Check for updates

Using The Balanced Scorecard To Enhance Competitive Advantage

Zahraa Mahmood Abdalzahraa

Al-Furat Al-Awsat Technical University – Babylon Technical Institute, Iraq

Abstract: This study aims to investigate the role of the Balanced Scorecard (BSC) in enhancing an organization's competitive advantage. It focuses on how the BSC measures performance across four main perspectives: financial, customer, internal processes, and learning and growth. By applying this tool, organizations can more effectively align their strategies with their long-term objectives. The BSC also supports decision-making based on accurate and reliable data, thereby improving operational efficiency. Findings suggest that utilizing the Balanced Scorecard enhances an organization's competitiveness in the market. This approach contributes to sustainable performance improvements over time. It also enhances customer satisfaction and improves the quality of products and services. Additionally, it encourages investment in employee skill development and capacity building. Overall, the Balanced Scorecard is a practical strategic tool for achieving organizational success and maintaining a competitive edge.

INTRODUCTION: The Balanced Scorecard is a management tool used by many organizations, regardless of their type, to measure performance and turn strategy into actionable steps. Although the Balanced Scorecard was not originally designed for non-profit organizations, many of these organizations have tried to adapt it to meet their specific needs in order to gain and sustain a competitive edge. This study discusses the challenge of modifying and adapting the Balanced Scorecard for public sector and non-profit organizations, using it as a tool to measure their competitive advantage. The Balanced Scorecard helps clarify the mission and strategy of a non-profit organization, as well as translate that strategy into goals and activities that boost its competitive edge. Additionally, the Balanced Scorecard can be used by non-profits to create value, satisfy employees and beneficiaries, improve internal processes, and foster

learning and growth, ultimately transforming the organization into a learning and civic entity.

Research Problem:

Administrations have focused on developing laws, legislation, and information systems, but have not paid enough attention to improving and developing their internal environment, which has affected the weak competitive performance of these institutions. Therefore, the research problem is to determine the extent of the impact of using the Balanced Scorecard in enhancing competitive advantage by identifying the strengths and weaknesses of these institutions.

Research Importance:

The importance of the research can be summarized as follows:

1. Analyzing the impact of using the Balanced Scorecard in enhancing competitive advantage.

2. Determining the extent and importance of the impact of using the Balanced Scorecard in enhancing competitive advantage.

3. Attempting to present the scientific foundations upon which institutions can rely to improve performance.

Research Objectives:

1. Identify the concept, importance, and objectives of using the Balanced Scorecard in enhancing competitive advantage.

2. Explain how the Balanced Scorecard impacts competitive advantage.

3. Explain the importance of using the Balanced Scorecard in enhancing competitive advantage.

Research Hypotheses:

The research is based on two main hypotheses:

The first main hypothesis states: There is a statistically significant relationship between the Balanced Scorecard variables in enhancing competitive advantage.

The following hypotheses branch out from this:

1. There is a statistically significant correlation between the Balanced Scorecard's financial dimension and enhancing competitive advantage.

2. There is a statistically significant correlation between the Balanced Scorecard's customer dimension and enhancing competitive advantage.

3. There is a statistically significant correlation between the Balanced Scorecard's internal systems dimension and enhancing competitive advantage.

4. There is a statistically significant correlation between the Balanced Scorecard's education and growth dimension and enhancing competitive advantage.

The second primary hypothesis states: There is a statistically significant effect of the Balanced Scorecard variables on enhancing competitive advantage.

The following sub-hypotheses branch out from this:

1. There is a statistically significant effect between the Balanced Scorecard's financial dimension and enhancing competitive advantage.

2. There is a statistically significant impact of the Balanced Scorecard on enhancing competitive advantage in terms of the customer dimension.

3. There is a statistically significant impact of the Balanced Scorecard on enhancing competitive advantage in terms of the internal systems dimension.

4- There is a statistically significant impact of the Balanced Scorecard on enhancing competitive advantage in terms of the learning and growth dimension.

