

**The Impact of Using Feasible Accounting Systems on  
Merchandise Inventory Control in Commercial Companies**

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**Abstract:**

The current study aimed at meticulously examining the role of adopting feasible accounting systems in controlling merchandise inventory in Iraqi commercial companies. The study focused on several Aspects representing the use of feasible accounting systems, namely: technical availability, accounting system functions, integration with other systems, and decision support. The dependent variable was merchandise inventory control. The researchers use in this study a questionnaire as the primary data collection and a descriptive-analytical approach. retrieving a total of 100 completed questionnaires. Various statistical methods were applied using SPSS to present and analyse the study results. The findings indicated a significant positive correlation between the use of feasible accounting systems and merchandise inventory control, The Aspects of the independent variable demonstrate 86.3% of the changes in inventory management. Accordingly, the study recommends that commercial establishments adopt and develop feasible accounting systems, given their direct and effective impact on enhancing inventory control, reducing waste and spoilage, and improving the accuracy of accounting reports and information.

## أثر استخدام النظم المحاسبية الممكنة في السيطرة على المخزون السلعي في الشركات التجارية

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### المستخلص

هدفت هذه الدراسة إلى التعرف و اختبار الدور الذي تلعبه استخدام النظم المحاسبية الممكنة في السيطرة على المخزون السلعي وذلك في الشركات التجارية العراقية، معتمداً على مجموعة من الابعاد التي تمثل استخدام النظم المحاسبية الممكنة وهي (التوافر التقني، وظائف النظام المحاسبي، التكامل مع الأنظمة الأخرى، دعم اتخاذ القرار)، والمتغير التابع هو السيطرة على المخزون السلعي، كما استخدم الباحث المنهج الوصفي التحليلي، كما استخدمت الاستبانة كأداة للدراسة وبأسلوب العينة العشوائية، وتم استرداد (100) استبانة. واستخدم الباحث عدداً من الأساليب الإحصائية في برنامج (SPSS) لعرض وتحليل نتائج الدراسة.

حيث خلصت الى وجود ارتباط إيجابي معنوي لاستخدام النظم المحاسبية الممكنة في السيطرة على المخزون السلعي ويشرح المتغير المستقل بأبعاده مجتمعة 86.3% من تغييرات السيطرة على المخزون السلعي.

وعليه توصي الدراسة بضرورة قيام المنشآت لاسيما التجارية بتبني وتطوير النظم المحاسبية الممكنة، لما لها من أثر مباشر وفعال في تعزيز الرقابة على المخزون السلعي، وتقليل الهدر والتلف، وتحسين دقة التقارير والمعلومات المحاسبية.  
الكلمات المفتاحية: النظم المحاسبية الممكنة، السيطرة على المخزون السلعي، الشركات التجارية العراقية.

### Introduction

The accounting system, equipped with the necessary capabilities to provide management and other stakeholders with relevant data and information for business analysis and decision-making, is considered a fundamental information system within organizations. Traditionally, accounting systems were limited to recording financial transactions based on generally accepted accounting principles; however, with technological advancement, their role has evolved into integrated systems that support both financial and managerial functions (Hamdan, 2014).

Feasible accounting systems can be defined as technology-based accounting systems that integrate software applications and accounting procedures to efficiently collect, process, store, and analyze financial and operational data, thereby providing timely and accurate information that supports managerial decision-making and enhances organizational performance.

Merchandise inventory represents one of the most critical components of current assets in commercial companies, as it constitutes a significant portion of working capital and directly affects cost of goods sold and net profit. Effective inventory management therefore requires the adoption of advanced accounting systems capable of providing real-time, accurate information that supports decisions related to inventory levels, reorder timing, and cost control.

