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# Accounting Information Systems for Measurement and Control and their Relationship to Strategic Performance to Achieve Competitive Advantage

#### Thaer Umran Mousa

Department of Finance and Banking, College of Administration and Economics, University of Al-Qadisiyah, Iraq, E-mail: Thaer.mousa@uq.edu.iq

**Abstract:** The primary purpose of designing accounting measurement systems is the lack of a comprehensive, all-inclusive information system. It means that there are many variables that affect these systems in terms of their analysis, design and activation within the economic unit. When studying accounting measurement systems, there are many variables that can be taken into account and have an impact on the design of those systems. The researcher who follows this approach has two ways. The first is that the researcher chooses a specific variable as an independent variable to study its effect on the dependent variable, subject of the research, assuming that the other variables remain the same. The second is that the researcher studies the effect of all the variables combined on the dependent variable, taking all possible probabilities into account. The researcher followed the first approach, where the research focused on performance as independent variables that affect the nature, characteristics and tools of accounting measurement systems as a dependent variable. The research dealt with three sections: the first section is the research methodology, which consists of an introduction, problem, goal, importance and main hypothesis, and the second section is the theoretical aspect of accounting information systems for measurement, design and control over performance evaluation of economic units and the third section is the practical aspect. To achieve the research's objectives, a questionnaire was designed and distributed by the researcher. The survey was made on a group of accountants, auditors, chief financial officers (CFOs), accounting and auditing offices located within the governorates of Baghdad and Qadisiyah. The survey included a set of questions, including testing the seriousness, accuracy, validity and integrity of the answers in the survey lists. The research found an impact of accounting information systems on measurement and control of strategic performance in economic units with a difference in the competitive strategies associated with these systems.

**Keywords:** Information Systems, Control, Strategic Performance.

#### INTRODUCTION

The research attempts to explore some trends for the performance and strategy of economic units and how these trends affect information systems in accounting measurement through the nature of the regulatory requirements and the characteristics of the system used and the measurement and control tools used. In light of this, the research presents a comprehensive framework for the analysis of

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measurement and accounting control systems that takes into account the practical degree of measurement and control over the performance of the economic unit and the influencing factors, whether from inside or outside the organization for the known time levels, which are the long-term strategic level and the medium-term tactical level and the short-term operational level. Environmental and technological variables have an impact on the information system for accounting measurement and must be taken into account when designing those systems. These systems are not just isolated sub-systems, but are part of the overall system of the firm that is affected by the external environment. Although some research was conducted to study and design accounting control and measurement systems, which took an applied nature, the results of these studies were not specific about the relationship of environmental variables with the accounting control system. This can be contributed to the lack of sufficient data to determine such relationship precisely and the variables of the model designed to measure this relationship was not adequate. This calls for the need for more studies that examine such a relationship between the performance of the economic unit and the accounting systems for measurement.

#### RESEARCH METHODOLOGY

#### **Research Problem:**

The accounting and control measurement systems are practical tools for building performance and competitive strategies in economic units. As these systems include a set of official procedures that work to maintain performance or change the pattern of this performance if environmental conditions necessitate doing so. There is a reciprocal structural impact relationship between the performance of the organization and the accounting systems for measurement and control in the organization where measurement and control systems are considered a tool for implementing the strategy of the competitive economic unit, and the strategy is one of the constants of the organization and the role of accounting and control measurement systems is limited to motivating and monitoring the report on the extent to which the goals of the organization are achieved. Through the foregoing, this research attempts to answer the following question: Is there a difference in the characteristics of accounting systems and accounting control and measurement tools between firms as a result of their different strategic competitive performance?

#### **Research Importance:**

The importance of this research stems from being one of the research that dealt with the process of studying and analyzing accounting measurement systems in the light of strategic directions and performance evaluation in Iraqi economic units in addition to presenting a conception and theoretical framework to determine the nature of the relationship between competitive strategies and measurement and control systems as a basis for raising efficiency and effectiveness in firms and helping them in choosing the most appropriate systems for its strategy to achieve the competitive advantage in a way that enables it to face the competition that has become a feature of the local market.