Theoretical Framework:

First: The concept and definition of the Balanced Scorecard

The Balanced Scorecard (BSC) was introduced in 1992 by Norton and Kaplan as an innovative tool for measuring the performance of an economic unit. The purpose of the BSC is to create a method that combines financial and non-financial performance indicators into a unified measurement system. (Voelpel et al., 2005: 3-5) Norton and Kaplan described it as: a set of measures that quickly offer a comprehensive view of an organization's performance. It is also defined as: the primary tool for management to evaluate the organization's performance in an integrated way and to help senior managers develop plans by providing objective information relevant to operational activities. (Agarwal & Sonia: 2003: 418) It has also been described as: a translation of the organization's mission into an integrated set of performance measures, achieved by providing a framework for implementing the organization's strategy. Furthermore, the Balanced Scorecard doesn't just focus on financial goals but extends beyond that to include non-financial objectives. It is defined as: "A means of aligning business activities with the vision and strategy and measuring performance to achieve the organization's strategic objectives." (Mansor, 2012: 2) The effectiveness of the Balanced Scorecard has been documented through its rapid growth in popularity worldwide. Surveys indicate a 66% adoption rate among American companies, emphasizing its importance as a performance measurement tool. Consequently, the Balanced Scorecard can articulate an organization's vision and strategy from four

perspectives. Each perspective includes objectives, indicators, and relevant strategic measures to accomplish those objectives, as follows: (Hunger et al., 2004: 22) (Monteiro & Ribeiro, 2011: 5)

• The financial axis: This axis refers to the financial results of the organization's various activities.

• The internal operations axis: This axis focuses on identifying the essential processes the organization must successfully carry out, which in turn generate positive effects on customer satisfaction and the company's financial performance.

• The customer axis: Meeting customer needs is a key management priority. This axis should include a set of measures or indicators related to various factors that are important to the customer.

• The learning and growth axis: This requires improving and growing the organization through continuous employee training, as well as developing the skills and capabilities necessary to achieve goals. Therefore, this perspective includes indicators to measure both the current level and the results achieved through ongoing training over time. Second: Balanced Scorecard Objectives:

Organizations adopt the Balanced Scorecard approach to achieve several goals, including:

1. Making the strategy the focus of attention for every individual in the organization helps translate it into a set of actions aimed at achieving strategic success through the outstanding performance of these units, using the Balanced Scorecard approach (Al-Naimi, 2007: 74).

2. Communicating the strategy to all aspects of the organization through an integrated set of financial and non-financial metrics. This provides managers and employees with the opportunity to focus on key objectives and promotes initiatives and innovations that contribute to achieving these objectives (Jalbert & Landry, 2003: 40).

3. Establishing understandable and meaningful performance measures (benchmark results) used for continuous evaluation of the project's viability throughout its lifespan.

4. Comparing these measures against benchmarks to indicate progress in the evaluation process (Stewart, 2001: 40). Third: Considerations of the Balanced Scorecard

5. The concept of the Balanced Scorecard focuses on describing the essential components of an organization's success and operations, taking into account the following considerations: (Abdul Halim 2005: 20), (Al-Maghribi 2006: 278), (Al-Zarir 2008: 13).

The Time Dimension: Performance measurement processes focus on three time dimensions: yesterday, today, and tomorrow. What an organization does in the present in anticipation of the future may not have an impact on that future. Therefore, it is necessary to continuously monitor key financial and non-financial ratios.

The Strategic Dimension: Performance measurement processes focus on linking short-term operational processes to the organization's long-term vision and strategy. Therefore, metrics can be applied either from the top down, focusing on analyzing the overall strategy and evaluating change processes, or from the bottom up, focusing on empowering leaders and employees and maximizing operational freedom and performance.