With the evolution of accounting technology, modern accounting information systems such as Enterprise Resource Planning (ERP) systems and perpetual inventory systems have emerged, integrating financial and operational processes and improving firms' ability to control inventory, reduce costs, and minimize waste. Empirical evidence supports this view; Ria et al. (2023) found that integrated accounting information systems enhance operational efficiency and reduce errors in inventory management, thereby improving the reliability of financial reporting. Similarly, Purwanto et al. (2024) confirmed that integrating accounting systems with management strategies contributes to reducing excess inventory and achieving better alignment between supply and demand.

Despite these advancements, most previous studies have been conducted in developed or non-Arab contexts, which differ significantly from the Iraqi business environment. Iraqi commercial companies face specific challenges, including weak technological infrastructure, insufficient staff training, and high market volatility, which may limit the effectiveness of accounting systems in practice. This highlights a clear research gap regarding the applicability and impact of feasible accounting systems within the Iraqi context, particularly in commercial companies operating under unstable economic conditions.

Although recent studies (Ria et al., 2023; Purwanto et al., 2024) have demonstrated the effectiveness of accounting information systems in improving inventory control, most of these studies were conducted in developed or non-Arab contexts. The Iraqi business environment is characterized by specific challenges, including weak technological infrastructure, limited staff training, and high market volatility. These factors may restrict the effective implementation of feasible accounting systems. Therefore, a clear research gap exists regarding the applicability and impact of such systems within Iraqi commercial companies. This study aims to address this gap by examining the role of feasible accounting systems in improving merchandise inventory control, thereby enhancing operational efficiency and organizational sustainability.

### **Significance of the Study**

The significance of this study stems from two perspectives:

- Practical perspective: The study provides practical solutions for commercial companies seeking to control their merchandise inventory and improve the efficiency of their operational processes by relying on feasible accounting systems.
- Scientific perspective: The research contributes to filling a gap in the modern literature by examining the relationship between feasible accounting systems and inventory management from both financial and control perspectives. It also highlights the importance of integrating modern accounting technologies into the business environment, thereby supporting the digital transformation of institutions, enhancing their sustainability in the market, and increasing profitability.

### **Objectives of the Study**

The objectives can be summarized in the following points:

- Analyze the impact of using feasible accounting systems on controlling merchandise inventory in commercial companies.
- Assess the effectiveness of modern accounting systems in reducing losses and waste.

### **Research Problem and Questions**

Despite the remarkable progress in the development of accounting systems and their integration with information technologies, many commercial companies still face challenges and difficulties in effectively controlling their merchandise inventory. Some organizations and companies suffer from surplus or shortage in quantities, or from a lack of accuracy in reports related to inventory movement, which leads to higher operating costs and lower overall performance efficiency.

The problem lies in the extent to which the currently used accounting systems are able to provide accurate and real-time data that contribute to effective monitoring and control of inventory, especially in an environment characterized by rapid changes in supply and demand. Moreover, the absence of a deep understanding of how each Aspects (availability, functions, integration, decision support) affects merchandise inventory control limits the ability of companies to improve performance and sustainability. Therefore, there is a need to study the impact of using these systems on improving inventory management and to determine their effectiveness in achieving control and operational efficiency.

Accordingly, the research problem can be formulated in the following main question:

“What is the impact of using feasible accounting systems on controlling merchandise inventory in commercial companies?”

This main question leads to the following sub-questions:

1. How effective are modern accounting systems in reducing losses and waste?
2. How does the accuracy of accounting reports affect management's ability to make effective inventory decisions?
3. What are the major challenges facing companies in implementing accounting systems for inventory control?
4. What solutions can enhance operational efficiency and sustainability?

### **Study Limits**

- Scientific limits: The study is concerned with key aspects represented by feasible accounting systems and merchandise inventory control.
- Temporal limits: The study was conducted in / /6/ 2025.
- Spatial limits: The study was carried out in a group of commercial companies.