#### **Research Objectives:**

The research seeks to shed light on the performance of economic units through their performance, policies and competitive strategies that they follow, and the most important factors that must be taken into account when designing accounting measurement and control systems. Accounting measurement and control systems reflect the performance, policy, strategy and plans of economic units as sufficient information systems to raise their efficiency as well as developing an integrated framework for the design of measurement and accounting control systems that takes into account the special

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factors for measuring the efficiency and strategy of the unit and achieving its competitive objectives in the present and the future.

#### **Research Hypothesis:**

The hypothesis expresses the main objectives that the research seeks to achieve, which are: (There are differences in the nature of the accounting control and measurement systems package, the characteristics of the accounting systems, the nature of the tools used and the relative importance of the tools used among firms as a result of the difference in the competitive strategic performance of the organization).

#### **Research Methodology:**

In light of the specific objectives of this research, the descriptive (inductive) approach was used in order to reach an answer to the question of this research, which aims to identify the competitive strategic performance available to companies, as well as the package of measurement and accounting control systems used in each company as well as the applicable characteristics of accounting measurement and control systems in addition to the measurement tools.

#### SECOND SECTION: THEORETICAL ASPECT:

## 1. Trends in information systems in general and in accounting measurement and control in particular.

The contemporary business environment has changed fundamentally from before. One of the indicators of this change is the complexity of the production process, the reliance on advanced industrial systems technology and the expansion of competition circles as a result of the development in the consumption pattern of the market. These and other factors have resulted in a global trend of increasing the competitiveness of the enterprise on a global basis so that it can survive and grow. The competition has now moved its scope from the local to the global field. This change and development revealed a set of trends related to information systems in general, and measurement and accounting control systems in particular and how to activate them within the organization in terms of the strategic performance of economic units. The most important of these trends are: (Law, P.2009)

- 1. Increasing interest in the competitive strategic dimension of the firms.
- 2. Managing the value chain which represents the sum of the added activities of the final consumer.
- 3. Studying, analyzing and designing the policies and procedures by which the achievement is carried out.
- 4. Achieving integration between the elements of operational performance, objectives and strategies.

Therefore, the challenge facing accounting control and measurement systems at the present time revolves around the role these systems play in becoming a tool that helps the organization to progress towards something better (Elloit, Robert K. and Jacobson ,peter D 2009). This research seeks to study and determine the nature of the relationship between accounting and control systems and organizational strategic performance and to identify the differences between the nature and characteristics of the accounting and control tools used, which can be attributed to differences in the competitive strategic performance of organizations. Therefore, the main variables addressed by this research are represented in the nature of the accounting and control measurement systems package used and the characteristics of the accounting and control system, financial and control tools. These three variables are the focus of this research.(Satava, D 2006)

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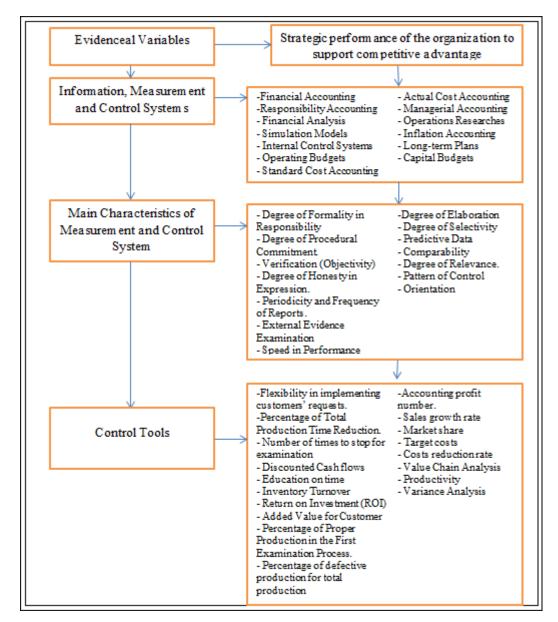


Figure No.(1) Accounting Measurement and Control Systems for Environmental variables for the Organization's Strategic Performance

## 2. Characteristics of the Accounting and Control Measurement Subsystems of the Organization

With regard to the characteristics of the system, the most important characteristics that were derived through studies can be clarified and from the reality of the actual environment as follows: (Nichols, D.R., & Price, K. H 2016)

**Degree of Details:** One of the indicators by which the characteristics of the accounting and control system are expressed is the degree of elaboration and detail in the control and accounting tools. The system ranges between the most extensive and the least elaborate in the light of the degree of classification and reclassification of the data used as a basis for accounting and control measurement.

