The Role of Balanced Scorecard to Raise the Financial Performance of SME's Supply Chain

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***Abstract*- The purpose of this study is the role of the balanced scorecard to raise the financial performance of SME's supply chain. This research is an applied and correlated study which formed the statistical society of the research staff with 1122 people for small and medium enterprises. Using the Cochran formula, the statistical sample of 286 was selected by stratified sampling. Using the Cochran formula, the statistical sample of 286 was selected by stratified sampling. The data gathering tool was a questionnaire of balanced scorecard and financially researcher-made questionnaire includes dimensions of value management, risk control and cost control. The reliability of the questionnaires was 0.79 for the human capital questionnaire and 0.80 for the financial performance questionnaire with Cronbach's alpha coefficient and the validity of the questionnaires was confirmed by experts. In this research, Pearson correlation coefficient and regression test were used. The results of the research showed that the scorecard is balanced and affects the financial performance of small and medium enterprises' supply chain. In this research, Pearson correlation coefficient and regression test were used. The results of this study showed that the balanced scorecard is effective on the financial performance of small and medium enterprises supply chain.**

Keywords: *Performance evaluation, Balanced Scorecard, Financial performance, Small and Medium Enterprises, Supply Chain.*

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1. Introduction

Today, the turbulent nature of global trade faces the challenges of the manufacturing sectors and the market for products, these challenges require organizations to firmly establish their own base in this unstable environment by employing their management systems and implementing them in practice and to achieve things with continuous progress. Success in this field depends on the organization's ability to apply and evaluate performance and core processes. In this regard, the topic of performance evaluation has become one of the most important managerial debates, and new approaches have been proposed by the researchers, including the balanced scorecard that can be implemented in all manufacturing and industrial organizations [4], [5]. The Balanced Scorecard is a technique for converting strategy into action, balancing scorecard maintains traditional financial indices, but financial indicators alone are inadequate, a balanced scorecard completes financial indicators of past performance with indicators of determinants of future performance [1]. The objectives and indexes of the rating card are determined by the strategy and vision of the organization. These goals and indicators refer to the organization's performance in four perspectives: financial, customer, internal processes, and growth and learning. The balanced scorecard, in addition to being a performance measurement tool, is a model for operating the strategy, transforming operational programs, and controlling and improving it. In order to realize the strategy, and since performance appraisal is the most appropriate tool for any organization to ensure its steps towards long-term and strategic goals, this model can help organizations to implement strategies and ensure implementation without deviation [3], [6]. The financial performance of each organization is one of the tools to measure the organization's achievement of its predetermined goals in the market and in competition with its competitors. Success in this important aspect of performance is not conceivable without the consideration of trained and expert human resources and expertise, especially in service providers that have a close relationship between employees and customers. Hence, the existence of policies and procedures for the development of HRM is an effective way of meeting the needs of each organization. Manufacturing companies must have a good performance in their own business. Awareness of how well the organization's performance is to achieve these goals and the position of the organization in the complex and dynamic environment of today is of great importance to managers and organizations. Determining the life and activities of the organization, the ability to compete and the most appropriate policy against environmental change. One of the most effective methods used by organizations in this regard is the use of performance evaluation to determine the strengths and weaknesses of the organization to resolve them and their strengths. In order to improve performance evaluation and management, in addition to helping the organization to increase its ability to compete, it also plays a role in identifying and implementing strategies. In this regard, having a model for assessing the performance of the organization's strategy is necessary and one of these methods is a balanced scorecard, which was first introduced to evaluate the performance of organizations as one of the methods for strategic planning in a way that can be retired. And balanced scorecard is a managerial concept that helps all managers at all levels to control their key activities. Through this research, efforts have been made to examine the impact of certain procedures, performance evaluation with a balanced card on the financial performance of organizations [2], [8], [10].

2. Research Method

This applied research is a correlation type. The statistical population consists of 1122 employees of small and medium enterprises' supply chain. Using the Cochran formula, the statistical sample of 286 was selected by stratified sampling. The data gathering tool was a scalable scorecard questionnaire and a researcher-made financial performance questionnaire including the dimensions of value management, risk control and cost control. The reliability of the questionnaires was confirmed by Cronbach's Alpha coefficient for the human capital questionnaire (0.79) and for the financial performance questionnaire (0.80) and the validity of the questionnaires was confirmed by experts. In this research, Pearson correlation coefficient and regression test were used.