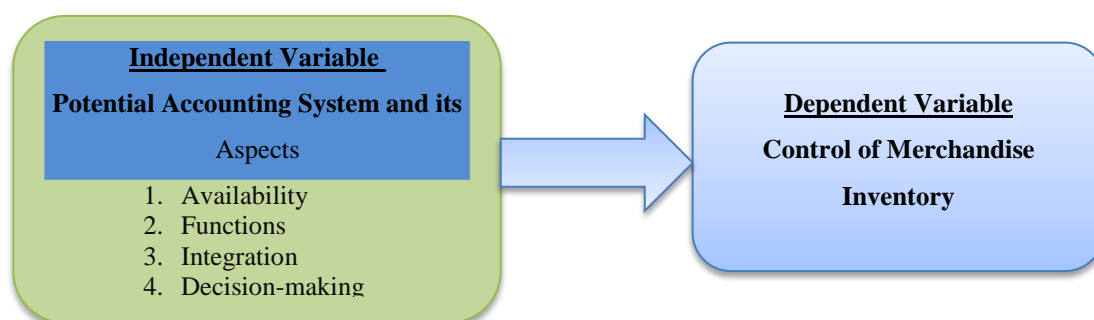
### **Research Methodology**

To test the hypotheses and answer the Study question, the researchers adopted the following approaches:

- Descriptive-analytical method: This method is one of the organized scientific approaches used to understand a specific problem or phenomenon through the collection of quantitative data, followed by their systematic classification and analysis, leading to accurate interpretation.
- The study was based on a questionnaire as the research tool to gather the opinions of the sample in order to determine the impact of using feasible accounting systems on controlling merchandise inventory in addition to field investigation

### **Research Model**

- Figure (1) explains and clarifies the study model, which outlines the variables constituting the present study. It provides a preliminary conceptualization of the influences and relationships among the study variables, which will be examined quantitatively.
- Independent variable: Using feasible accounting systems and its Aspects: availability, functions, integration, and decision-making support.
- Dependent variable: Control of merchandise inventory.



**Figure (1): Research Model**

**Source:** The figure was prepared by the researchers

### **Research Hypotheses**

**Main Hypothesis:** There is a statistically significant impact at the significance level (0.05) of using feasible accounting systems on controlling merchandise inventory in commercial companies.

#### **Sub-Hypotheses:**

1. There is a significant relationship between the technical availability of accounting systems and the control of merchandise inventory in commercial companies.
2. There is a significant relationship between the functions of the accounting system and the control of merchandise inventory in commercial companies.
3. There is a significant relationship between integration with other systems and the control of merchandise inventory in commercial companies.
4. There is a significant relationship between decision-making support and the control of merchandise inventory in commercial companies.

### **Key Previous Studies**

#### **Arabic Studies**

##### **Hamdan's study, (2014):**

This study aimed to identify the role and importance of developing accounting systems in improving financial performance in hotel establishments in Jordan, relying on the descriptive-analytical method. this study reached several conclusions, the important of which are:

- There is a statistically significant effect of developing accounting systems on financial performance in the study context.
- Developing accounting systems contributes to enhancing the level of managerial performance and supports the process of development and change.

In light of these results, the researchers provided several recommendations, the most important of ones are:

- The necessity of direct supervision over the development of accounting systems in hotel establishments to ensure compliance.
- Adopting a clear plan for implementing the required changes related to the development of accounting systems.

### **Arabic Studies**

#### **Saad's & Al-Hasoumi's Study, (2017):**

This study aimed to identify the use of accounting information systems and their impact on decision-making, in addition to uncovering the problems faced by a feed factory. The study used the descriptive method to achieve its objectives. The main findings were:

- The feed factory does not use accounting information systems and lacks the human and technical capabilities required.
- The factory does not provide training courses for its employees.
- The factory's equipment is outdated and does not keep up with technological developments.

In light of these results, the study recommended:

- Providing the necessary requirements for transitioning to the application of information systems in the factory.
- Ensuring the availability of financial and human resources, along with training employees on using modern technologies.

