

Increasing Efficiency In Textile Industry Enterprises Based On A Balanced Indicators System

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Abstract: This article discusses the theoretical and methodological foundations of using the balanced scorecard (BSC) to improve efficiency at textile enterprises. The study interprets the BSC as a strategic management tool that integrates the financial and non-financial aspects of the enterprise's activities into a single management mechanism. The article substantiates the possibilities of assessing efficiency based on the interrelationship between working with consumers, internal business processes, innovative development and financial results. It is also scientifically concluded that the introduction of the BSC in textile enterprises can improve management processes, effectively use resources and increase competitiveness.

Keywords: Balanced scorecard, textile industry, strategic management, efficiency, financial and non-financial indicators, innovative development, internal business processes, competitiveness.

INTRODUCTION:

Balanced Scorecard – “a management system based on identifying and assessing the effectiveness of an enterprise based on optimally selected indicators that reflect all aspects of its activities, both financial and non-financial.” [5].

LITERATURE REVIEW

The Balanced Scorecard was developed in the early 1990s by a group of researchers at Harvard Business School at the initiative of American economists R. Kaplan and D. Norton. The Balanced Scorecard was recognized as a single system that combines financial and non-financial indicators. BSC is based on value indicators, but the main task of using BSC is to manage processes. The fundamental purpose of this approach is explained by the fact that the idea of "balance" is not a comparison or equality, but the selection of a set of the most important indicators. The reason why this system is called "balanced" is that it combines the main areas of the enterprise's

activity - working with consumers, economic, innovative and financial issues.

METHODOLOGY

The balanced program of implementation of measures in the activities of a textile enterprise as a mechanism for implementing the strategy involves solving two tasks: the first is the system itself and the second is its use. These two tasks are interrelated. As the BSC is developed to manage the main processes, it becomes clear which indicators of the system are not sufficiently informed, need to be developed, and which should be included in the new criteria for assessing strategic success. This process includes the following stages:

- preparatory stage - selection of a unit for implementing the BSC; determination of the composition of participants and an alternative schedule for the development and implementation of the BSC; agreement between the participants on the

specifics of the industry and the textile enterprise itself.

- development stage - development and approval of the mission of the textile enterprise; identification of the main aspects of the textile enterprise's activities; identification of detailed key success factors for the main aspects of the textile enterprise's mission, development of a system of indicators, identification of cause-and-effect relationships, coordination of short-term and long-term goals; development of a corporate strategic map;

-implementation stage - development of an action plan and implementation of strategic maps in the activities of a textile enterprise.

Based on these, we will focus on the importance of the balanced scorecard system and its components.

Financial relations. Financial issues are of great importance in enterprise management. In particular, it is necessary to develop strategic goals for the efficient allocation of resources and optimal use of costs, taking into account the interests of shareholders and potential investors.

Internal business processes. In this case, goals are set for analyzing the sources of intensive development of the enterprise. Typically, the correct organization of processes within the enterprise is an important factor in intensive development.

Education and training. Management theory and practice confirm that human resources play a high role in the development of enterprise activities. In general, in the context of economic liberalization, the role of highly qualified personnel increases, as they become the main force in the development of the process of technical progress.[1].

Market factor or customer relations. The setting of strategic goals in this regard is directly related to competition in national and world markets. Practice shows that ignoring this block in competitive conditions brings the business entity closer to the risk of bankruptcy. One of the important components of strategic management in textile enterprises in a market economy is the determination of a sound development strategy.

