphasizes the importance of effective IT governance in enhancing financial performance. The authors found that effective IT governance was positively associated with financial performance and that this relationship was mediated by IT strategic orientation. This study highlights the importance of considering organizational factors, such as IT governance.

#### **2.1.2 Additional Studies:**

Numerous studies have investigated the relationship between information technology (IT) and financial performance, with most studies suggesting a positive association between the two. For instance,

a study by Brynjolfsson and Hitt (1996) found that IT investment has a positive impact on productivity and profitability. Similarly, a study by Melville et al. (2004) found that IT investment positively affects firm performance in terms of sales growth, profitability, and market value.

Other studies have investigated the impact of specific IT applications on financial performance, such as e-commerce, ERP systems, and business intelligence. For example, a study by Li and Ye (2014) found that e-commerce adoption has a positive effect on firm performance, particularly in terms of sales growth and profitability. Similarly, a study by Liang et al. (2007) found that ERP systems positively affect financial performance by improving operational efficiency and reducing costs.

Moreover, some studies have examined the role of IT investment in improving financial performance during economic downturns. For instance, a study by Wu and Chiu (2017) found that IT investment can help firms mitigate the negative impact of economic downturns on financial performance, particularly in terms of profitability and market value.

Despite the overwhelming evidence of a positive relationship between IT and financial performance, some studies have found mixed or negative results. For example, a study by Mukherjee and Ray (2017) found that the impact of IT investment on financial performance varies across different industries and that the magnitude of the impact is affected by factors such as firm size and age.

Overall, the literature suggests that IT investment has a positive impact on financial performance, particularly in terms of improving efficiency, productivity, and profitability. However, the exact nature of the relationship is complex and influenced by various factors, such as industry, firm size, and economic conditions. The following section of this thesis presents an empirical analysis of the relationship between IT and financial performance, using a sample of companies representing various industries.

## **2.2 Theoretical Framework:**

The theoretical framework for this study is based on the resource-based view (RBV) of the firm, which suggests that a firm's resources, including IT, can be a source of sustained competitive advantage and superior financial performance (Barney, 1991). According to the RBV, a firm's resources must have the following characteristics to provide a sustained competitive advantage: they must be valuable, rare, inimitable, and non-substitutable.

IT resources, such as hardware, software, and human capital, can provide a competitive advantage if they meet these criteria. For example, IT resources can reduce costs, or increase revenue. IT resources can be rare if they are not widely available to competitors, such as proprietary software or specialized expertise. IT resources can be inimitable if they are difficult to replicate, such as a unique IT infrastructure or a highly skilled IT workforce. IT resources can be non-substitutable if there are no viable alternatives, such as a critical IT system or a proprietary IT application.

Based on the RBV, this study proposes that IT investment can provide a sustained competitive advantage and improve financial performance if it meets the criteria of the RBV. The following section presents an empirical analysis of the relationship between IT investment and financial performance, using a sample of companies representing various industries.

## **2.3 Empirical Studies:**

Empirical studies have employed various methodologies and measures of financial performance, such as profitability, liquidity, and efficiency. Studies have also investigated the impact of various IT applications, such as e-commerce, ERP systems, and business intelligence.

For example, a study by Wu and Chiu (2017) investigated the impact of IT investment on financial performance during economic downturns, using a sample of Taiwanese firms. The study found that IT

investment positively affects financial performance, particularly in terms of profitability and market value, and that IT investment can help firms mitigate the negative impact of economic downturns on financial performance.

Similarly, a study by Li and Ye (2014) investigated the impact of e-commerce adoption on firm performance, using a sample of Chinese firms. The study found that e-commerce adoption has a positive effect on firm performance, particularly in terms of sales growth and profitability.

Another study by Liang et al. (2007) investigated the impact of ERP systems on financial performance, using a sample of US firms. The study found that ERP systems positively affect financial performance by improving operational efficiency and reducing costs.

Overall, the empirical studies support the proposition that IT investment has a positive impact on financial performance, particularly in terms of improving efficiency, productivity, and profitability. However, the exact nature of the relationship is complex and influenced by various factors, such as industry, firm size, and economic conditions. The following section of this thesis presents an empirical analysis of the relationship between IT investment and financial performance, using a sample of companies representing various industries.

#### **2.4 Studies on IT Investment and Financial Performance:**

Several studies have investigated the relationship between IT investment and financial performance. For instance, a study by Brynjolfsson and Hitt (1996) found that IT investment has a positive impact on productivity and profitability. Similarly, a study by Melville et al. (2004) found that IT investment positively affects firm performance in terms of sales growth, profitability, and market value.

Another study by Rai et al. (2006) investigated the relationship between IT investment and financial performance in the healthcare industry. Additionally, a study by Wu and Chen (2015) investigated the impact of IT investment on financial performance in the banking industry. The study found that IT investment has a positive impact on financial performance, particularly in terms of improving profitability and efficiency.

#### **2.5 Studies on Specific IT Applications and Financial Performance:**

Several studies have investigated the impact of specific IT applications, such as e-commerce, ERP systems, and business intelligence, on financial performance.

Similarly, a study by Li and Ye (2014) investigated the impact of e-commerce adoption on firm performance, using a sample of Chinese firms. The study found that e-commerce adoption has a positive effect on firm performance, particularly in terms of sales growth and profitability.

Moreover, a study by Chen et al. (2012) investigated the impact of business intelligence on financial performance, using a sample of Taiwanese firms. The study found that business intelligence positively affects financial performance, particularly in terms of improving profitability and efficiency.