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**Degree of Relevance:** Where the system has a high degree of relevance if it provides for each administrative level the appropriate administrative information according to the area of activity responsibility. If the system does not provide this accounting and control information, it will be less relevant.

**Degree of Selectivity:** (Humphey, C. Moizerp and Turley 2006) There is often a conflict between the information and each other, so there will be information that is relevant for the accounting and regulatory position and others are irrelevant. The degree of selectivity of the system increases as the ratio of the relationship between the appropriate information to the inappropriate information increases, which is illustrated by the following relationship:



Whereas:

Ds: represents the degree of selectivity. Ri: represents the relevant information

**IRi:** represents irrelevant information

**Degree of Procedural Commitment:** It is possible to distinguish between two types of control in the light of this criterion, namely the standard system and the strategic control system, where the first is based on pre-defined formal tools and procedures to conduct the control process and therefore is characterized by a high degree of procedural commitment, while the procedures and tools used in the second type are subject to the characteristics of the situation being monitored, and here the degree of procedural commitment is reduced. (Nichols, D.R., & Price, K. H 2016)

**Degree of Formality in Responsibility:** The organizations are formed in the form of a hierarchical structure, and each firm has specific goals at the top of the organizational hierarchy, which in turn are analyzed into sub-goals at lower administrative levels, and so on in light of the principle of means analysis, where each administrative level in the organization has a specific goal and a certain responsibility that represents restrictions on security level and so on. Therefore, the degree of formality in responsibility varies according to the degree of formal analysis of the objectives and the link between them and the organizational structure of the firm. (- Joseph V. C. and terry L. N.,2019)

Control Pattern: (Kinchella, W. Robert et 2007) What is meant by the control pattern is the behavior and philosophy of senior management towards the application of the control system. There is the tight pattern, in which there is a characteristic of a low degree of participation on the part of subordinates, and the focus is on accounting standards, where the role of managers comes to mere achievement of these standards as specific tasks or goals. Whereas, the loose control system that is characterized by a relative freedom for respondents of the organization has the characteristics of a high degree of participation in setting goals or standards as well as attention to the behavioral aspects of the control process.

**Speed in performance:** It is measured by the time elapsed between the occurrence of a specific environmental change and the arrival of indicators about this event to the administrative level responsible for taking a specific action in connection with this event. There are situations that require a high speed in the organization's response to its effects, and here comes the role of speed in the performance of the regulatory system. (- Joseph V. C. and terry L. N.,2019)

**Orientation:** It is possible to distinguish between two basic systems of control in the light of the regulatory orientations. There are future-oriented control systems, where the focus is on the goal of

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continuous improvement in the activity, while the system may be backward-oriented if the main goal is past events and predetermined goals.

**Degree of change in the accounting and control system or flexibility:** The current environment is dynamic, and the accounting measurement and control system must conform to the requirements of this environment, and therefore it must have the property of flexibility and change according to the internal and external requirements. The degree of flexibility of the system is determined by its ability to respond to changes in this environment.

**Periodicity of reports:** The periodicity or frequency of reports is one of the characteristics that distinguish a control system from other systems. There are reports prepared on a daily basis, others on a monthly basis, and third on a quarterly, semi-annual or annual basis.

**External Environment Examination**: In many situations, managers need data from the external environment along with internal data in order to make a decision. The degree of reliance on external environment data in the measurement and control process is one of the important characteristics that distinguish a control system from other systems. ((Bakear, N.2005))

**Predictive Data:** Due to the increasing degree of uncertainty in the current business environment, the need for predictive data in the areas of measurement and control is increasing. Increasing the data used in the forecast process leads to an increase in the degree of forecasting accuracy and thus the degree of uncertainty decreases.