Environmental dimension: The balanced scorecard focuses on all relevant stakeholders, both internal and external, when applying standards. There are external standards that focus on customers and markets, in addition to internal standards that focus on improving effectiveness and efficiency. It is worth noting that successful organizations must focus on tools that achieve a good evaluation of their environmental performance. Therefore, the balanced scorecard is the tool that transforms strategies into action, not a tool for formulating strategies. Figure (5) illustrates these considerations.
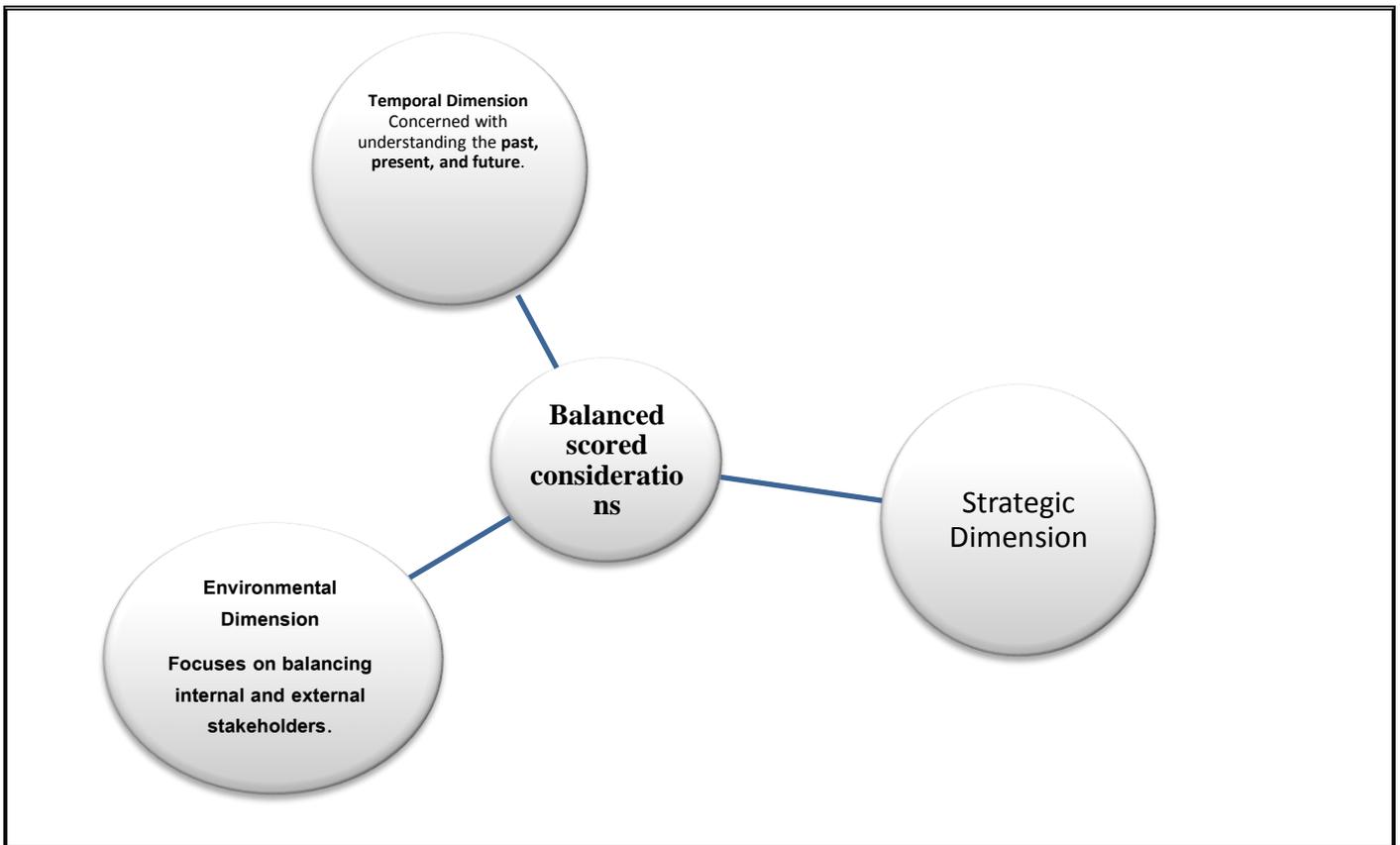
Figure (1) Considerations of the balanced scorecard