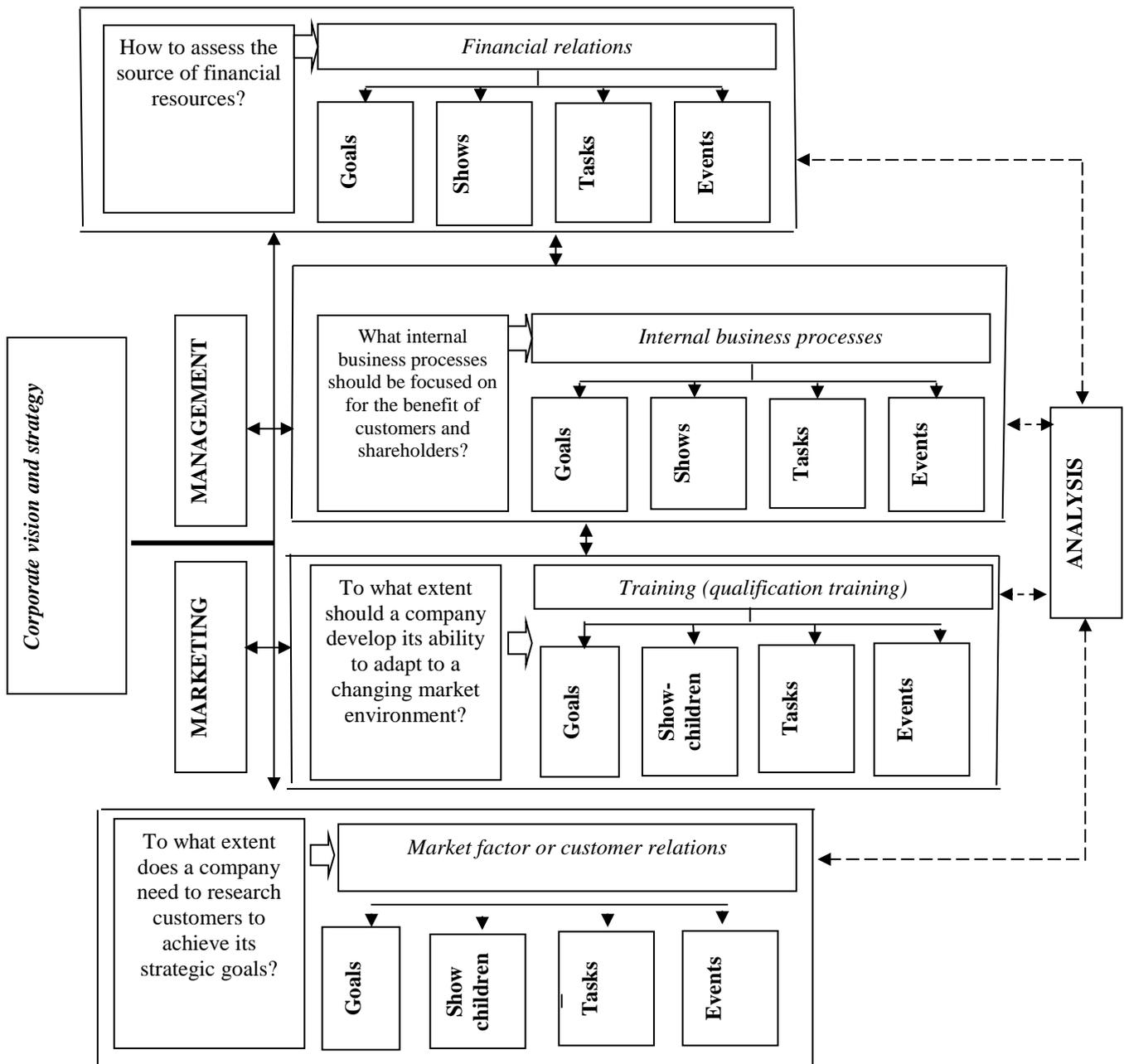


Figure 1. The balanced scorecard and its components

In strategic management, a clear definition of strategy is an important factor determining the quality of the enterprise's long-term development. Based on the construction of a balanced scorecard, it is possible to clarify the following aspects that ensure the quality of the enterprise's strategy:

-What internal and external factors should be taken into account when developing a strategy?

What are the company's strengths and weaknesses compared to its competitors?

What is the financial capacity of the enterprise and the professional potential of its employees to implement a specific strategy?

When developing a strategy, it is necessary to pay closer attention to which aspects of the enterprise's production activities, etc.

In order to implement a balanced scorecard system in the practice of textile enterprises, the above-mentioned stages should be implemented through the following measures: assigning the relevant unit the task of monitoring and summarizing the

comprehensive application of this system and the analysis of its results; clearly identifying the units of the enterprise where the BSC will be implemented; determining the methods of providing information by the units responsible for the implementation of the BSC; strictly controlling the BSC implementation processes, in particular, ensuring the complete elimination of identified shortcomings and errors in the activities of the enterprise as a result of its implementation.