**Degree of honesty in expression:** One of the components of the efficiency of the measurement and control system is the extent of honesty in expressing the activity under evaluation and impartiality so that the process of measurement and control expresses the truth.

**Comparability:** (- Knapp, MC.2016) The measurement and control process is achieved mainly by comparing actual indicators with standard indicators, target indicators, or indicators of previous best performance. The effectiveness of the measurement and control system increases if it has a high degree of comparison with one or more of the previous indicators.

**Verification** (**objectivity**): The efficiency of the measurement and control system is measured by the degree of objectivity in the measurement process, so there must be sources to review the data of the measurement and control process and verify its reliability.

## 1. Performance measures and financial tools for measurement and control used (Gavious, I. 2007)

With regard to the control tools, some measures have been suggested from the same previous sources and previous research and studies in the same field. These tools have been defined to cover the three main fields which are strategic, tactical and operational fields. The researcher would like to emphasize at this point the importance of designing measurement systems that support the strategic priorities of the organization. The need to achieve integration between performance and the organizational strategy, in terms of the details of performance measures at each level of the organization and the degree of compatibility between these measures.

**Owners' Equity Analysis:** (Bakear, N.2005) One of the measures of evaluating strategies is to verify that the proposed strategy creates value for shareholders, measured by the net present value of the flows generated by it. The analysis in this scale depends on determining the causes of value, whether at the operational or investment levels, and some assert that the addition to owners' rights can be analyzed and measured in light of estimating the owners' net present value added on three

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levels, namely the individual strategic dimension and the balance of this strategic dimension with other strategic dimensions then the interaction and integration between the organizational unit and the sector to which it belongs. This can be shown the measure of addition to the rights of owners as shown in the following formula (Gavious, I. 2007)

$$cg = \sum_{t=1}^{n} \Delta E t - (2)$$

$$E_{t} = (P_{t} - P_{t} \min) (1 - x_{t}) S_{t} / K_{t} (1 + K_{t})^{t-1} - (3)$$

$$P_{t} \min = (F_{t} + W_{t}) K_{t} / (1 - X_{t}) (1 + K_{t}) - (4)$$

#### whereas:

Cg: Addition to owners' equity resulting from the implementation of the G strategy.

 $\Delta$ Et: Change in owners' equity at the end of the period t.

Pt: Ratio of income from additional sales during period t (income before interest and taxes sales)

Pt min: Minimum revenue from additional sales

Xt: Rate of income tax during the period being measured

St: Change in sales during the period under measurement

Kt: Weighted Average Cost of Capital (WACC) ratio

Ft: Investment Expenditure per Sales Dollar. It is equal to Investment Expenditure - (Depreciation/Sales)

Wt: Working capital required per sales dollar (Capital/Sales)

**Job Analysis:** This analysis helps to determine the value added by each function performed by the firm to the customers where the costs of performing each of these functions are compared with the best specific value of these costs from the point of view of customers, in order to determine the aspects that should be focused on for each job in light of its importance from the point of view of customers and in light of the conditions of the organization itself. (ealy, T. and Kim, Y2003)

**Product Life Cycle Analysis:** The product life cycle concept is one of the basic concepts that can be used to clarify the relationship between the different areas of activity during the life of the product and which the organization can analyze and evaluate. This concept serves as the basis on which the various strategies of the organization should be developed. (- Knapp, MC.2016) It is also considered one of the means that support the strategic view in the competition environment. It gives an indication of adding the product during its total life cycle rather than focusing on each stage of this cycle independently, which includes the stages of the product life cycle, the stage of planning and design for production and production, and finally the support or exclusion of the product.

**Value Chain Analysis:** (Gavious, I. 2007) This analysis aims to identify the chain of value-adding activities from the time of obtaining raw materials until the consumer has completed the product, in order to follow up the behavior of costs when performing each activity and the sources of excellence in each activity. This analysis is based on the following steps:

- 1. Determining the value chain of activities.
- 2. Determining the value drivers in each activity across the chain.
- 3. Determining the critical competitive characteristic that supports the value chain.