#### **Al- Al-Shmailah's Study, (2024):**

This research aimed to explore the impact of using modern accounting systems in improving the efficiency of accounting work in municipalities in Jordan, adopting the descriptive-analytical method. The study concluded with several findings, the most significant ones are:

- Using modern accounting systems greatly enhances the accuracy of financial and accounting data.
- It also contributes to reducing administrative costs and increasing the efficiency of accounting operations in municipalities.

At the end, the researchers recommended:

- Providing continuous training for employees on using these modern systems.
- Establishing clear policies to ensure the effective use of modern accounting systems.

### **Foreign Studies**

#### **Ria's et al. Study, (2023):**

This study conducted a systematic review of more than 25 studies on accounting information systems related to inventory. The findings revealed:

- Modern accounting systems improve operational efficiency and reduce storage-related costs.
- They enhance the accuracy of financial reports and accelerate decision-making.
- The study concluded with the following recommendations:
- The necessity of integrating modern technological systems into accounting.
- Expanding the use of ERP systems to increase the effectiveness of inventory control.

## Foreign Studies

### Purwanto's et al. Study, (2024):

This study aimed to measure the impact of the inventory accounting system on the quality of internal control in a service company, relying on the descriptive-analytical method. The main findings were:

- The system accounts for 74.9% of the effectiveness of the internal control system.
- An effective accounting system reduces manipulation and human error, and supports accurate inventory-related decision-making.
- The study concluded with the following recommendation:
- It is necessary to adopt continuous electronic inventory systems to strengthen control.

Similarities	Differences
Independent Variable and Its Aspects, Research Method, and Study Instrument	Objectives, Study Community and Sample, Results, Dependent Variable

A critical review of previous studies reveals a general consensus between Arab and foreign research regarding the importance of feasible accounting systems and their key dimensions. Most studies adopted quantitative approaches using questionnaires and statistical analysis, which enhances the reliability of findings across different contexts. However, significant differences exist due to environmental factors. Arab studies primarily focused on practical challenges such as weak technological infrastructure and limited system integration, resulting in moderate impacts. In contrast, foreign studies emphasized advanced analytical tools within highly developed technological environments, leading to stronger and more comprehensive results. This highlights a contextual gap that justifies conducting the current study within the Iraqi environment.

## **Theoretical Framework of the Study Variables**

### **First: Using Feasible Accounting Systems**

#### **1. Concept:**

Several definitions of accounting systems have been proposed, namely: A subsystem of information systems concerned with collecting, storing, and processing financial data and transforming it into useful information for decision-makers (Romney & Steinbart, 2021:30). According to Gelinias et al. (2018), it is the framework used to record and process financial transactions and produce reports that support management operations, planning, and control. Hall (2020), on the other hand, defined it as a set of integrated tools and processes aimed at providing accurate and reliable financial information. (Saad & Al-Hasoumi 2017:14) described it as a system for collecting, classifying, processing, storing, and delivering information of value related to past, present, and future economic events to beneficiaries to support decision-making. As for feasible accounting systems, they are: Accounting information systems that rely on computing technologies to record, process, and analyze financial and inventory data, with the aim of improving operational efficiency and supporting decision-making in the organization (Abdel Fattah, 2021:23). From the researchers' perspective, they are systems based on modern technologies such as integrated software, used to accurately record and process financial data with the capability of generating real-time reports and analyses. The study adopted the descriptive-analytical approach, as it is the most appropriate method for analyzing relationships between variables and interpreting quantitative data.

#### **2. Characteristics:**

According to (Saad & Al-Hasoumi 2017:33), the most important characteristics of feasible accounting information systems are:

- The ability to understand the content of information.
- The ability to correctly use information in making appropriate and relevant decisions for which that information was prepared.
- Qualitative and temporal expertise in dealing with different types of accounting information over a given time period.

#### **3. Objectives:**

(Hamdan ,2014:37) identified a set of objectives as follows:

- Assisting management at all levels in carrying out planning, supervision, and control functions.
- Enabling the analysis and classification of revenues and expenses of each department and division in order to improve overall performance.