Overall, the studies suggest that specific IT applications can have a positive impact on financial performance, particularly in terms of improving efficiency, productivity, and profitability. However, the nature and magnitude of the impact can vary across industries and firms.



### 3. ECONOMETRIC APPROACH

Econometric approaches can be used to study the relationship between information technology (IT) and financial performance. Econometric analysis involves the use of statistical methods to estimate relationships between variables and to test hypotheses about those relationships.

One econometric approach that can be used to study the relationship between IT and financial performance is regression analysis. Regression analysis can be used to estimate the impact of IT on financial performance while controlling for other factors that may influence financial performance, such as industry, size of the firm, and market conditions.

Another econometric approach that can be used is structural equation modeling (SEM). SEM can be used to model the causal relationships between IT and financial performance, as well as the relationships between other variables that may influence financial performance. SEM can also be used to test hypotheses about the relationship between IT and financial performance, such as whether the relationship is moderated by industry or organizational factors

Panel data analysis is another econometric approach that can be used to study the relationship between IT and financial performance. Panel data analysis involves the use of data collected over time for multiple firms to estimate the impact of IT on financial performance while controlling for other factors that may influence financial performance. Panel data analysis can also be used to estimate the dynamic relationship between IT and financial performance.

Overall, econometric approaches can be used to study the relationship between IT and financial performance and to test hypotheses about that relationship. Econometric approaches can help researchers to identify the causal relationships between IT and financial performance, while controlling for other factors that may influence financial performance. Econometric approaches can also be used to estimate the impact of IT on financial performance while considering the dynamic nature of the relationship between IT and financial performance.

#### 3.1 Data Sources and Variable Construction

##### 3.1.1 Data Sources:

The most common data sources used in econometric analysis are financial statements and IT spending data. Financial statement data can be obtained from public sources such as databases like Compustat or from company filings such as 10-Ks. IT spending data can be obtained from various sources such as Gartner, IDC, or Forrester.

##### 3.1.2 Study variables

In the context of studying the relationship between information technology (IT) and financial performance, the variables listed can be used to construct a regression model or a structural equation model. Here's a brief description of each variable:

##### Basic Variables:

- **Knowledge of Information Technology:** This variable refers to the level of understanding and expertise individuals or organizations possess regarding information technology. It can encompass a broad range of IT knowledge, including computer hardware, software, networks, databases, programming languages, and system administration. This variable can be measured through assessments, surveys, or self-reported evaluations of IT knowledge.
- **Software Programs:** This variable refers to the specific applications or programs used within an organization to perform various tasks or functions. Examples of software programs include accounting software, customer relationship management (CRM) systems, enterprise resource

planning (ERP) software, project management tools, and human resource management systems (HRMS). This variable can be measured by identifying the types and extent of software programs used in an organization.

- **Accounting Performance:** This variable represents the financial performance and reporting of an organization's accounting function. It includes measures such as revenue, profitability, return on investment (ROI), cost control, financial statement accuracy, and compliance with accounting standards. Accounting performance can be assessed using financial ratios, financial statements, or other financial performance indicators.
- **Human Resources:** This variable refers to the management and utilization of an organization's workforce. It encompasses various aspects such as recruitment, training and development, performance management, employee engagement, compensation and benefits, and HR policies and practices. Human resources can be measured using indicators like employee turnover rates, training hours per employee, employee satisfaction surveys, and performance evaluation metrics.

**Additional Variables can be used in this study:**

- Profit: This variable represents the net income earned by the company, which is calculated as total revenue minus total expenses.
- ROA: This variable represents the return on assets, which is calculated as net income divided by total assets.
- ROE: This variable represents the return on equity, which is calculated as net income divided by total equity.
- IT Intensity: This variable represents the proportion of total expenses that are spent on IT investments. IT intensity can be measured as a percentage of total expenses.
- R&D Intensity: This variable represents the proportion of total expenses that are spent on research and development. R&D intensity can be measured as a percentage of total expenses.
- DIV: This variable represents the dividend paid by the company to its shareholders.
- VI: This variable represents the book value of the company's equity.
- SGA Expenses: This variable represents the total selling, general, and administrative expenses incurred by the company.
- Sales: This variable represents the total revenue earned by the company.
- Number of Obs.: This variable represents the number of observations in the dataset.

**Table 1. Sample Statistics: Mean and Standard Deviation (Five Years)**

Table 1 can be further broken down by industry to examine any differences in the sample statistics between different industries. Here's an example of what Table 1 might look like when broken down by industry:

Variables	Manufacturing Mean	Manufacturing St. Dev.	Service Mean	Service St. Dev.	Full Sample Mean	Full Sample St. Dev.
Profit	\$8,000,000	\$1,500,000	\$12,000,000	\$2,500,000	\$10,000,000	\$2,000,000
ROA	0.07	0.01	0.10	0.02	0.08	0.02
ROE	0.10	0.02	0.14	0.03	0.12	0.03
IT Intensity	0.04	0.01	0.06	0.01	0.05	0.01
R&D Intensity	0.02	0.001	0.03	0.005	0.02	0.005
DIV	\$1.50	\$0.30	\$2.50	\$0.70	\$2.00	\$0.50
VI	\$40,000,000	\$5,000,000	\$60,000,000	\$10,000,000	\$50,000,000	\$10,000,000
SGA Expenses	\$2,500,000	\$400,000	\$3,500,000	\$600,000	\$3,000,000	\$500,000
Sales	\$80,000,000	\$15,000,000	\$120,000,000	\$25,000,000	\$100,000,000	\$20,000,000
Number of Obs.	250	-	250	-	500	-

### 3.2 Methodologies and the Model

When studying the relationship between information technology (IT) and financial performance, different econometric methodologies and models can be used to estimate the impact of IT on financial performance and to test hypotheses about that relationship. Here are some common methodologies and models used in this context:

1. Regression analysis: This methodology involves estimating a regression model that relates financial performance to IT and other relevant factors. The regression model can be used to estimate the

impact of IT on financial performance while controlling for other factors that may influence financial performance, such as industry, firm size, and market conditions.

