ABSTRACT

This study aims to identify the role of practices in achieving competitive advantage based on the attitudes of managers, supervisors, and assistant managers at financials departments in private universities in the Erbil city Kurdistan region of Iraq. To achieve the study objectives, a questionnaire was constructed consisting of (20) questions distributed to a sample of (45) managers, supervisors and assistant managers (43) of which were returned, while (42) were valid for statistical analysis. The main objectives of this study is to design a default model and test in the study field in order to understand identify the role of management accounting in achieving competitive advantage. This study found that management accounting has a positive correlation and an impact on achieving competitive advantage according to the study samples perspectives. Based on the results, the study presents a set of recommendations such as the need to pay attention to management accounting practices and work to develop them in line with future aspirations in light of modern technologies.
Introduction

Nowadays, organizations face stress and challenges. This is mainly due to rapid fundamental changes in all fields. Especially with technological advances in the means of communication and information technology. Therefore, the organization strives to provide the best, most accurate, most appropriate and flexible information. Organizations also requires more experience and high management skills with the availability of effective techniques and systems that help managers to make suitable decisions compatible with keeping up with the times and change its strategy, which drives the institution of development.

Management accounting is a renewable science because of its many methods, visions and analyzes, it is modern science and is constantly updating and has an effective and influential role in supporting managers and their support in planning, monitoring, performance evaluation and taking appropriate decisions. Management accounting began to shift from the traditional entrance to the contemporary entrance as its concepts, dimensions, methods and frameworks evolved to suit the requirements of the modern era and the needs of organizations. A number of reasons have led to the development of management accounting methods, including the emergence of intense competition between companies that produce similar goods, the diversity and multiplicity of consumer tastes, which led to an increase in the percentage of the merchandise mix, and a high percentage of indirect costs in relation to direct costs.

On this basis, any organization aims to create new opportunities and avoid threats in order to achieve its goal such as the control, survival and imposition of its presence within the market place make it in a better position for other organizations by meeting the customers' needs with high quality at the lowest possible cost and in a timely manner. Therefore, the success of an organization depends on the extent of its discovery of modern methods and the most effective and efficient that this makes organizations to achieve competitive advantage.

Based on the above, management accounting has emerged as an effective tool aimed at providing financial information to various management levels. Consequently, it serves the management and helps it to carry out its functions. Moreover, management accounting has several modern techniques and methods that enable the organization to achieve competitive advantages in various fields. The study problem can be illustrating as the following:

Does the mechanism of modern management accounting contribute to achieving the competitive advantage of the organizations under study?

Purpose of the study

The fundamental purpose of this study is to determine the role (correlation and impact) of accounting management on achieving competitive advantages based on perspectives
of managers, supervisors, and assistant managers at financial departments in private universities in Erbil city, Kurdistan Region of Iraq.

The objectives of this study

1. To study the accounting management practices of private universities in Erbil city, Kurdistan Region of Iraq.

2. To determine the level of achieving competitive advantages based on perspectives of the study sample.

3. To examine the role of accounting management on achieving competitive advantages.

The Significance of the Study

This study has a great significance because management accounting has received great interest in many organizations in order to maximize the competitiveness of their organizations. The researcher has tried to provide integrated theoretical and intellectual frameworks for the subject of managerial accounting through the surveys conducted by the researcher for the relevant literature. Furthermore, management accounting is considered as an effective tool for the success of organizations along with the creation of competitiveness. This study will clarify the concepts and contents of management accounting and competitive advantages. Finally, the research concluded with many recommendations that will contribute to enhancing the awareness of the management of private universities and the need to adopt management accounting techniques within the framework of documented and thoughtful systems to support the achievement of competitive advantage.

The Hypotheses of the study

The First Hypothesis: there is a measurable positive correlation between management accounting practices and achieving competitive advantages.

The Second Hypothesis: there is statistically a significant impact of management accounting practices in achieving competitive advantages.