- Implementing internal control procedures to safeguard assets and enhance operational efficiency in companies.
- Helping management determine profit and loss over different financial periods and, consequently, assess the company's financial position at the end of these periods.
- Assisting management in reducing inventory errors, thereby minimizing thefts or losses.

#### **4. Aspects of Feasible Accounting Systems**

##### **4.1 Technical Availability:**

Technical availability refers to the extent to which the technological infrastructure required to operate the accounting system efficiently is available, including hardware, networks, and supporting software (Al-Aani, 2020:21).

##### **4.2 Functions of the Accounting System:**

This relates to the range of functions and services provided by the accounting system, such as recording transactions, preparing reports, and conducting financial analysis, ensuring comprehensiveness and accuracy (Al-Obaidi, 2019:25).

##### **4.3 Integration with Other Systems:**

The ability of the accounting system to interact and connect with other systems within the organization, such as sales, purchasing, and inventory, in order to provide an integrated flow of information (Al-Zahrani, 2021:31).

##### **4.4 Decision-Making Support:**

Represents the extent to which the outputs of the accounting system contribute to providing management with the necessary information to make sound decisions, particularly regarding inventory and financial policies (Hassan, 2022:29).

#### **Second: Control of Merchandise Inventory**

Several definitions have been proposed, including:

- Establishing effective control systems and procedures to ensure the availability of appropriate quantities at the right time, while minimizing loss, damage, and excess cost (Al-Sharif, 2018:17).
- The process of organizing and tracking inventory levels to ensure the availability of required quantities without surplus or shortage (Arnold et al., 2018:55).
- A systematic organization of demand and storage levels to achieve balance between supply and demand and reduce costs (Heizer et al., 2020:266).
- Systems that use accounting tools and data analysis to monitor and improve inventory levels in real time.

From the researchers' perspective, it is the process of supervising and organizing the quantities and flow of goods within inventory in terms of purchasing, storage, and distribution, with the aim of reducing loss and cost while increasing operational efficiency (Purwanto et al., 2024:54).

### **Third: The Relationship Between the Use of Feasible Accounting Systems and Merchandise Inventory Control**

Feasible accounting systems play a fundamental role in enhancing institutional efficiency in managing resources, particularly merchandise inventory, which requires precise monitoring to reduce losses and achieve operational efficiency. Feasible accounting systems are defined as a set of software applications and accounting procedures supported by technology that are used to collect, process, and store financial data, thereby enabling management to make accurate decisions. The relationship between feasible accounting systems and merchandise inventory control can be observed in several key aspects, including: (Romney & Steinbart, 2021, pp. 25–30)

- Improving the accuracy of accounting records: These systems allow for precise recording of all inventory-related transactions, such as purchases and sales, which helps reduce human errors or data manipulation.
- Real-time tracking of storage levels: Modern systems enable management to monitor inventory quantities instantly and provide analytical reports that support accurate decisions regarding demand or disposal.
- Enhancing internal control: They provide advanced control mechanisms, such as assigning access privileges and generating comparative reports between actual and recorded quantities, which help detect deviations or losses. (Romney & Steinbart, 2021, pp. 210–220)
- Reducing costs and improving the storage cycle: Through analyzing historical data, optimal inventory levels can be estimated, avoiding overstocking or shortages, which minimizes costs associated with spoilage or shortages.
- Operational integration: Accounting systems integrate with other organizational departments such as production and procurement, creating consistent information flows that strengthen control over inventory movement.