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4. Developing this critical competitive characteristic to gain a competitive advantage.

**Target Costs:** This measure is one of the control measures that look at competition conditions and market price as a starting point for work. The tasks within the organization aim to achieve this level or better than it to achieve a competitive advantage. This means that the target costs may be a starting point in building the strategic dimension of the firm's activity (- Knapp, MC.2016)

#### **Third Section: Practical Aspect**

The current research population consists of workers in government units, the sample was randomly selected from the research population where the researcher distributed (70) questionnaires and they were answered by (60) persons or (90%). The researcher used a questionnaire to collect information from the target sample. The form consists of two parts. The first part includes the personal data of the research sample, including age, educational and occupational qualifications, and years of service. The second part included (11) statements according to the five-point Likert scale (agree, strongly agree, neutral, disagree, strongly disagree). 6) Questions. These statements were distributed to the researches' axes. The first axis included (5) questions and the second axis included (6) questions. In order to improve the validity and reliability of the questionnaire, a pre-test was conducted for it by presenting it to some academics from university professors in order to verify the clarity and integrity of its statements and their modifications were made before distributing them to the sample.

#### 1. Statistical Reliability and Validity:

Table No. (1): Statistical Reliability and Validity

Coefficient	Value	Interpretation
Validity	0.9	It is characterized by high degree of validity
Reliability	0.8	It is characterized by high degree of reliability

#### Source: Prepared by the researcher

Through the above table, we notice the value of the Cronbach's alpha correlation coefficient for validity and reliability, respectively, equal to 0.9 and 0.8, which are greater than (0.5), and accordingly, the answers of the sample respondents to the questionnaire are characterized by a high degree of validity and reliability.

## 2. Characteristics of age, academic qualification, academic and occupational specialization, and years of experience:

**Table (2) Characteristics of the research sample:** 

Data	Categories	Number	Percentage
	Less than 25 years	21	33.3
Age	25 – 35 years	23	36.7
	36 – 45 years	14	23.3
	46 – 50 years	4	6.7
	Total	60	100%
	Bachelor	36	60
Academic qualification	High diploma	8	13.3
	Master	8	13.3
	PhD	8	13.3
	Total	60	100%

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	Accounting	36	60
Academic specialization	<b>Business Administration</b>	14	23.3
	Economics	5	8.3
	Others	5	8.3
	Total	60	100%
	Accountant	24	40
	CFO	6	10
Job	<b>Head of Financial Department</b>	6	10
	Auditor	24	40
	Total	60	100%
	Less than 5 years	22	36.7
	5 and less than 10 years	19	31.7
Years of Experience	10 and less than 15 years	11	18.3
	15 years and more	8	13.3
	Total	60	100%

Source: Prepared by the researcher

Table (2) shows that the majority of respondents of the research sample according to age are from the youth group and it can be said that they are young people. The table shows according to the academic qualification that the majority of the research respondents have a university academic qualification. The table also shows that the sample respondents are graduates of the College of Administration and Economics of the specialization of accounting, business administration and economics. It also shows that the majority of the sample respondents, according to the job title, are accountants, auditors, CFOs and auditing offices and that the sample respondents have sufficient and clear experience and skill, according to the numbers, ratios, categories and data installed in the table above.

#### 3. Descriptive analysis of the field research sample:

The researcher tries, through statistical analysis and discussion on the main statement in the first axis to know the opinions of the sample respondents about whether the company follows a strategic performance, especially in supporting its ability to competitive performance in the market for its products.