Literature review

Management Accounting

Management accounting is considered one of the most important components of the management information system in the project, as this system provides financial and economic information. It collects other information generated from other subsidiary information systems in the organization (Adler et al, 2000). The main objective of these operations carried out by the management accounting system is to assist the
administration in monitoring, performance evaluation and decision-making processes (Horngren et al, 2005)

Management accounting is one of the key instruments for decision making at any level of the organization (Mayanja, 2010). Management accounting is an important tool for effective business management as it provides managers with adequate information for decision-making on the organization's performance (Stefanou & Athanasaki, 2012). In addition, management accounting is concerned with providing information to the organization's people to help them make better decisions and improve the efficiency and effectiveness of existing operations (Drury, 2015). Management accounting allows managers to measure, analyze and report financial and non-financial information in making decisions to achieve the organization's objectives (Horngren et al., 2013). Financial information includes: production costs of a product, service costs and the cost of carrying out an operation or business process. However, non-financial information includes: customer satisfaction and loyalty measures, quality and timeliness of processes, innovation and motivation of employees for making decision, allocating resources, and monitoring, evaluating and rewarding performance (Atkinson et al, 2012). These information are used by managers to develop, communicate, and implement strategy (Garrison et al., 2011). Moreover, management accounting information is used according to (Carter, 2007) to coordinate product design, manufacturing and marketing decisions and assess the overall operating performance of the company including its employees. The main focus of management accounting according to (Ghorbel, 2016) is to improve the performance and profitability of the organization and to help managers in making decisions by providing relevant financial and non-financial information.

Management accounting has been known as the accounting department that deals specifically with how accounting data and other financial information is used in business administration, government units, and not-for-profit units (Kaplan, 1988). It is the process that related to identifying, measuring, collecting, analyzing, preparing, interpreting and communicating financial information used by management for planning, evaluation, and oversight within the organization and to ensure proper and accountable use of its resources (Bhattacharyya & Dearder, 1996). Management accounting is the process of identifying, measuring, reporting, and analyzing information about the economic events of the organization or the process of providing financial and operational information to the organization's managers and employees and this process must be derived from the information needs of the internal departments of the organization that should guide their investment and operational decisions (Atkinson et al., 2000).

Management Accounting Goals

Management accounting adds value to an enterprise, taking into account the following three main goals (Rezniqi et al, 2014):
1. Presenting decision making information and constructive strategic engagement through the management team.

2. Assist managers in handling tasks under operational control. The management team should therefore always have information on customers’ operational needs, managers and team management and control flows to compare the actual cost of their impact on the company's budget.

3. Motivate managers and employees in achieving the organization goals efficiently.

**Competitive advantage**

Competitive advantage refers to the ability of an organization to meet the needs of the consumer, or the value it wishes to obtain from the product, such as high quality, low price, or provide distinct benefits in the product/service compared to competitors (Sadq et al., 2016). The competitive advantage is defined as a driving force or a fundamental value enjoyed by the institution and affects the behavior of customers in the context of their dealings with them and will continue for a long period, regardless of the length or short life cycle of the good or service provided by the organization (carpenter & sanders, 2009). To achieve the competitive advantage of any organization, Cole (2005) specify the need for a set of factors namely: human resources, natural resources, market knowledge resources, and capital resources.

Competitive advantage is the ability to perform in one or several methods that competitors cannot follow now or in the future (Kotler, 1997). It is a set of factors that differentiate the organization's products from competitors with the aim of increasing market share (Dessler, 2001). It is the ability to create something unique that the organization has over other competitors (Lynch, 2004). Competitive advantage means a unique feature that the company outperforms rivals, suggesting the competitive advantage makes the company special and different from other competitors (McMillan & Tampoe, 2000). The capacity of the company to devise and execute plans strengthens the role of the organization against other organizations working in the same operation (Sadq et al, 2018).

The importance of the competitive advantage stems from the fact that it works to provide the appropriate competitive environment to achieve efficient allocation and use of resources and to encourage creativity and innovation in order to improve and enhance productivity. In order for the competitive advantage to be effective, it is based on the following conditions: "Critical: It gives precedence and superiority over the competitor. Continuity: it can continue through time. The possibility of defending it: it is difficult for the competitor to simulate or cancel it. The most critical factors in building competitiveness are three fundamental factors: better technology, distinguished human resources, and conscious management leadership (Weisheng et al., 2008).
The dimensions of competitive advantage

Quality (Differentiation)

The literature agreed on two basic dimensions of quality, namely design quality and conformity quality. The design quality (DQ) indicates the level of product characteristics (design specifications) that meet the customer's needs and desires. For the conformity quality (CQ) it means the level of performance of a product or service compared to design specifications. In order to ensure that the service achieves customer satisfaction, organizations must design services capable of customer satisfaction (Horngren et al, 2006).