Accordingly, the relationship between the use of feasible accounting systems and merchandise inventory control is a positive one, as these systems contribute to improving monitoring performance, supporting

decision-making, minimizing waste, and increasing the efficiency of logistical operations in institutions and companies. (Hall, 2020, pp. 18–28)

### **Practical Part: Study Methodology**

The researchers focused on the documentary method, reviewing the relevant literature in books, references, and journals. It was also used study with a questionnaire developed by the researchers for this purpose. for collecting data on the impact of using feasible accounting systems on controlling merchandise inventory. The questionnaire included sundry parts covering the study and employed a five-point Likert scale.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

Some indicators were calculated using SPSS software to analyse the study data, which will be detailed in the practical part of the research. The questionnaire consisted of two parts as follows:

**Part One:** This section included some questions about demographic indicators.

**Part Two:** This includes a group of statements measuring test of implementation of the study Aspects. It was structured as follows:

#### **Axis One: Measuring the Use of Feasible Accounting Systems with its studied Aspects:**

##### **Technical Availability:**

- The company has an electronic accounting system appropriate for the size of its operations.
- The accounting system has a clear and user-friendly interface for users.
- The accounting system is updated periodically to meet business needs.
- There is a technical infrastructure (hardware, networks, and technical support) that ensures the system operates efficiently.

##### **Functions of Accounting System:**

- The accounting system covers various financial operations, including sales, purchases, inventory, and reporting.
- The system can generate detailed analytical reports on inventory movements.
- The system allows real-time and accurate recording of inventory transactions.
- The system provides different permission levels according to employees' roles.

**Integration with Other Systems**

- The accounting system integrates directly with the purchasing and sales systems.
- Inventory quantities are automatically updated after each sale or purchase transaction.
- Products can be tracked from receipt to sale through the system.
- The system can share data with other departments.

**Decision-Making Support**

- The system provides reports that help determine appropriate order quantities.
- The information available in the system assists in making better storage decisions.
- The accounting system supports forecasting the company's future inventory needs.
- Management relies on the outputs of the accounting system for purchasing and storage decisions.

**Second Axis for Measuring Merchandise Inventory Control:**

- Using the accounting system helped reduce discrepancies between actual and recorded inventory.
- The use of the accounting system led to a decrease in cases of inventory loss or damage.
- Proper use of the accounting system improved the accuracy of purchase orders for inventory.
- The accounting system's reports aided in the early detection of inventory shortages or surpluses.

**Research Data Analysis Methods****Instrument Reliability Study**

To measure the internal consistency of the questionnaire responses, the researchers used Cronbach's Alpha to measure instrument reliability, and it is considered acceptable and good if the Cronbach's alpha value is equal to or higher than 0.60. Table number (1) shows Cronbach's Alpha values for the Aspects to define the strength of internal consistency of the questions within aspects. Practically, the reliability coefficient was 0.962 for Use of Feasible Accounting Systems, 1.00 for Merchandise Inventory Control, and 0.976 for the questionnaire as a whole. These values indicate that the study instrument has capable of achieving the research goals with high reliability according to (2010:184).

Table (1): Reliability Test

Measurement Scale	Items	(Cronbach's Alpha)
<b>Independent Variable:</b> Use of Feasible	16	0.962

Accounting Systems (combined Aspects)		
<b>Technical Availability</b>	4	0.972
<b>Accounting System Functions</b>	4	0.931
<b>Integration with Other Systems</b>	4	0.638
<b>Decision Support</b>	4	0.973
<b>Dependent Variable:</b> Merchandise Inventory Control	4	1.000
<b>Instrument:</b> Full Questionnaire	20	0.976

Generally, values above 0.70 are considered very good, while values between 0.60 and 0.70 are acceptable. The results indicate that most dimensions demonstrate high reliability, except for the integration dimension, which falls within the acceptable range. This suggests that some items in this dimension may require further refinement in future studies.

The statistics were obtained based on SPSS Data Analysis Results

### Hypotheses Testing

**Main Hypothesis:** the effect is not statistically significant at the 0.05 threshold of using feasible accounting systems on controlling merchandise inventory in Iraqi commercial companies. As for the sub-hypotheses derived from it:

- H01: There is no significant correlation between the technical availability of accounting systems and merchandise inventory control in commercial companies.
- H02: There is no significant correlation between the functions of the accounting system and merchandise inventory control in commercial companies.
- H03: There is no significant correlation between integration with other systems and merchandise inventory control in commercial companies.
- H04: There is no significant correlation between decision-making support and merchandise inventory control in commercial companies.