Table No.(3) Frequent Distribution of the Statement of the First Axis

Statement	Strongly agree Frequen cy Percenta ge	Agree Frequen cy Percenta ge	Neutral Frequen cy Percenta ge	Disagree Frequen cy Percenta ge	Strongly disagree Frequen cy Percenta ge	Mea n	Chi- Squa re Value	Level of Acceptan ce		
The	26	18	11	4	1					
Company in which you work has its own strategy to support its ability of	43.3	30	18.3	6.7	1.7	1.97	33.01	Strongly agree		

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competitive							Ī	
performanc e in the								
market for								
its								
products,								
more								
important								
in terms of								
quality.								
The	19	28	8	5	0			
Company								
has a more								
important								
strategy,								
which is								
leadership								
in cost								
reduction in						2.02	20.63	Agree
order to	31.7	46.7	13.3	8.3	0	2.02	9	Agree
support its								
ability of								
competitive								
performanc								
e in the								
market for								
its								
products.								
The	27	27	2	4	0			
Company								
follows the								
strategy of								
differentiati								
on in the								
market, and								
the most								
important						1.75	36.50	Strongly
thing is to	45	4.5	3.3	6.7	0	1./3	8	agree
support its								
ability of								
competitive								
performanc								
e in the								
market for								
its								
products.								
The focus	37	16	6	1	0	1.54	48.68	Strongly
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strategy in							9	agree
the market								agree
in which								
the								
company								
operates is								
the most								
important								
in								
supporting	61.7	26.7	10	1.6	0			
its								
competitive								
strategic								
performanc								
e in the								
market for								
its								
products.								
The	29	19	11	1	0			
Company								
applies the								
relative								
importance								
of the								
financial								
performanc								
e measure						1.72	2968	Strongly
in its three	48.3	31.7	18.3	1.7	0	1.72	9	agree
dimensions								
: long-term,								
medium-								
term								
tactical, and								
short-term								

#### **Source: Prepared by the researcher**

After analyzing the above Table No.(3) for the results of the first axis (Does the company follow a strategic performance, especially in supporting its ability of competitive performance in the market for its products), we find that he obtained a mean of 2, i.e., (I agree), according to Five-Point Likert Scale, meaning that the majority of the sample surveyed agree with the statements forming this axis, this means that there is a difference in measurement systems and accounting tools as a result of their different strategic competitive performance.

As for the second axis, the researcher tries, through statistical analysis and discussion of the statement of the axis, to know the opinions of the sample respondents about the role of the

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characteristics of accounting information systems in the accounting and control measurement on the strategic performance of economic units.

Table No.(4) Frequent distribution of the Statement of the Second Axis

Statement    Frequen cy   Frequen cy   Frequen cy   Percenta ge   Percen		Strongly agree	Agree	Neutral	Disagree	Strongly disagree		Chi-	
The degree of elaboration and detail in the control and accounting measuremen t tools: The system ranges between the most elaborate in the light of the degree of classificatio on of the data used as a basis for accounting and control measuremen t.  The system ranges between the most elaborate in the light of the degree of classificati on of the data used as a basis for accounting measuremen t.  The system ranges between the most elaborate in the light of the degree of classificati on of the data used as a basis for accounting and control measuremen t.  The system ranges between the most elaborate in the light of the degree of classificati on of the data used as a basis for accounting and control measuremen t.  The system ranges between the most elaborate in the light of the degree of classificati on of the data used as a basis for accounting and control measuremen t.  The system ranges between the most elaborate in the light of the degree of classificati on of the data used as a basis for accounting and control measuremen t.  The system ranges between the most elaborate in the light of the degree of classificati on of the data used as a basis for accounting and control measuremen t.	Statement	Frequen	_	_	_	Frequen		Squa	Level of Acceptan
The degree   26   23   11   8   0							n		ce
The degree of elaboration and detail in the control and accounting measuremen t tools: The system ranges between the most elaborate and the least elaborate in the light of the degree of classificatio n and reclassificatio on of the data used as a basis for accounting and control measuremen t.  The system 15 30 10 5 0 1.8 25.5 Stror agr.								value	
of elaboration and detail in the control and accounting measuremen t tools: The system ranges between the most elaborate and the least elaborate in the light of the degree of Classificatio n and reclassificati on of the data used as a basis for accounting and control measuremen t.  The system 15 30 10 5 0 is highly relevant if it provides each administrati ve level	Th								
The system is highly relevant if it provides each administrati ve level 25 50 16.7 8.3 0 2.08 23.33 Strong agree 3 25 25 25 25 25 25 25 25 25 25 25 25 25	of elaboration and detail in the control and accounting measuremen t tools: The system ranges between the most elaborate and the least elaborate in the light of the degree of classificatio n and reclassificati on of the data used as a basis for accounting and control measuremen						1.8	25.5	Strongly agree
is highly relevant if it provides each administrati ve level 25 50 16.7 8.3 0 23.33 Strong agree 25 50 16.7 8.3 0		15	30	10	5	0			
with the	is highly relevant if it provides each administrati				8.3		2.08		Strongly agree