It is important to note that the balanced scorecard system should not be understood only as a tool to help in drawing up a financial plan and budget of an enterprise, on the contrary, the necessary analysis of the indicators formed on the basis of this system, assessment of results, optimal planning and control will give good results. The algorithm of the process of managing the activities of a textile enterprise based on the system of balancing capabilities and results can be implemented in the practice of textile enterprises in stages. As a result, the proposal to introduce a modern process of drawing up a plan of success by performance indicators and factors by introducing the algorithm of the process of managing the activities of a textile enterprise based on the principle of "From strategy to action" into the traditional processes of developing and implementing a strategy for increasing the efficiency of management of a textile enterprise is based on the possibility of increasing the level of profitability as a result of improving management mechanisms.[6].

In general, the concept of "mechanism" itself was borrowed from the field of technology and, after medicine, biology and other fields of science, was transferred to economics. It is not for nothing that in economic research the term "mechanism" is found in various combinations, including: market mechanism, production management development mechanism, economic mechanism, economic mechanism, organizational-economic mechanism[8].

This broad use of the term indicates that its physical essence is universal, while at the same time, each time the term is used, it acquires a narrow meaning.

From a technical point of view, a mechanism is a system of bodies designed to convert the motion of one or more bodies into the motion of other rigid bodies. Typically, a mechanism has one input link driven by a motor and one output link connected to a working body or tool. This definition gives a general idea of a mechanism, which is a tool that helps to unify statics and dynamics, to ensure their regulation and consistency in relation to energy transfer, and, first of all, indicates that a mechanism is a system[7].

RESULTS

In our opinion, another aspect of the problem in the formation of management mechanisms is that it is necessary to study each constituent of this mechanism separately. In particular, in some scientific literature there are cases of studying either the organizational or economic aspects of this mechanism.

At the same time, in our opinion, it is appropriate to study both aspects of this mechanism in unity, in a single system, in interrelation, in interdependence. The presence of these two components not only reveals the essence of the mechanism, but also gives it the name of an organizational-economic mechanism.

Economic mechanismIt embodies the relationships, forms, methods, and tools that support the implementation of socio-economic development plans of subjects using economic methods and ensure their mutual interest in movement.

The economic mechanism regulates the following two groups of relations in the activities of the enterprise:

between the enterprise, as well as between the enterprise and the state;

between the enterprise and the state on the one hand, and between the enterprise and its members on the other.

"The forms, means and methods by which these relations are regulated can be grouped as follows:

general rules and norms determining the status of economic entities and the system of remuneration for labor; the pricing system; the financial system; the credit system”[4].

“To increase the effectiveness of the implementation of the proposed systems and methods for managing the efficiency of internal activities in textile enterprises, it is necessary to create a unified system of control and regulation tasks” [3]. With the help of the control mechanism, it will be possible to identify promising opportunities and risks for increasing business activity in the sustainable development of textile enterprises.

The introduction of digital technologies into the management process by textile enterprises has become one of the most pressing issues of today.

There are a number of ways to reduce the management process.

Factors influencing the increase in retained earnings in "QODIR TEXTILE" and "SABO TEXTILE" were selected as the resulting factor indicators. This was done based on the analysis of leading experts from the Andijan Regional Directorate of the Ministry of Economy and Finance.

X1 – the number of management staff of the enterprise;

X2 – the amount of management costs of the enterprise;

X3 – the total amount of capital investments of the enterprise.