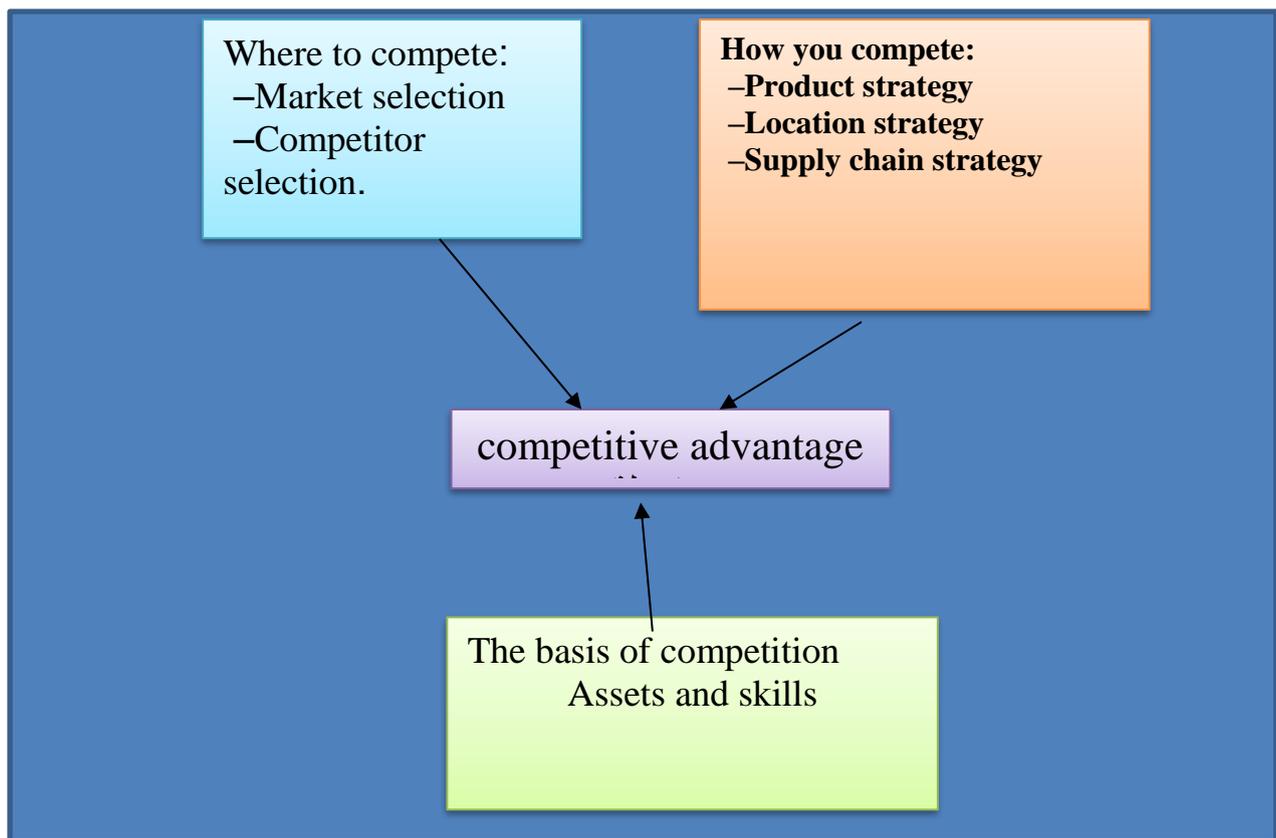Source: Prepared by the researcher based on (Al-Maghribi, 2006: 278)

First: Definition of Competitive Advantage:

Several definitions of competitive advantage have been provided, including Ali Al-Salmi, who defined it as "competitive ability is the unique skill, technology, or resource that enables an organization to produce value and benefits for customers that exceed what competitors offer them, and confirms its distinction and difference from these competitors from the perspective of customers who accept this difference and distinction, as it brings them greater benefits and values that surpass what other competitors offer them." (Ali Al-Salmi, 2001: 104).