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relevant								
administrati								
ve								
information								
according to								
the area of								
activity								
responsibilit								
y.								
The	24	28	2	6	0			
behavior								
and								
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of senior								
managemen								
t towards								
the								
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of the								
control								
system in a								
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which has						1.83	33.33	Strongly
	40	46.7	3.3	10	0	1.83	3	agree
the								
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t and control	36.7	45	13.3	3.3	1.7		)	agree
system is								
compatible								
with the								
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s of this	
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Source: Prepared by the researcher	

Source: Prepared by the researcher

After analyzing the above table No.(4) for the results of the second axis on (the role of the characteristics of accounting information systems in the accounting and control measurement on the strategic performance in economic units), we find that he obtained a mean of 2 i.e. (I agree), according to Five-Point Likert scale, meaning the majority of the sample surveyed agree with the statements form this axis, this means that there is a difference in the measurement systems and

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accounting and control tools as a result of the difference in their competitive strategic performance in the economic units.

#### 4. Hypothesis Analysis and Discussion

Table (5) One-sample T-test for the first axis

No.	Statement	Confide	ence at 95%	level		Orientation
		(T) test	Degree of freedom	Significance	Mean	
1	The Company in which you work has its own strategy to support its ability of competitive performance in the market for its products, more important in terms of quality.	16.073	3	0.00	1.97	Agree
2	The Company has a more important strategy, which is leadership in cost reduction in order to support its ability of competitive performance in the market for its products.	11.165	2	0.00	2.02	Agree
3	The Company follows the strategy of differentiation in the market, and the most important thing is to support its ability of competitive performance in the market for its products.	14.731	2	0.00	1.75	Strongly agree
4	The focus strategy in the market in which the company operates is the most important in supporting its competitive strategic performance in the market for its products.	12.320	2	0.00	1.54	Strongly agree
5	The Company applies the relative importance of the financial performance measure in its three dimensions: long-term, mediumterm tactical, and short-term operational dimensions.	14.281	2	0.00	1.72	Strongly agree

Source: Prepared by the researcher

It is evident from the above table that:

1. The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (16.073). The value of significance level was (0.00), which is less than the significance level (0.05), which indicates the existence of statistically significant differences concerning that "the Company in which you work, which has its own strategy to support its ability of competitive performance in the market for its products and is more important in terms of quality".

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- 2. The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the second statement, was (11.165), and the level of significance is 5%. The value of significance level was (0.00), which is less than the significance level (0.05), which indicates the existence of statistically significant differences concerning that "the Company has a more important strategy in leadership in cost reduction in order to support its ability in competitive performance in the market for its products".
- 3. The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (14.731). The value of significance level was (0.00), which is less than the significance level (0.05), which indicates the existence of statistically significant differences concerning that "the Company has a more important strategy, which is leadership in cost reduction in order to support its ability of competitive performance in the market for its products".
- 4. The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (14.731). The value of a significant level was (0.00), which is less than the significance level (0.05) which indicates the existence of statistically significant differences concerning that "the focus strategy in the market in which the company operates is the most important to support its competitive strategic performance in the market for its products".
- 5. The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (14.731). The value of a significant level was (0.00), which is less than the significance level (0.05) which indicates the existence of statistically significant differences concerning that "the Company's application of the relative importance of financial performance measures in its three dimensions: long-term, medium-term tactical, and short-term operational".