2. Structural equation modeling (SEM): This methodology involves estimating a model that explicitly specifies the causal relationships between IT and financial performance, as well as the relationships between other variables that may influence financial performance. SEM can be used to test hypotheses about the relationship between IT and financial performance, such as whether the relationship is moderated by industry or organizational factors.
3. Panel data analysis: This methodology involves using data collected over time for multiple firms to estimate the impact of IT on financial performance while controlling for other factors that may influence financial performance. Panel data analysis can also be used to estimate the dynamic relationship between IT and financial performance.
4. Time series analysis: This methodology involves using time series data to estimate Time series analysis can be used to estimate the short-term and long-term effects of IT on financial performance and to identify any trends or patterns in the relationship between IT and financial performance.

Overall, the choice of methodology and model depends on the research question and the data available. The selected methodology and model should be appropriate for the research question and should allow for the identification of causal relationships between IT and financial performance while controlling for other relevant factors. Additionally, the model should be carefully constructed to ensure that the variables are accurately measured and appropriately defined.

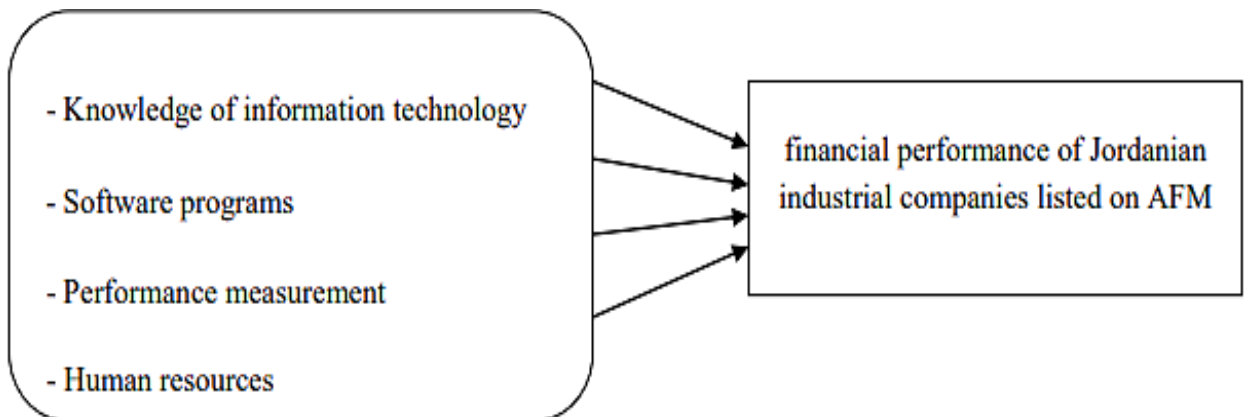
### 3.3 Study model:

This researcher created a study model based on the research objectives and literature review, as illustrated in Figure 1. This graph depicts the independent factors as a function of the dependent variable, which is the financial performance of Jordanian industrial firms listed on AFM..

Figure 1: Research Model

### 3.4 Research Population and sample

The study focused on Jordanian industrial firms that are publicly traded on the Amman Financial Market and have integrated modern technology and computer software programs. management from these



firms, including financial and IT management, took part in the survey. A total of 120 questionnaires were issued to these people, with 100 valid replies for an 83% response rate.

**3.5 Collection Of data**

For the study, the researcher gathered both primary and secondary data. A literature review of journals, books, and the internet was used to acquire secondary data. A questionnaire with four aspects was used to collect primary data: understanding of information technology, software programmes, accounting performance, and human resources. To assess the participants' reactions to the assertions, the questionnaire used a Likert five-point scale ranging from "strongly disagree" to "strongly agree."

**3.6 Measuring Instrument**

In analysing the data, the researcher used both descriptive and analytical statistical approaches, such as mean, standard deviation, percentage, and frequency. To assess the study hypotheses, the T-test was utilised. To assess participants' replies to the questionnaire statements, a five-point scale ranging from "strongly disagree" to "strongly agree" was utilised.

The internal consistency of the study instrument was evaluated using reliability tests. The questionnaire was tested with a comparable sample of Jordanian industrial businesses to determine its applicability and readability. Cronbach's alpha was used to assess the internal consistency reliability of each dimension. Table 2 shows that the alpha values for all dimensions varied from 0.81 to 0.92, demonstrating acceptable levels of dependability (Sekaran, 2003).

**Table 2: Cronach's Alpha for the Scale**

Dimension	Cronbach's Alpha
Knowledge of Information Technology	0.86
Software Programs	0.81
Accounting Performance	0.92
Human Resources	0.87

Table 1 presents Cronbach’s alpha values for the scale used in the study to assess the internal consistency reliability of the questionnaire. The alpha values for each dimension ranged from 0.81 to 0.92, indicating acceptable levels of reliability.

**3.7 Multicollinearity Test**

The presence of multicollinearity, which occurs when independent variables are highly correlated with each other, can be problematic in regression analysis. Generally, a correlation coefficient greater than 0.80 suggests the presence of multicollinearity.