Nabil defined it as "an advantage or element of superiority for an organization that is achieved if it follows a specific competitive strategy." (Nabil, 2015: 37)

Competitive advantage is defined as an advantage or element of superiority for an organization that is achieved if it follows a specific competitive strategy. We find that the first definition is more meaningful and convincing because it focuses on the essence of competitive advantage, which is creativity. The second definition focuses on creating value for the customer, while The third definition focuses on one source of competitive advantage: competitive strategy. Competitive strategy is defined as an integrated set of actions that lead to achieving a sustained and sustainable advantage over competitors. This strategy is determined by three main components: the method of competition, the arena of competition, and the basis of competition. (Nabil, previous source, 39) Figure (2) illustrates this strategy.

Where to compete:
–Market selection
–Competitor selection.

How you compete:
–Product strategy
–Location strategy
–Supply chain strategy

competitive advantage

The basis of competition
Assets and skills

Source: Prepared by the researcher based on (Al-Maghribi, 2006: 278)

First: Definition of Competitive Advantage:

Several definitions of competitive advantage have been provided, including Ali Al-Salmi, who defined it as "competitive ability is the unique skill, technology, or resource that enables an organization to produce value and benefits for customers that exceed what competitors offer them, and confirms its distinction and difference from these competitors from the perspective of customers who accept this difference and distinction, as it brings them greater benefits and values that surpass what other competitors offer them." (Ali Al-Salmi, 2001: 104).

Nabil described it as "an advantage or element of superiority for an organization that is achieved if it follows a specific competitive strategy." (Nabil, 2015: 37)

Competitive advantage is defined as an advantage or element of superiority for an organization that is achieved through a specific competitive strategy. We find that the first definition is more meaningful and convincing because it emphasizes the core of competitive advantage, which is creativity. The second definition focuses on creating value for the customer, while the third definition centers on one source of competitive advantage: competitive strategy. Competitive strategy is described as a coordinated set of actions that lead to a sustained and lasting advantage over competitors. This strategy is determined by three main components: the method of competition, the arena of competition, and the basis of competition. (Nabil, previous source, 39) Figure 2 illustrates this strategy.

Correlation Coefficient	
Balanced Scorecard	.846**
Enhance competitive advantage	

(**) A significant correlation at a significance level of (0.01)

Source: Prepared by the researcher based on the results of the questionnaire lists

After verifying the validity of the main hypothesis, we now proceed to test its sub-hypotheses, as shown in

the data in Table 2, which presents the Pearson correlation coefficients (Pearson) between the components of the Balanced Scorecard and the enhancement of competitive advantage.

Table:2 Results of the correlation between the components of the Balanced Scorecard and enhancing competitive advantage across variables.

Balanced Scorecard	Financial	Customers	Internal Operations	Learning and Growth	Total Tax Performance	Statistical Relationships	
						Number	Importance
Enhance competitiv advantage	$.810^{**}$	$.531^{**}$	$.810^{**}$	.426	.589	3	60%

(**) A significant correlation at a significance level of 0.01

(*) A significant correlation at a significance level of 0.05

From the table above, the following is clear:

There is a significant positive correlation (direct) between the Balanced Scorecard and enhancing competitive advantage, with the correlation value reaching (0.589), indicating a positive, non-significant relationship. Regarding the sub-dimensions, individually, this section identified five positive relationships, three of which were significant at a level of (0.01), representing (60%) of the total relationships. The highest correlation coefficient was between enhancing competitive advantage and the two axes (financial and internal operations), with a value of (0.810**), which is significant at (0.01). The lowest correlation coefficient was between competitive advantage and the education and growth axis, with a value of (0.426), indicating a positive, non-significant correlation. Overall, these results support the hypothesis that there is a statistically significant relationship between the variables of the balanced scorecard and the enhancement of competitive advantage.

Second: Examining the influence relationships between the main and sub-research variables.