To test the hypothesis, used Spearman's correlation to measure the relationship between the dependent variables and the independent ones of this study.

Table (2): Correlation Analysis Between Study Variables

Dependent Variable	Decision making support	Integration	Functions	Technical availability	Correlation and significance
Control of merchandise	0.972	0.463	0.935	0.871	Spearman Correlation(R)

inventory	0.000	0.000	0.000	0.000	Sig(2-tailed)
	100	100	100	100	N

The information was obtained based on use of the SPSS Analysis Results Depend on the table 2 , the researchers finds that the more companies focus on using feasible accounting systems, the better they are able to control merchandise inventory. This result proves the truth of the main hypothesis, which is, "There is a statistically significant relationship between the use of feasible accounting systems and merchandise inventory control." used Multiple regression analysis to test the impact of using feasible accounting systems and its components, to test the main hypothesis. (technical availability, functions, integration, decision-making support) on merchandise inventory control in the studied commercial companies.

Table (3): Multiple Regression Analysis of the Relationship Between the Dependent Variables and Independent Variables

Model Summary				
Model	R	R Square	Adjusted R Square	Std.
1	0.929	0.863	0.861	0.26801
a. Predictors: Using feasible accounting system				

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.201	1	44.201	615.373	.000b
	Residual	7.039	98	0.072		
	Total	51.240	99			
a. Dependent Variable: Control of merchandise inventory						
b. Predictors: Using feasible accounting system						

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.233	0.242		0.089	.000
	Using feasible accounting system	1.284	.052	.929	24.807	.000
a. Dependent Variable: control of merchandise inventory						

The table was prepared by the researchers

The correlation coefficient (R) was 0.929, and the coefficient of definition ( $R^2$ ) 0.863, indicating that the use of feasible accounting systems explains 86.3% of the changes in merchandise inventory control, with the remainder refer to other factors not included in the model. The ANOVA analysis demonstrated the model's explanatory power, showing a F-value of 615.373 and a sig = 0.00, that is lower than 0.05, confirming that the overall is statistically considerable. Moreover, the t-test results indicated that the use of feasible accounting systems has a significant effect in the model, with sig = 0.000, which is less than 0.05. for that, the equation of estimated regression will be

**Merchandise Inventory Control= 1.233 + 1.284 × Use of Feasible Accounting Systems**

This led to every one-unit Rise in the use of feasible accounting systems, there is an Rise of 1.284 units in merchandise inventory control. Therefore, it can be concluded that the use of feasible accounting systems has a statistically significant role in controlling merchandise inventory in the studied commercial companies. Next, a simple regression analysis will be conducted between the Aspects of the independent variable (use of feasible accounting systems) and the dependent variable (merchandise inventory control):

Table (4): Simple Regression Analysis

Dependent variable	Model Summary			Variance analysis Anova			Regression Coefficients'		Significance
	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Calculated F-value	Degree of Freedom	Sig.	Linear regression coefficient	Calculated T-value	
Availability	0.781	0.611	0.607	153.661	1	0.000	1.063	0.908	0.000
					98	0.000			
Functions	0.913	0.834	0.832	492.311	1	0.000	1.170	22.188	0.000
					98	0.000			
Integration	0.702	0.493	0.488	95.308	1	0.000	1.005	9.763	0.000
					98	0.000			
Decision making support	0.971	0.942	0.942	1603.610	1	0.000	1.037	40.045	0.000
					98	0.000			

The table was prepared by the researchers.

#### **Technical Availability and Merchandise Inventory Control:**

the table 4 show that the correlation coefficient (R) is 0.781 and the coefficient of definition ( $R^2$ ) is 0.611, meaning that technical availability explains 61.1% of the changes in merchandise inventory control. The results also show that the p-value for this model is lower than 0.05 Refer that model is statistically considerable.