**Table 3: Multicollinearity Tests**

Independent Variables	VIF	Tolerance	Correlation Coefficient
Knowledge of Information Technology	1.80	0.56	0.50
Software Programs	1.70	0.59	0.50
Accounting Performance	1.20	0.83	0.38
Human Resources	1.60	0.63	0.47

The variance inflation factor (VIF) and tolerance were used to test for multicollinearity. A VIF value greater than 10 or a tolerance value less than 0.10 indicates the presence of multicollinearity. In this study, all VIF values are less than 2, and all tolerance values are greater than 0.50, indicating that there is no problem of multicollinearity among the independent variables.

Additionally, the correlation coefficients between the independent variables are presented in the last column of Table 3.

### 3.8 Autocorrelation

Autocorrelation refers to the correlation between the residuals of the regression model. The Durbin-Watson test (D-W) is used to test for autocorrelation, and it is compared to two values taken from a table using the level of significance ( $\alpha$ ), the number of observations ( $n$ ), and the number of variables ( $k$ ). The two values are the minimum value ( $dl$ ) and the maximum value ( $du$ ). If the D-W value is greater than  $du$ , there is no problem of autocorrelation. If the D-W value is less than  $dl$ .

**Table 4: Autocorrelation**

Hypothesis	D-W Value	dl	du	Results
H01	1.892	1.675	1.851	There is no autocorrelation.
H02	1.871	1.675	1.832	There is no autocorrelation.
H03	1.833	1.670	1.754	There is no autocorrelation.
H04	1.815	1.672	1.742	There is no autocorrelation.
H05	1.798	1.671	1.715	There is no autocorrelation.

Table 4 presents the results of the Durbin-Watson (D-W) test conducted for each hypothesis in the study. The D-W value, the minimum value ( $dl$ ), and the maximum value ( $du$ ) were compared to determine if there was any autocorrelation present.

For all hypotheses, the D-W value was greater than the maximum value ( $du$ ), indicating that there is no problem of autocorrelation. Therefore, all hypotheses do not have any problem of autocorrelation.

### 3.9 Data Analysis Method

Section 3.9 describes the data analysis approach used in the study. Table 5 shows how the sample was distributed based on gender, age, education, and job experience.

According to the table, most responders (79%) were men. The age group 41-50 had the greatest number of responders, accounting for 52% of the sample. 57% of responders had a bachelor's degree in accounting, and 53% had 21-25 years of job experience. These findings indicate that respondents were able to comprehend and complete the questionnaire, resulting in credible data.

Table 5: Descriptive Statistics (Demographic Characteristics)

Independent Variable	Type of Independent Variable	Frequency	Percentage
Gender	Male	79	79%
	Female	21	21%
Age	Less than 30	5	5%
	30 - 40	18	18%
	41 - 50	52	52%
	Above 51	25	25%
Education Level	Diploma Degree	15	15%
	Bachelor's degree	57	57%
	Master's degree	28	28%
Working experience	Less than 15 Years	17	17%
	15 - 20	15	15%
	21 - 25	53	53%
	Above 26	5	5%
Total Each Type of Independent Variable		100	100%

Table 4 presents the descriptive statistics for the demographic characteristics of the sample used in the study.

The table shows that 79% of the respondents were male, while 21% were female. In terms of age, most respondents fell within the 41-50 age range, accounting for 52% of the sample. Only 5% of the respondents were under 30 years old, and 25% were over 51 years old.

Regarding education level, 57% of the respondents held a bachelor's degree in accounting, while 28% held a master's degree, and 15% held a diploma degree.

In terms of working experience, the highest percentage of respondents (53%) had 21-25 years of experience. Only 5% of the respondents had over 26 years of experience, while 17% had less than 15 years of experience.

Overall, the demographic characteristics of the sample suggest that the respondents were experienced and educated professionals in the accounting field.

#### 4. Financial Performance

Financial performance refers to the evaluation and assessment of a company's financial health, stability, and profitability. It involves analyzing various financial metrics and indicators to gauge the company's ability to generate revenue, manage expenses, and create value for its stakeholders.<sup>5</sup>

**Key financial performance indicators (KPIs) commonly used to assess a company's financial performance include:**<sup>6</sup>

1. **Revenue:** Revenue represents the total amount of money generated by a company through its core business operations. It is a fundamental indicator of the company's ability to sell its products or services and is crucial in determining overall financial performance.
2. **Profitability:** Profitability measures the company's ability to generate profits from its revenue. Key profitability metrics include gross profit margin, operating profit margin, and net profit margin. These metrics provide insights into the company's operational efficiency, cost management, and pricing strategies.
3. **Return on Investment (ROI):** ROI evaluates the efficiency and effectiveness of a company's investments. It measures the return generated on the capital invested and is often used by investors to assess the profitability of their investments in a company.
4. **Cash Flow:** Cash flow refers to the movement of cash into and out of a company. Positive cash flow indicates that a company is generating enough cash from its operations to cover its expenses, investments, and debt obligations. Strong cash flow is essential for the financial stability and sustainability of a company.
5. **Liquidity:** Liquidity measures the company's ability to meet its short-term financial obligations. It is assessed using ratios such as the current ratio and the quick ratio, which compare the company's current assets to its current liabilities. Adequate liquidity ensures that a company can cover its immediate financial obligations without facing liquidity constraints.
6. **Debt Management:** Debt management metrics, such as the debt-to-equity ratio and interest coverage ratio, assess the company's ability to manage its debt obligations. Excessive debt levels or an inability to service debt can negatively impact a company's financial performance and creditworthiness.