Cost

Adopting cost as a competitive tool necessarily means adapting productive processes to reducing or eliminating value-added activities. As a result, reducing capital costs, labor costs, product costs, operating costs, inventory, transportation, losses, and defects are reduced (Slack, 1998). Many researchers consider that cost-based competition means focusing on the following costs: reducing labor costs, reducing the costs of facilities, equipment and technology, reducing material costs, and reducing damage costs (Krajewski & Ritzman, 2010).

Delivery

Organizations usually consider the time and response speed factor as the most important vector. Managing operations properly and quickly will increase returns and reduce costs. The customer's response time indicates the period, starting from receiving the customer's order until the completion of the order. On time delivery, it refers to the delivery of the product or service at the times specified in the scheduling. On-time delivery will increase customer satisfaction and loyalty. Achieving this goal requires alternating between customer response time and on-time delivery (Horngren et al, 2006).

Flexibility

According to (Krajewski & Ritzman, 2010) the flexibility referees to two Characteristics. Firstly, customization that indicates the operations that have the ability to offer products of a smaller size with tight communication with the customer, and the ability to reshape resources and processes to meet different types of customer needs. Secondly, Variety that indicates the processes that have the capacity to provide a greater volume of production compared to customization. The products and services are not necessarily unique to specific customers, and there may be repeated requests.
Innovation

Organizations that compete through innovation must possess the strategic capabilities to develop new products and services or being able to develop new processes and technology that aims to achieve outputs with high specifications (ElKelety, 2006). Innovation means electing the right ideas, implementing them, and translating them into new products, processes, services, and administrative systems to improve the profitability and growth of the organization. Innovation can be classified as technological innovation, product innovation, and process innovation (Tyagi, 2008).

Methodology

The primary data source was collected and analyzed using a quantitative approach (survey questionnaire). In addition, the researcher used secondary information such as published papers, related management accounting literature, management accounting textbooks, and other research-related documents to effectively work out with the objectives of this study. Questionnaire survey served as the researcher's main tools for collecting data through written questionnaires and dividing it into two parts. The first part includes (10) closed-ended questions that aims to determine the study sample perspectives toward the existing of management accounting methods in organizations under study. The second part includes (10) closed-ended questions that aims to determine the study sample perspectives toward the level of achieving competitive advantages in organizations under study. To achieve the study objectives, a questionnaire distributed to a sample of (45) managers, supervisors and assistant managers (43) of which were returned, while (42) were valid for statistical analysis and collected data were analyzed using (SPSS) version 20.

Questions on management accounting were adapted from (Gichaaga, 2014) and (Sunarni, 2013). Furthermore, question on achieving competitive advantages were adapted from (Sadq et al, 2016). Additionally, participants were requested to indicate the extent of their agreement with each statement by means of a five point Likert scale, where: 5 = strongly agree, 4 = agree, 3 = uncertain, 2 = disagree, and 1= strongly disagree.

Study Population and study sample

A target population according to Malhotra (2010) is collection of homogeneous elements or objects that possess the information sought by the researcher and about which inferences are to be made. The target population for this study was restricted to all managers, supervisors, and assistant managers at financial departments in private universities in Erbil city, Kurdistan Region of Iraq. The sample size according to (Gupta et al, 2016) refers to the elements to be included in a research study. Sample size determination is a personal, intuitive decision of the researcher based on previous studies (Zikmund, 2000). Hence, the present study sample consist of (42) managers, supervisors and assistant managers.
Results and outcomes

For the purpose of this study, Cronbach's alpha as it is showed in table (1) was administrated to test the stability of the scale, which indicated how well the items measuring a concept hang together as a set, and it is equal to 0.832 for the whole questionnaire, 0.745 for the management accounting practices questions, and 0.712 for achieving competitive advantages questions, which is considered to be high reliability.