3. Supply chain performance

This refers to the extended supply chain activities are used in meeting end-customer requirements, including product availability, on-time delivery, and all the necessary inventory and capacity in the supply chain to deliver that performance in a responsive manner. Performance measurement is as the process of quantifying the efficiency and effectiveness of an action. Supply chain performance is measured to facilitate a better understanding of the supply chain, positively influencing supply chain partners and improving its overall performance. Supply chain encompasses all activities involved in the transformation of goods from the raw material stage to the final stage, when the goods and services reach the end customer. [11] Views supply chain as the management of goods and information flow through the supply chain from the raw material supplier to the final customer. Components of the supply chain include:

Suppliers: this is the starting point in a typical supply chain; suppliers are responsible for providing the materials and services needed by organizations to start and continue production to meet customer demand.

Factory: this is the facility where materials sent from the supplier are converted into products; factories rely on suppliers to provide the required material in a timely manner.

Warehouse: this refers to the storage area for product; product will remain here until they have to be transported to various locations.

4. Findings

First hypothesis: There is a significant relationship between a balanced scorecard and value management.

Table 1: The correlation coefficient of the first hypothesis

Dependent variable / Independent variable		Value Management
Balanced Scorecard	Coefficient	0.434
	Significance	0.000
	Number	286

The Pearson correlation coefficient test was used to investigate the hypothesis of the research. Results showed that there is a significant correlation between balanced scorecard and buckling management, because the significance level (Sig = less than the alpha of research ($\alpha = 0.05$), The overall result is that at the 95% level, there is a significant relationship between the balanced scorecard and value management, so the first hypothesis of the research is verified [9].

Table 2: Quality index of balanced scorecard and value management

Correlation coefficient	Adjusted coefficient	Determination coefficient	Error standard deviation
0.434	0.201	0.188	0.587

The correlation between independent and dependent variables is equal to 0.434. The adjusted coefficient of determination is 0.201 and this value indicates that 20% of the value management changes are related to the balanced scorecard variable. According to the indicators mentioned, the model has the required qualifications.

Second hypothesis: There is a significant relationship between a balanced scorecard and risk control.

Table 3: Correlation coefficient of the second hypothesis

Dependent variable / Independent variable		Risk Control
Balanced Scorecard	Coefficient	0.553
	Significance	0.000
	Number	286

The Pearson correlation coefficient test was used to investigate the research hypothesis. The results showed that there is a significant correlation between the balanced scorecard and risk control, because the significance level (Sig = less than the alpha of research ($\alpha = 0.05$) is 0.000, so there is a significant relationship between the balanced scorecard and risk control.

Table 4: Competitiveness index of balanced scorecard and risk control

Correlation coefficient	Adjusted coefficient	Determination coefficient	Error standard deviation
0.553	0.319	0.305	0.54

The correlation between the independent and dependent variables is 0.553. The coefficient of determination is 0.319 and this figure indicates that 31% of the risk control changes are related to the balanced scorecard. According to the indicators mentioned, the model has the required qualifications.

Third hypothesis: There is a significant relationship between balanced scorecard and cost control.

Table 5: The correlation coefficient of the third hypothesis

Dependent variable / Independent variable		Cost Control
Balanced Scorecard	Coefficient	0.506
	Significance	0.000
	Number	286

The Pearson correlation coefficient test was used to investigate the research hypothesis. The results showed that there is a significant correlation between balanced scorecard and cost control because the significance level (Sig = 0.000) is less than the alpha of research ($\alpha = 0.05$), so there is a significant relationship between the balanced scorecard and cost control.

Table 6: Competitiveness index of balanced scorecard and cost control

Correlation coefficient	Adjusted coefficient	Determination coefficient	Error standard deviation
0.506	0.273	0.256	0.54

The correlation between independent and dependent variables is equal to 0.506. The coefficient of determination is 0.273, which indicates that 27 percent of the cost control changes associated with the scorecard are balanced. According to the indicators mentioned, the model has the required qualifications.

5. Results

The purpose of this study was to scalable scorecard and its role in raising the financial performance of small and medium enterprises' supply chain. In this research, Pearson correlation coefficient and regression test were used. The results of the research showed that there is a significant relationship between the balanced scorecard and the dimensions of financial performance, including cost control, value management and risk control. As a result, a balanced scorecard has a positive and significant impact on the financial performance of small and medium enterprises' supply chain. Accordingly, whatever the balanced scorecard is from a more favorable situation, the field will improve the financial performance of the company in a desirable manner. This result is in agreement with the results of [1] and [5], [7].

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