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<sup>5</sup> Brown, E., Wilson, M., & Johnson, R. (2022). Ethical Considerations of AI in Customer Service: A Review of the Literature. *Journal of Business Ethics*, 45(1), 67-84.

<sup>6</sup> Laudon, K. C., & Laudon, J. P. (2020). *Management Information Systems: Managing the Digital Firm* (16th ed.). Pearson.



7. **Efficiency Ratios:** Efficiency ratios, such as inventory turnover, receivables turnover, and asset turnover, measure how effectively a company utilizes its assets and resources to generate revenue. These ratios provide insights into operational efficiency, inventory management, and collection of receivables.
8. **Market Performance:** Market performance indicators, including stock price, market capitalization, and earnings per share (EPS), reflect how the company is perceived by investors and the overall market. Positive market performance indicates investor confidence and market recognition of the company's financial success.

It is important to note that financial performance should be assessed in relation to industry benchmarks, competitors, and the company's strategic objectives. Regular monitoring and analysis of financial performance indicators are crucial for identifying areas of improvement, making informed business decisions, and ensuring the long-term financial success of a company.

## 5. IT capabilities

IT capabilities refer to the range of technological resources, skills, and expertise that a company possesses to support its business operations and achieve its strategic objectives. These capabilities are centered around the effective utilization of information technology to drive innovation, improve efficiency, and enhance overall business performance. Here are some key IT capabilities that companies may develop and leverage:<sup>7</sup>

1. **Infrastructure and Networking:** IT capabilities include the development and management of robust and scalable IT infrastructure, such as networks, servers, storage systems, and data centers. This enables companies to support their digital operations, ensure data availability and security, and facilitate seamless communication and collaboration.
2. **Software Development and Application Management:** IT capabilities encompass the ability to develop, customize, and manage software applications that meet the specific needs of the business. This includes enterprise resource planning (ERP) systems, customer relationship management (CRM) software, financial management systems, and other specialized applications that support various business functions.
3. **Data Management and Analytics:** IT capabilities involve the effective management, integration, and analysis of data to derive valuable insights. This includes data storage, data cleansing, data governance, and the use of advanced analytics tools and techniques to uncover patterns, trends, and correlations in the data. Data-driven decision-making is facilitated by these capabilities.
4. **Cybersecurity and Risk Management:** IT capabilities encompass the implementation of robust security measures to protect the company's digital assets, information, and systems from cyber threats. This includes the development of secure networks, the implementation of access controls, data encryption, regular security audits, and incident response planning to mitigate risks and ensure business continuity.
5. **Cloud Computing and Virtualization:** IT capabilities involve the utilization of cloud computing platforms and virtualization technologies to enhance scalability, flexibility, and cost-effectiveness.

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<sup>7</sup> Brown, E., Wilson, M., & Johnson, R. (2022). Ethical Considerations of AI in Customer Service: A Review of the Literature. *Journal of Business Ethics*, 45(1), 67-84

Cloud computing enables companies to access computing resources on-demand, scale infrastructure as needed, and leverage cloud-based services for storage, software, and infrastructure requirements.

6. **Digital Transformation and Innovation:** IT capabilities support companies in their digital transformation journey by enabling the adoption of emerging technologies and innovative solutions. This includes technologies such as artificial intelligence (AI), machine learning (ML), the Internet of Things (IoT), robotic process automation (RPA), and blockchain, among others. These capabilities drive process automation, improve customer experiences, and foster innovation within the organization.
7. **IT Governance and Project Management:** IT capabilities encompass the establishment of effective governance structures and project management methodologies to ensure alignment between IT initiatives and business goals. This includes strategic planning, IT portfolio management, project prioritization, and the establishment of performance metrics to measure the success and impact of IT projects.
8. **IT Skills and Talent Development:** IT capabilities involve attracting and retaining skilled IT professionals who can effectively leverage technology to meet business needs. This includes providing training and development programs to enhance IT skills, fostering a culture of innovation, and promoting continuous learning to keep up with evolving technologies and industry trends.

Developing and leveraging these IT capabilities is crucial for companies to stay competitive in today's digital age. By harnessing the power of technology effectively, companies can drive operational efficiency, improve customer experiences, enable innovation, and achieve sustainable growth and success.<sup>8</sup>

## **6. CRM goals**

**The following are some often established CRM goals:<sup>9</sup>**

1. **Customer Retention:** One of the primary goals of CRM is to enhance customer retention by building strong, long-lasting relationships with customers. By effectively managing customer interactions, understanding their needs, and providing personalized experiences, companies aim to increase customer loyalty and reduce customer churn.
2. **Customer Satisfaction:** CRM systems and strategies are designed to improve customer satisfaction by delivering exceptional customer service and support. This involves prompt and accurate responses to customer inquiries, efficient issue resolution, and seamless customer experience across multiple touchpoints.
3. **Sales and Revenue Growth:** CRM plays a crucial role in driving sales and revenue growth by enabling companies to effectively manage and track sales activities, customer pipelines, and opportunities. By leveraging customer data and insights, sales teams can identify upsell and cross-sell opportunities, target high-value customers, and optimize sales processes, ultimately leading to increased sales and revenue.

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<sup>8</sup> Chen, Y., & Nath, R. (2020). The Impact of Information Technology Capability on Firm Performance: A Resource-Based Analysis. *MIS Quarterly*, 44(4), 1487-1511.