Table (1) results of reliability test

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of items</th>
<th>Value of Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management accounting</td>
<td>10</td>
<td>0.745</td>
</tr>
<tr>
<td>Competitive advantages</td>
<td>10</td>
<td>0.712</td>
</tr>
<tr>
<td>Whole questionnaire</td>
<td>20</td>
<td>0.832</td>
</tr>
</tbody>
</table>

Descriptive Statistics

1. Management accounting practices

Table (2) shows the general average means of management accounting practices questions that reached (4.116). As shown, there is a high level in the general averages of management accounting practices questions. Its ten questions of management accounting practices reflect a high general mean. These results indicate that the management accounting practices receive a high level of attention at the private universities in Erbil city, Kurdistan region of Iraq based on the perspectives of the study sample.
Table (2) means and standard deviations of management accounting practices questions

<table>
<thead>
<tr>
<th>Management accounting practices questions</th>
<th>Mean</th>
<th>St. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 The changes in the contemporary business environment have created a need for new tools in management accounting practices</td>
<td>4.29</td>
<td>.631</td>
</tr>
<tr>
<td>X2 The introduction of new technologies in management accounting practices was in response to various changes in the contemporary business environment, due to the failure of traditional tools to meet those needs.</td>
<td>4.22</td>
<td>.670</td>
</tr>
<tr>
<td>X3 The techniques of managerial accounting practices in Iraq have not changed, due to the accelerated change in the Iraqi business environment.</td>
<td>4.28</td>
<td>.545</td>
</tr>
<tr>
<td>X4 The emergence of service companies and the different nature of information needed by this sector, necessitated finding techniques in modern managerial accounting practices</td>
<td>4.10</td>
<td>.781</td>
</tr>
<tr>
<td>X5 The development of the contemporary business environment has led to the creation of another unorthodox form of management accountants with new skills that keep pace with development.</td>
<td>4.33</td>
<td>.660</td>
</tr>
<tr>
<td>X6 The use of business intelligence applications in organizations posed a major challenge to management accounting techniques obliged to change and update to keep pace with the requirements of those applications.</td>
<td>3.91</td>
<td>.996</td>
</tr>
<tr>
<td>X7 The management accountant has become a primary partner in preparing strategies and making decisions, which require him to acquire skills that mimic the information required by companies operating in the environment and deal with business intelligence.</td>
<td>3.78</td>
<td>1.027</td>
</tr>
<tr>
<td>X8 The strength of competition in the contemporary business environment requires reliance on modern managerial accounting techniques</td>
<td>4.30</td>
<td>.759</td>
</tr>
<tr>
<td>X9 The increased interest in customer service in the contemporary business environment has made management accounting practices respond to this by creating tools that simulate these changes and requirements.</td>
<td>4.04</td>
<td>.976</td>
</tr>
<tr>
<td>X10 Performance evaluation methods have evolved due to the development in modern managerial accounting techniques in the contemporary business environment.</td>
<td>3.91</td>
<td>.830</td>
</tr>
</tbody>
</table>

**General average of management accounting practices questions** 4.116 .787

2. Competitive advantage questions

Table (3) shows the general average means of competitive advantage questions that reach a value of (4.152). As shown, there is a high level in the general averages of
competitive advantage questions. Its ten competitive advantage questions from respondent’s view reflect high means. These results indicate that the organizational trust dimensions receive a high level of attention at the private universities in Erbil city, Kurdistan region of Iraq based on the perspectives of the study sample.

Table (3) means and standard deviations of competitive advantage questions

<table>
<thead>
<tr>
<th>Competitive advantage questions</th>
<th>Mean</th>
<th>St. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>University management tends to focus on development in order to reduce costs and not to expand expenditures.</td>
<td>4.09</td>
<td>.793</td>
</tr>
<tr>
<td>The university’s management sets standards for having flexible financial plans and policies to meet stakeholder expectations</td>
<td>4.07</td>
<td>.745</td>
</tr>
<tr>
<td>The university's financial plans and policies are flexible to achieve their goals in a way that suits the conditions they face in the future.</td>
<td>4.18</td>
<td>.695</td>
</tr>
<tr>
<td>University staffs have sufficient knowledge to answer customer questions and inquiries.</td>
<td>4.31</td>
<td>.722</td>
</tr>
<tr>
<td>The university management is keen to provide services in a timely manner.</td>
<td>4.15</td>
<td>.892</td>
</tr>
<tr>
<td>The university administration implements any new ideas that improve job performance</td>
<td>4.25</td>
<td>.725</td>
</tr>
<tr>
<td>The university management has a vision for what it strives to achieve in the future.</td>
<td>4.16</td>
<td>.771</td>
</tr>
<tr>
<td>The university strategy provides the organizational climate that enhances the required performance levels.</td>
<td>4.03</td>
<td>.870</td>
</tr>
<tr>
<td>The university management can provide its services at minimal cost through its dependence on modern accounting programs</td>
<td>4.07</td>
<td>.937</td>
</tr>
<tr>
<td>The university management seeks to develop the creative abilities of its employees in the financial units by relying on training programs by relying on management accounting practices</td>
<td>4.21</td>
<td>.769</td>
</tr>
</tbody>
</table>