**The regression equation will be:**

$$\text{Merchandise Inventory Control} = 0.377 + 1.063 \times \text{Technical Availability}$$

This let to that for per unit Rise in technical availability, there is a Rise of 1.063 units in merchandise inventory control, highlighting a positive and significant role of the independent variable technical availability in inventory control.

**Functions of the Accounting System and Merchandise Inventory Control:**

The results of the correlation coefficient show that (R) is 0.913, while the coefficient of definition (R<sup>2</sup>) is 0.834, meaning that the functions of the accounting system explain 83.4% of the changes in merchandise inventory control. The p-value for the model is lower than 0.05, confirming that the model is statistically significant. Based on these results, the functions of the accounting system have a statistically significant impact on merchandise inventory control.

**Functions of the Accounting System and Merchandise Inventory Control:**

The regression equation is:

$$\text{Merchandise Inventory Control} = 0.842 + 1.170 \times \text{Functions of the Accounting System}$$

This let to that for per unit Rise in the functions of the accounting system, there is a Rise of 1.170 units in merchandise inventory control, indicating the significant function of this independent variable.

**Integration with Other Systems and Merchandise Inventory Control:**

The results show a correlation coefficient (R) of 0.702 and a coefficient of definition (R<sup>2</sup>) of 0.493, let integration with other systems describe 49.3% of the changes in merchandise inventory control. The p-value is lower than 0.05, reflecting the model is statistically significant.

Regression equation will be:

$$\text{Merchandise Inventory Control} = 0.462 + 1.005 \times \text{Integration}$$

This implies that for per unit Rise in integration, there is a Rise of 1.005 units in merchandise inventory control, demonstrating a positive and significant effect.

**Decision-Making Support and Merchandise Inventory Control:**

The results show a correlation coefficient (R) of 0.701 and a coefficient of definition (R<sup>2</sup>) of 0.492, meaning that decision-making support demonstrate 49.2% of the changes in merchandise inventory control. The p-value is lower than 0.05, confirming the model is statistically considerable.

**Regression equation will be:**

$$\text{Merchandise Inventory Control} = 0.198 + 1.037 \times \text{Decision-Making Support}$$

This let to that for per unit Rise in decision-making support, there is a Rise of 1.037 units in merchandise inventory control, highlighting a positive and

significant role of this independent variable. Based on the review, it is evident that feasible accounting systems effectively provide accurate and up-to-date data on merchandise inventory, enabling management to monitor inventory periodically and in a timely manner.

### **Conclusions:**

There is a direct relationship between the use of feasible accounting systems and merchandise inventory control.

- There is a positive correlation between technical availability and merchandise inventory control.
- There is a considerable positive correlation between the functions of the accounting system and merchandise inventory control.
- There is a considerable positive correlation between integration with other systems and merchandise inventory control.
- There is a considerable positive correlation between decision-making support and merchandise inventory control.
- The practical study shows a significant positive relationship between the use of feasible accounting systems and merchandise inventory control, explaining 86.3% of the changes in inventory control.
- All Aspects of feasible accounting systems contribute significantly to inventory control, with technical availability and functions being the most influential Aspects: technical availability accounts for 61.1% of the changes, functions accounts for 83.4%, integration 49.3%, and decision-making support explains 49.2% of the changes in merchandise inventory control.

### **Recommendations**

Based on the practical study, the following suggestions are proposed for the management of commercial companies:

- Increase reliance on feasible accounting systems in all stages of inventory management to ensure accurate and timely information availability.
- Provide continuous training through specialized programs to equip employees with the skills to use accounting systems and related technology effectively.
- Activate and utilize decision-support reports by encouraging the use of analytical tools provided by accounting systems to formulate inventory-related policies.
- Establish continuous monitoring and evaluation mechanisms by creating a periodic system to assess the performance of accounting

systems and their impact on inventory control, aiming to improve performance and prevent potential issues.

### **Suggested Future Studies**

- The role of technical availability in inventory control.
- The role of accounting systems and their impact on inventory control in governmental institutions.

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