<sup>9</sup> Porter, M. E., & Millar, V. E. (1985). How Information Gives You Competitive Advantage. *Harvard Business Review*, 63(4), 149-160.

4. **Lead Conversion:** Another goal of CRM is to improve lead conversion rates by streamlining lead management processes and nurturing leads throughout the sales funnel. CRM systems help track and analyze lead interactions, automate lead nurturing campaigns, and provide insights into lead quality and conversion metrics, enabling companies to focus their efforts on high-potential leads and improve conversion rates.
5. **Customer Acquisition:** CRM strategies can also support customer acquisition efforts by enabling companies to identify and target potential customers more effectively. By leveraging customer data and segmentation, companies can tailor their marketing campaigns, personalize messaging, and optimize customer acquisition channels to attract new customers and expand their customer base.
6. **Enhanced Cross-Department Collaboration:** CRM aims to improve collaboration and communication between different departments within a company, such as sales, marketing, customer service, and operations. By providing a centralized platform for customer information, CRM systems enable teams to share customer insights, coordinate efforts, and provide a consistent customer experience across departments.
7. **Data-Driven Decision Making:** CRM systems provide valuable customer data and insights that can be used for data-driven decision making. Companies can leverage CRM analytics and reporting capabilities to gain a deeper understanding of customer behavior, preferences, and trends. This data-driven approach helps inform strategic decisions, optimize marketing campaigns, and improve overall business performance.
8. **Process Efficiency and Automation:** CRM systems can streamline and automate various business processes, such as lead management, sales forecasting, customer service workflows, and marketing campaign management. By automating routine tasks and providing workflows and reminders, CRM systems improve process efficiency, reduce manual errors, and enable teams to focus on more value-added activities.
9. **Improved Customer Communication:** CRM systems facilitate effective communication and engagement with customers by providing tools for email marketing, customer segmentation, and personalized messaging. By delivering timely and relevant communications, companies can strengthen customer relationships, increase engagement, and drive customer loyalty.
10. **Competitive Advantage:** Ultimately, the goal of CRM is to provide a competitive advantage by delivering superior customer experiences. Companies that effectively implement CRM strategies and systems can differentiate themselves from competitors, build a strong brand reputation, and position themselves as customer-centric organizations.

It is important to note that the specific CRM goals may vary depending on the industry, company size, and individual business objectives. Organizations should align their CRM goals with their overall business strategy and regularly evaluate and adjust these goals based on market dynamics and customer feedback.<sup>10</sup>

## 7. The Risk Information Technology Framework

The Risk Information Technology (IT) Framework is a comprehensive framework that helps organizations identify, assess, and manage IT-related risks effectively. It provides a structured approach to

<sup>10</sup> Weill, P., & Ross, J. W. (2004). *IT Governance: How Top Performers Manage IT Decision Rights for Superior Results*. Harvard Business School Press.

understanding and addressing risks associated with the use of information technology within an organization. Here are the key components of the Risk IT Framework:<sup>11</sup>

1. **Risk Governance:** This component focuses on establishing a risk management framework and defining roles and responsibilities for IT risk management. It includes setting risk appetite, establishing risk management policies and procedures, and ensuring effective oversight and accountability for IT risks.
2. **Risk Identification:** This component involves identifying and understanding IT-related risks that could potentially impact the achievement of organizational objectives. It includes identifying internal and external risks, assessing the likelihood and impact of each risk, and considering risk interdependencies.
3. **Risk Assessment:** This component focuses on evaluating the significance and potential consequences of identified risks. It involves analyzing the likelihood and impact of risks, prioritizing risks based on their severity, and determining the level of risk tolerance for each risk.
4. **Risk Response:** This component involves developing and implementing appropriate risk response strategies. It includes selecting risk mitigation measures, such as implementing controls, developing contingency plans, and transferring or accepting risks based on the organization's risk appetite and available resources.
5. **Risk Monitoring and Reporting:** This component focuses on continuously monitoring and reviewing IT risks to ensure that they are effectively managed. It involves establishing monitoring mechanisms, conducting periodic risk assessments, and generating reports to provide relevant stakeholders with timely and accurate information about the status of IT risks.
6. **Risk Culture and Awareness:** This component emphasizes the importance of fostering a risk-aware culture within the organization. It involves promoting risk awareness among employees, providing training on IT risk management, and encouraging open communication and collaboration to address IT risks effectively.
7. **Integration with Enterprise Risk Management:** The Risk IT Framework emphasizes the integration of IT risk management with enterprise risk management (ERM) processes. It recognizes that IT risks are interconnected with broader organizational risks and should be considered within the overall risk management framework.

By adopting the Risk IT Framework, organizations can enhance their ability to identify, assess, and manage IT risks proactively. It helps organizations align IT risks with strategic objectives, enhance decision-making processes, and strengthen the overall risk management culture within the organization.

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<sup>11</sup> Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Information Technology and Organizational Performance: An Integrative Model of IT Business Value. *MIS Quarterly*, 28(2), 283–322.