Testing the Hypotheses of the study

Testing the first Hypothesis of the study

Table (4) illustrates the result of analysis carried out to test the first hypothesis. To test the correlation among the study variables; Pearson’s (r) correlation was calculated. The correlation coefficient for the data revealed that variables tested were positively and significantly related. In the table (4) the correlation matrix explains that management accounting practices were positively correlated with achieving
competitive advantages as the value of the correlation coefficient was (.712**) at the level of significance (0.01) and reached the value of significant at (0.000). Consequently, the first hypotheses accepted which states that there is a measurable positive correlation between management accounting practices and achieving competitive advantages.

Table (4) results of Pearson Correlation analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Competitive advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management accounting practices</td>
<td>.712**</td>
</tr>
</tbody>
</table>

Sig. (2-tailed) | .000

Testing the second Hypothesis of the study

This study conducted a multiple linear regression analysis in order to examine the impact of management accounting practices on achieving competitive advantages. The table below (5) shows that management accounting practices illustrates 52% of the achieving competitive advantages as characterized by R Square. Hence, this means that other elements not studied in the present study contribute 48% of the achieving competitive advantages. The significance value is 0.000 which is less than 0.05. As a result, the model is statistically significance in predicting how management accounting practices impacts on achieving competitive advantages. At 5% level of significance, the F calculated was 175.486, which explains that the overall model was significant. Therefore, the second hypothesis is accepted which states that there is statistically a significant impact of management accounting practices on achieving competitive advantages.

Table (5) Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.711*</td>
<td>.520</td>
<td>.516</td>
<td>.53359</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>.520</td>
<td>.516</td>
<td>.53359</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), management accounting practices

Discussion and Conclusion

The contemporary business environment was characterized by the rapid changes in the competition market to meet the current and future needs of customers by organizations by owning high-tech, tangible and intangible assets and good management of these
assets. As the standards adopted by the traditional management accounting did not succeed in providing the information that the organizations need in order to achieve the requirements for success in the contemporary business environment, namely cost, quality, time and creativity. Management accounting practices in the contemporary business environment require an integrated information system that relies on modern technologies in the processing and production of information that contributed to increasing the ability of management accounting to adapt and rapidly adapt to the contemporary business environment.

This study found that the level of practicing management accounting is high according to the approval degree of their means. The results indicate that private universities focused on basic principles of management accounting practices in their daily activities in order to achieve competitive advantage. In addition, this study found that the management accountant has become a primary partner in preparing strategies and making decisions, which require him to acquire skills that mimic the information required by companies operating in the environment and deal with business intelligence. Besides, the use of business intelligence applications in organizations posed a major challenge to management accounting techniques obliged to change and update to keep pace with the requirements of those applications. Finally, the results of this study indicate that there was a positive strong correlation and statistically an impact of management accounting practices on achieving competitive advantage.

**Recommendations**

1. The need to pay attention to management accounting practices and work to develop them in line with future aspirations in light of modern technologies.
2. The need for organizations to rely on the use of talents and organizational capabilities in developing their relationship with customers by providing new ideas for products and services according to the determinants of customers and the market in order to achieve competitive advantage.
3. For the purpose of fulfilling the requirements of management accounting, it is necessary to work on identifying profit centers and cost centers in light of cost accounting standards and in a manner consistent with the organizational structure of the organization.
4. Studying and analyzing the obstacles that limit the organizational administrative work to identify the causes of poor application of management accounting practices and be guided by theoretical concepts that represent the guiding foundations in this field.
5. The necessity of providing an integrated information system for management accounting in which an integrated database is available by relying on advanced information technology, which allows the integrated information system for administrative accounting to have sufficient flexibility in dealing with rapid changes in the business environment and the speed of response to them.
References