This section aims to examine the influence relationships between the independent variable (Balanced Scorecard) and the dependent variable (enhancing competitive advantage). In line with the second main hypothesis, which states that (there is a statistically significant influence between the variables of the Balanced Scorecard in enhancing competitive advantage), four sub-hypotheses were developed from it, using a simple linear regression model. The analysis considered both sub-levels and total levels to determine the significance of each sub-variable of the independent variables on each sub-variable of the dependent variables. Accepting or rejecting the influence hypothesis is based on calculating the percentage of significant models out of all models. If more than 50% are significant, the hypothesis is accepted. If fewer than 50%, the hypothesis is rejected. This decision is made by comparing the calculated (F) value to the critical (F) value at two significance levels (0.05 and 0.01), as follows:

The second main hypothesis of the research is: (There is a statistically significant influence between Balanced Scorecard Variables in Enhancing Competitive Advantage.) Four sub-hypotheses branch out from this hypothesis, as follows:

First: The initial sub-hypothesis states that there is a statistically significant effect of the Balanced Scorecard on the financial dimension in enhancing competitive advantage.

Table (3): Shows the use of the Balanced Scorecard in enhancing competitive advantage.

Financial Perspective	fixed limit(a)	Beta coefficient β	coefficient of determination R^2	Calculated F value	Morale	decision
Customer Perspective	2.775	.118	.014	.116	.742	No effect
Internal Processes Perspective	.756	.661	.714	19.994**	.002	There is an effect
Learning and Growth Perspective	1.949	.399	.305	3.508	.098	There is an effect
Overall Tax Performance	1.616	.381	.182	1.775	.219	There is an effect
total Tax Performance"	35.481	1.560	.346	4.241*	.073	There is an effect
Moral models	number				2		
	relative importance				40%		

Table F value at 0.05 = (3.89)

Table F value at 0.01 = (6.76)

1. Analysis of the impact of the financial axis on enhancing competitive advantage: Table (3) shows that the calculated F value is (0.116), which is less than the table F value of (3.89) at a significance level of (0.05) and a significance level of (0.742). This indicates that the financial axis has no effect on improving competitive advantage. The same table reveals a constant value (a = 2.775), meaning there is a financial axis of (2.775) even when the competitive advantage is

zero. Additionally, the value (118 = β) indicates that a one-unit change in the financial axis will result in a (0.118) change in competitive advantage. Regarding the coefficient of determination (R2), a measure used to assess how well the regression equation estimates values by explaining the reduction in errors, its value is (0.014). This suggests that the financial axis accounts for only (0.14%) of the variance in competitive advantage, while (99.86%) of the variance is due to factors not included in the regression model.

2- Analysis of the impact of the customer axis on

enhancing competitive advantage: Table (3) shows that the calculated (F) value is (19.994), which exceeds the tabular (F) value of (6.76) at a significance level of (0.01) and a significance level of (0.002). This indicates that the customer axis significantly influences the enhancement of competitive advantage. Additionally, the table displays the constant value (a = 756), suggesting that the customer axis has a base value of (0.756) even when competitive advantage is zero. The coefficient (β = 661) implies that a one-unit increase in the customer axis results in a (0.661) increase in competitive advantage. Regarding the coefficient of determination (R^2), which quantifies the usefulness of the regression equation in estimating values and reflects the percentage reduction in errors when using the model, its value is (714). This indicates that the customer axis accounts for (7.14%) of the variance in competitive advantage, while (92.86%) of the variance is explained by factors not included in the regression model.

3. Analysis of the impact of the internal systems axis on enhancing competitive advantage: It is evident from Table (3) that the calculated (F) value is (3.508), which exceeds the tabular (F) value of (3.89) at a significance level of (0.05), and also exceeds a significance level of (0.098). This suggests that internal systems have an impact on the dependent variable, enhancing competitive advantage. The same table shows the constant value (a = 1.949), meaning there is an internal systems axis valued at (1.949) even if the competitive advantage is zero. The coefficient (β = 399) suggests that a one-unit change in internal systems leads to a (399) change in competitive advantage. The coefficient of determination (R^2), which measures the usefulness of the regression equation for estimating values and represents the percentage reduction in errors when using it, is 0.305. This indicates that internal systems explain (3.05%) of the variance in enhancing competitive advantage, with (96.95%) attributed to factors outside the regression model.