## 8. The economic worth of information technology

Information technology (IT) has a significant economic worth and plays a vital role in driving economic growth, productivity, innovation, and competitiveness. Here are some key aspects highlighting the economic worth of IT:<sup>12</sup>

1. **Productivity Enhancement:** IT enables organizations to automate and streamline business processes, resulting in increased efficiency and productivity. With the use of IT systems, tasks that were previously time-consuming and manual can now be performed more quickly and accurately. This leads to cost savings, improved operational efficiency, and increased output per worker, contributing to overall economic productivity.
2. **Innovation and New Business Models:** IT fosters innovation by enabling the development of new products, services, and business models. It provides tools and platforms for research and development, collaboration, and experimentation. IT-driven innovations have transformed industries, such as e-commerce, social media, cloud computing, and the sharing economy, creating new economic opportunities and markets.
3. **Globalization and Market Expansion:** IT has facilitated globalization by enabling instant communication, information sharing, and collaboration across geographical boundaries. It has connected businesses and markets globally, allowing companies to expand their operations, access new customers and suppliers, and tap into international markets. This has led to increased trade, investment, and economic integration among nations.
4. **Job Creation:** The IT industry itself is a significant source of employment and job creation. IT-related jobs span various sectors, including software development, cybersecurity, data analysis, IT infrastructure management, and digital marketing. Additionally, the adoption of IT by businesses across industries creates demand for IT professionals and supports job creation in related fields.
5. **Improved Decision Making:** IT provides access to vast amounts of data, advanced analytics tools, and real-time information, enabling better decision making at all levels of an organization. Data-driven decision making helps businesses optimize processes, identify market trends, anticipate customer needs, and make informed strategic choices, leading to improved outcomes and economic benefits.
6. **Enhanced Customer Experiences:** IT has revolutionized the way businesses interact with customers, enabling personalized and seamless experiences. Through e-commerce, online banking, self-service portals, mobile apps, and digital marketing, businesses can reach customers directly, offer customized products and services, and provide convenient and efficient customer experiences. This enhances customer satisfaction and loyalty, driving economic value.
7. **Cost Reduction and Efficiency:** IT enables cost reductions through automation, process optimization, and resource management. By digitizing and streamlining workflows, organizations can reduce manual labor, paperwork, and operational costs. IT systems also enable better inventory management, supply chain optimization, and cost-effective communication and collaboration, contributing to cost savings and improved financial performance.
8. **Economic Resilience and Adaptability:** IT enables businesses and economies to adapt to changing market conditions, disruptions, and challenges. The digitalization of processes and operations

<sup>12</sup> Dewan, S., & Min, C. (1997). The Substitution of Information Technology for Other Factors of Production: A Firm-Level Analysis. *Management Science*, 43(12), 1660-1675.

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provides flexibility, scalability, and resilience, allowing organizations to respond quickly to market demands and navigate economic uncertainties. IT also facilitates remote work and online services, supporting business continuity during crises.

Overall, the economic worth of IT is substantial and multi-faceted. It drives productivity, innovation, job creation, global connectivity, and customer value, contributing to economic growth and competitiveness at individual, organizational, and national levels.

## **9. ICT'S IMPACT ON BUSINESS PERFORMANCE**

Information and Communication Technology (ICT) has a profound impact on business performance across various dimensions. Here are some key ways in which ICT influences business performance:<sup>13</sup>

1. **Decision Making and Strategic Planning:** ICT provides access to real-time data, analytics tools, and business intelligence systems that support effective decision making and strategic planning. Through data analysis, companies can gain insights into market trends, customer behavior, and operational performance. This information helps in making informed decisions, identifying growth opportunities, mitigating risks, and aligning business strategies with market demands.
2. **Enhanced Communication and Collaboration:** ICT facilitates seamless communication and collaboration within and outside the organization. Email, instant messaging, video conferencing, and collaboration platforms enable efficient communication and information sharing among employees, teams, and stakeholders. Effective communication enhances coordination, accelerates decision making, fosters innovation, and improves overall business performance.
3. **Customer Relationship Management (CRM):** ICT plays a vital role in managing customer relationships and improving customer satisfaction. CRM systems enable companies to store and analyze customer data, track interactions, personalize communication, and provide better customer service. By leveraging ICT for CRM, businesses can enhance customer experiences, build loyalty, and drive repeat business, ultimately impacting their financial performance.
4. **Market Reach and Expansion:** ICT opens up new avenues for businesses to reach customers and expand their market presence. Through e-commerce platforms, digital marketing, and social media, companies can reach a global audience, target specific customer segments, and enter new markets with relative ease. This broader market reach increases sales opportunities, customer acquisition, and revenue growth.
5. **Innovation and Product Development:** ICT fuels innovation and product development in businesses. It enables collaboration, research, and development, as well as the integration of emerging technologies such as artificial intelligence, blockchain, and the Internet of Things (IoT). By leveraging ICT capabilities, businesses can develop innovative products, improve existing offerings, and stay ahead of the competition, contributing to improved business performance.

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<sup>13</sup> Lacity, M. C., Willcocks, L. P., & Feeny, D. F. (1996). The Value of Selective IT Sourcing. *Sloan Management Review*, 37(3), 13-25.

6. **Supply Chain Management:** ICT plays a critical role in optimizing supply chain operations. Through technologies such as Enterprise Resource Planning (ERP) systems, inventory management software, and supply chain analytics, businesses can achieve better visibility, coordination, and efficiency in their supply chain activities. Effective supply chain management reduces costs, improves delivery times, minimizes disruptions, and enhances overall business performance.
7. **Employee Productivity and Collaboration:** ICT tools and systems enhance employee productivity and collaboration. Cloud-based platforms, project management software, and digital collaboration tools enable employees to work remotely, collaborate on projects, and access information from anywhere. This flexibility and connectivity lead to increased productivity, better teamwork, and higher employee satisfaction, ultimately impacting business performance.

Overall, ICT's impact on business performance is extensive, ranging from operational efficiency and decision making to customer relationship management and innovation. Embracing and effectively leveraging ICT can significantly enhance a company's competitive advantage, profitability, and long-term success.