**Table (6) One-sample T-test for the second axis** 

No.	Statement	(T) test	Degree of freedom	Significance	Mean	Orientation
1	The degree of elaboration and detail in the control and accounting measurement tools: The system ranges between the most elaborate and the least elaborate in the light of the degree of classification and reclassification of the data used as a basis for accounting and control measurement.	13.552	1	0.01	1.8	Agree
2	The system is highly relevant if it provides each administrative level with the relevant administrative information according to the area of activity responsibility.	17.430	2	0.02	2.08	Agree
3	The behavior and philosophy of	13.552	3	0.00	1.83	Agree

4.6	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 7 in Jul-2022 https://www.grnjournals.us/index.php/AJEBM
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	• , , , ,					
	senior management towards the					
	application of the control system in					
	a tight style, which has the					
	characteristic of a low degree of					
	participation on the part of					
	subordinates, and the focus is more					
	on accounting standards.					
	The current environment is dynamic					
	and the accounting measurement					
4	and control system is compatible	21.284	2	0.00	1.88	Agraa
4	with the requirements of this	21.284				Agree
	environment according to the					
	flexibility feature.					
	The efficiency of the measurement					
	and control system is the extent of			0.00	1.92	Agraa
5	honesty in expressing the activity	12.904	2			
3	under evaluation and impartiality so	12.904	2		1.92	Agree
	that the process of measurement					
	and control expresses the truth.					
	There are future-oriented					
	accounting and control					
6	measurement systems where the	21.768	2	0.00	1.89	Agree
	focus is on the goal of continuous					
	improvement in the activity.					

Source: Prepared by the researcher.

- 1) The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (13.552). The value of a significant level was (0.01), which is less than the significance level (0.05), which indicates the existence of statistically significant differences regarding the degree of elaboration and detail in the control and accounting measurement tools: The system ranges between the most elaborate and the least elaborate in the light of the degree of classification and reclassification of the data used as a basis for accounting and control measurement.
- 2) The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (17.430) and significance level 5%. The value of a significant level was (0.02), which is less than the significance level (0.05), which indicates the existence of statistically significant differences, which is that the system has a high degree of relevance if it provides for each administrative level the relevant administrative information according to the area of activity responsibility.
- 3) The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (13.552). The value of a significant level was (0.00), which is less than the significance level (0.05), which indicates the existence of statistically significant differences, which is that the behavior and philosophy of senior management towards the application of the control system in a tight style, which has the characteristic of a low degree of participation on the part of subordinates, and the focus is more on accounting standards.

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- 4) The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (21.284). The value of a significant level was (0.00), which is less than the significance level (0.05), which indicates the existence of statistically significant differences, which is that the current environment is dynamic and the accounting measurement and control system is compatible with the requirements of this environment according to the flexibility feature.
- 5) The calculated (t) value, to indicate the differences between the sample respondents who are agree, neutral and disagree what was stated in the first statement, was (12.904). The value of a significant level was (0.00), which is less than the significance level (0.05), which indicates the existence of statistically significant differences in the application of the efficiency of measurement and control system is the extent of honesty in expressing the activity under evaluation and impartiality so that the process of measurement and control expresses the truth.

#### **Results:**

- 1) The metrics used in the accounting and control measurements and performance evaluation differ between the firm according to its strategic performance.
- 2) The accounting and control measurement tools can be used depending on the regulatory system followed, which in turn depends on the degree of environmental instability and the nature of the relationship between the organization and the environment.
- 3) The effectiveness of accounting standards decreases and their role diminishes in the event of a dynamic environment and that the administrative level is measured by its performance more than the operational and executive level.
- 4) There is no comprehensive accounting and control measurement system that meets the needs of economic units and their strategic performance in order to achieve competition and growth.

#### **Recommendations:**

- 1) Determining the relationship between performance measures, where senior management needs accounting measures aimed at verifying that performance at the medium tactical level is consistent with long-term strategic performance.
- 2) It is necessary to rely on non-financial performance measures and advanced technological industrial methods as well as advanced administrative methods through focusing on customers, being the most important element of the characteristics of these measures.
- 3) Achieving continuous improvement by searching for means to reduce costs and matching accounting focus with strategic performance.
- 4) The firm should use modern industrial technology and accounting and control standard tools that are compatible with these systems and stay away from systems that impede the application of this technology in order to achieve a competitive advantage.

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