Table 2

Changes in capital investments and management performance indicators in "QODIR TEXTILE" and "SABO TEXTILE" in 2015-2023[2]

Year	Retained earnings, million soums (Y)		Number of management staff of the enterprise, people (X1)		the amount of management expenses of the enterprise, million soums (X2)		Total amount of capital investments of the enterprise, million soums (X3)	
	A	B	A	B	A	B	A	B
2015	11865.6	7381.4	65	48	10378.3	5318.2	202.9	222.6
2016	290.9	3729.1	67	51	10917.1	5764.9	298.9	305.3
2017	2518.9	3247.2	66	51	12185.0	6218.1	8498.3	357.9
2018	6223.5	4736.6	73	58	13869.9	7565.7	11493.6	427.8
2019	87703.9	51381.3	72	61	21893.3	10365.8	822.0	397.8
2020	83886.9	55117.2	78	65	30022.6	13193.4	194.9	15099.7
2021	72303.9	51212.7	84	67	35917.8	16385.3	91.7	7327.6
2022	99398.2	68927.4	88	75	41142.3	18852.5	151.1	671.8
2023	121258.1	84601.34	90.2	75.4	49160.17	21850.87	174	7009.28

“If the essence of the endogenous factor and the exogenous factor indicators affecting it is seen, then the number of management personnel, management costs, and factors that have a significant impact on the volume of capital investments as influencing factors have a close relationship to the model in the form of a production model. Based on the

relationship of the main endogenous and exogenous factors identified, the above time series data were analyzed using the EViews10 program in order to determine the trends in the volume of net profit in “QODIR TEXTILE” and “SABO TEXTILE” in Andijan region”[2].

The parameters identified in the regression analysis based on the data presented in Table 2 and the significance of the model were evaluated through the calculated key indicators. Using the identified data,

$$y = -4683,32 \cdot x_1 + 6,22 \cdot x_2 - 0.032 \cdot x_3 + 254953,5$$

“The reliability and adequacy of the model and its parameters constructed using the software package should be checked based on several criteria to ensure the accuracy of the results. Since the autocorrelation in the identified trend was slightly below the established optimal limit (DW=1.47) and met the requirements according to other criteria, the regression equation (1) determined above was found to be reliable and proved to be adequate. The

$$y = 1366,6 \cdot x_1 + 2,52 \cdot x_2 + 0.584 \cdot x_3 - 78133,63$$

"It is necessary to check the reliability and adequacy of the model and its parameters constructed using the program based on several criteria and ensure the accuracy of the results. Since the multicollinearity in the identified trend is slightly above the established optimal limit (DW=2.55) and meets the requirements according to other criteria, the regression equation

the equation of the multifactor econometric model of the change in net profit in "QODIR TEXTILE" as a result of the factors affecting it is as follows" [2]:

parameters determined in the regression analysis process using the Eviews10 software package and the significance of the model were assessed using the main evaluation indicators calculated by the program". Using the identified data, a multifactor econometric model of the change in net profit volume and factors affecting it in «SABO TEXTILE» was developed. According to it, the following are the factors that characterize this process:

(1) determined above was found to be reliable and its adequacy was proven". Using a multifactor econometric model, the values of changes in the volume of undisclosed profits of enterprises under the influence of management factors in the medium term, that is, in 2024-2027, are presented in Table 3 below.

Table 3

Unretained profits, management costs, and capital investment prospects at QODIR TEXTILE and SABO TEXTILE in 2024-2027[2]

Year	Retained earnings, million soums (Y)		Number of management staff of the enterprise, people (X1)		the amount of management expenses of the enterprise, million soums (X2)		Total amount of capital investments of the enterprise, million soums (X3)	
	A	B	A	B	A	B	A	B
2024	124899.8	88186.4	93	79	48317.48	21695.4	292.3	8498.2
2025	140640.0	99172.9	96	83	53124.63	23735.8	143.9	9479.7
2026	156380.2	109192.9	99	86	57922.78	25786.3	583.1	10461.2
2027	172120.4	121279.4	102	90	62718.93	27828.7	1140	11442.7

CONCLUSION

“Based on the coefficients of the variables in the constructed multifactor models, it is possible to estimate the change in the resulting factor value per unit of the value of each factor added. When using

the proposed multifactor models in both enterprises, it is necessary to take into account the influence of each factor on the endogenous factor in the enterprises. In this case, it is advisable for “QODIR TEXTILE” to focus on increasing management costs without changing the number of management

personnel, while "SABO TEXTILE" should increase the volume of all three factor indicators with an optimal distribution of resource capacity. The use of identified trends allows optimizing the efficiency of the factor unit by correctly distributing the volume of resources input in the organization of the management process in enterprises" [2].

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