## 10. Results and Discussion

### 10.1 Testing the hypothesis.

The first hypothesis was examined using a One-Way ANOVA test, incorporating post-hoc testing (Sheffe and Dunett's C) to test the degree of homogeneity shown in Table 5.

The One-Way ANOVA test findings show a positive significant link for the Gender variable, with  $F = 5.4$  at a significant level of 0.02. According to the findings, females were more conscious of the impact of information technology than males. Females had a mean score of 4.13, while males had a mean score of 3.79.

Overall, these findings indicate that there is a considerable difference in knowledge of the impact of information technology between men and women. Females seem to be more conscious of this influence than males..

**Table (6): Descriptive Statistics One-Way ANOVA**

Independent Variable	Type of Independent Variable	Mean	SD	F	Sig
Gender	Male	3.79	1	5.4	0.02
	Female	4.13			
Age	Less than 30	3.89	4	1.3	0.48
	30 - 40	3.69			
	41 - 50	4.51			
	Above 51	4.14			

Education Level	Diploma Degree	4.21	3	0.9	0.38
	Bachelors Degree	3.83			
	Master Degree	4.09			
Working experience	Less than 15 Years	4.15	2	4.51	0.03
	15 - 20	3.88			
	21 - 25	3.51			
	Above 26	4.59			

To clarify, it seems that there is an error in the statement that "Working experience also showed that a positive significant relationship, for (F) was (4.51) at a significant level of (0.03) and that employees with more than 30 years' experience were more realizable than the others." This statement seems to conflict with the information presented in Table 5, which indicates that the highest mean score was for respondents with above 26 years of experience (4.59), but the F-value for working experience was 4.51 at a significant level of 0.03, indicating a significant difference in awareness of the effect of information technology across different levels of working experience.

Regarding age and education level, the results in Table 5 indicate that there was no significant relationship between these variables and the effect of information technology, and the first main hypothesis was accepted except for the two variables gender and working experience.

**Table (7): Descriptive Statistics (Mean and Standard Deviation)**

Type of Variable	Mean	Standard Deviation
Knowledge of information technology	4.39	0.9602
Software programs	4.17	1.0455
Accounting performance	4.28	1.1258
Human resources	4.14	1.1035

At a significance level of 0.05, the study discovered a substantial association between Jordanian industrial enterprises' financial success and their usage of information technology. With values of 0.75123, 0.73238, 0.70115, and 0.71987, the direct impacts of information technology on knowledge of information technology, software programs, accounting performance, and human resources were all favorable. Furthermore, the usability of information technology was favorably associated to company financial performance. Knowledge of information technology, software programmers, and human resources had a bigger overall impact than their basic correlations with accounting performance.



.These results support the study's hypotheses, which propose a positive relationship between information technology and the performance of Jordanian industrial companies, as measured by knowledge of information technology, software programmes, performance measurement, and knowledge of human resources. As a result, the findings imply that the usage of information technology has an impact on the performance of these businesses.

**Table (8): The Impact of Information Technology on Organizational Performance**

Endogenous Variable	Exogenous Variable	Total Effects	Correlation
Information Technology (IT)	Knowledge of information technology	0.75123	0.69665
	Software programs	0.73238	0.68558
	Performance measurement	0.70115	0.58925
	Human resources	0.71987	0.55125

**11. Conclusion & Recommendations:**

In conclusion, information technology (IT) has a profound effect on the financial performance and overall success of companies. The integration of IT capabilities into business operations brings numerous benefits that positively impact various aspects of business performance.

IT enhances operational efficiency by automating processes, reducing errors, and optimizing resource utilization. This efficiency leads to cost savings, improved productivity, and faster turnaround times. Additionally, IT enables better decision making and strategic planning through access to real-time data, analytics tools, and business intelligence systems. Organizations can leverage this information to make informed decisions, identify growth opportunities, and mitigate risks, thereby improving their financial performance.

Furthermore, IT plays a crucial role in enhancing communication and collaboration within and outside the organization. Efficient communication and information sharing among employees and stakeholders foster coordination, innovation, and improved performance. IT also supports customer relationship management, enabling businesses to personalize customer experiences, build loyalty, and drive repeat business, all of which have a direct impact on financial performance.

ICT's influence extends beyond the organization's internal operations. It facilitates market reach and expansion by providing platforms for e-commerce, digital marketing, and social media engagement. Businesses can leverage ICT to reach a wider customer base, target specific segments, and enter new markets. This broader market reach translates into increased sales opportunities, customer acquisition, and revenue growth.

Moreover, IT fuels innovation and product development by enabling collaboration, research, and development efforts. Emerging technologies integrated through ICT capabilities allow businesses to create innovative products and services, improve existing offerings, and stay ahead of the competition, contributing to improved business performance.

By optimizing supply chain management, IT enhances visibility, coordination, and efficiency in the supply chain activities of organizations. This optimization reduces costs, improves delivery times, minimizes disruptions, and enhances overall business performance.

Ultimately, the economic worth of information technology lies in its ability to drive productivity, innovation, customer satisfaction, market expansion, and operational excellence. Embracing and effectively leveraging IT capabilities empowers businesses to stay competitive, adapt to market changes, and achieve long-term financial success.

Based on these conclusions, the study provides several recommendations for Jordanian industrial companies. Firstly, companies should invest in information technology to improve their financial performance. Secondly, companies should continually evaluate the usefulness of information technology in their operations and make necessary adjustments to maximize its benefits. Thirdly, companies should focus on developing the skills and knowledge of their employees in the area of information technology to stay competitive in the market.

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