4- Analysis of the impact of the education and growth axis on enhancing competitive advantage: From Table (3), the calculated (F) value is (1.775), which is greater than the tabular (F) value of (3.89) at a significance level of (0.05), and at a significance level of (0.219). This suggests that the education and growth axis influences enhancing competitive advantage. The same table shows the constant value (a = 1.775), indicating the presence of the education and growth axis at this value even if the competitive advantage equals zero. The coefficient (β = 0.381) means that a one-unit increase in the education and growth axis results in a 0.381 increase in enhancing competitive advantage. The (R^2) value is (0.182), reflecting that this axis explains 1.82%

of the variance in enhancing competitive advantage, while (98.18%) is explained by factors outside the model.

5- Analysis of the impact of using the balanced scorecard in boosting competitive advantage: The data in Table (3) show that the calculated (F) value is (4.241), which exceeds the tabular (F) value of (3.89) at a significance level of (0.05), with a significance level of (0.073). This indicates that using the balanced scorecard influences the dependent variable of boosting competitive advantage. The constant value (a = 35.481) signifies the presence of the balanced scorecard at this level, even if competitive advantage is zero. The coefficient (β = 1.560) suggests that a one-unit increase in using the balanced scorecard results in a 1.560 increase in competitive advantage. The (R^2) value is (0.346), meaning that the balanced scorecard explains 3.46% of the variance in enhancing competitive advantage, with (96.54%) attributed to other factors outside the model.

Based on the combined results above, we conclude that the sub-hypothesis of the second main hypothesis is accepted.

REFERENCES

Arabic sources:

1. Ali Al-Salmi, "Strategic Human Resources Management," Dar Gharib for Publishing and Printing, Cairo, 2001.

2. Nabil Morsi Khalil, "Competitive Advantage in Business," Alexandria Center, Egypt, 2015.

3. Abdul Rahim Muhammad Ali, Contemporary Marketing, Wael Publishing and Distribution House, 2017.

4. Al-Naimi, Nadia Shaker Hussein, "Integration of the Balanced Scorecard and Benchmarking Techniques for the Purpose of Evaluating Strategic Performance in Economic Units," Master's Thesis, College of Administration and Economics, University of Baghdad, 2007.

5. Al-Zarir, Rania Muhammad Nazih, "The Possibility of Using the Balanced Scorecard to Measure the Efficiency of Government Banks in Syria," A Comparative Case Study, Damascus University, 2008. http://www.alnodom.com/index.php

6. Al-Maghribi, Kamel Muhammad, "Organizational Behavior: Concepts and Foundations of Individual and Group Behavior in Organizations," Fourth Edition, Dar Al-Fikr Publishers and Distributors, Amman, Jordan, 2010.

7. Abdul Halim, Nadia Radhi, "Integrating Environmental Performance Indicators into the

Balanced Scorecard to Activate the Role of Business Organizations in Sustainable Development," Journal of Economic and Administrative Sciences, Volume 21, Issue 2, December 2005. http://dr-ama.com/?p=2769

Foreign Sources:

8. Philip Kotler et al., Making Management, 14th Edition, Pearson Education, France, 2012, p. 314

9. Jalbert, T., S. P. Landry "Which Performance Measurement is best for your company?", Management Accounting Quarterly, 2003.

10. Stewart,Wendy E., "Balanced Scorecard for Projects," The Project Management Journal, Vol. 32, No. 1, March, 2001.

11. Agarwal N.P & Agarwal Sonia "Value Balanced Scorecard-A Tool Of Performance Appraisal" (2003): University Of Rajastan Jaipur.Web: http://www.icai.org/resource_file/1127p417.pdf

12. Muzainah Mansor, "Performance Management For A Tax Administration: Integrating Organizational Diagnosis To Achieve Systemic Congruence", Malaysia, 2012.

13. Wheelen, Thomas & Hunger David, "strategic management and business policy: concepts," 9th ed. person prentice hall, new jersey 2004.