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Building a System of Indicators to Evaluate Responsibility Centers in Vietnamese Enterprises

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Abstract

Many businesses around the world operating in different fields have used the Balanced Scorecard to evaluate performance. With the trend toward an increasingly open economy, Vietnamese businesses have many opportunities but also many challenges. Vietnamese businesses face global competitive pressure. To maintain operations and move towards sustainable development, Vietnamese businesses always improve the quality of products and

services to meet new conditions and standards, especially green standards. Besides, enhancing competitiveness in the market requires Vietnamese businesses to not only build financial strategies but also include non-financial strategies. To accomplish this, Vietnamese businesses need to form responsibility centers within the business and build a system of indicators to evaluate responsibility centers based on a balanced scorecard.

Keywords: Responsibility Center, Assessment Criteria, Balanced Scorecard

1. Introduction

To survive and develop in a highly competitive environment, businesses always seek ways to organize production and business effectively and improve competitiveness. With current achievements in management science, decentralization of management to form responsibility centers in most businesses is inevitable. Therefore, to organize production and business effectively, businesses need to evaluate the results achieved by responsibility centers as well as the shortcomings, causes, and responsibilities of related departments. This means that businesses need to have a system of indicators to evaluate responsibility centers appropriately. In models for building a system of performance assessment indicators, the balanced scorecard is highly appreciated by many researchers as well as many businesses. The balanced scorecard is considered a strategic management tool, turning strategy into specific actions.

Vietnam has diplomatic relations with 192 countries; more than 30 partners with relationships from Comprehensive Partners or higher; signed 16 FTAs; including many new generation FTAs (CPTPP, EVFTA, RCEP); In which economic and trade relations are the focus of development, making the international market increasingly open, creating great conditions for businesses to develop. International organizations assess that Vietnam will be one of the countries with the highest growth rate in the region. In the coming time, it shows that the domestic market is relatively large, with high development potential, creating favorable conditions for business development. Administrative reform, improving the business investment environment, and digital transformation are being strongly implemented. Along with that, Vietnam is still considered a country with great potential to attract FDI, especially in the current trend of restructuring and diversifying supply and production chains. All information shows that Vietnamese businesses are facing global competitive pressure. With the trend of an increasingly open economy, Vietnamese businesses have many opportunities but also many challenges. To maintain operations and move towards sustainable development, Vietnamese businesses always improve the quality of products and services to meet new conditions and standards, especially green standards. Besides, to enhance competitiveness in the market requires Vietnamese businesses to not only build financial strategies but also include non-financial strategies. To accomplish this, businesses need to build a system of responsibility center assessment indicators consistent with their development strategy.

This article studies the application of the balanced scorecard to build a system of indicators to evaluate responsibility centers in Vietnamese enterprises. Depending on each specific business, a system of evaluation criteria will be established according to the administrator's requirements.

2. Literature Review

The responsibility center manager is responsible for achieving the optimal relationship between inputs and outputs (Hansen, Mowen, and Guan, 2009). Usually, this is a cause-and-effect relationship. For example, in the production department, input materials are a tangible part of the finished product, control focuses on production on the required time, in the desired volume, in accordance with quality standards and characteristics, and with minimal input. However, in some cases input and output are not directly related. For example, advertising costs are an input that is expected to increase sales, but sales depend on many factors other than advertising, so the relationship between increased advertising costs and increased sales is more difficult to determine.

Also, according to Hansen, Mowen and Guan (2009), assessing responsibility centers is based on the principle of controllability. Control is the degree of influence a particular manager has over costs, revenues, and related items for which the manager is responsible. Controllable costs are all costs that are affected by management decisions. Uncontrollable costs are costs that are not affected by managers' decisions (Garrison, 1991). This principle holds that managers are responsible for the decisions they have the authority to make.

There are many views that agree that managers should be evaluated only based on the items under their control. However, the strict application of the controllability principle has two disadvantages. First, requiring managers to be responsible only for factors directly under their control will discourage them from taking actions that affect events beyond their control. Second, it ignores the often-useful role of relative performance appraisal, whereby performance is evaluated relative to some group rather than against a standard. When the controllability principle is applied, managers are responsible for their own activities, leading to possible counter-functional activities. Performance measures expose opportunism through accounting manipulations.

Therefore, when developing indicators to evaluate responsibility centers, it is necessary to emphasize that performance measures should be used purely technically and separate from the relationship with other measures; accepting the view that there is no perfect measure or performance measurement system.

Depending on the responsibility center, inputs and outputs may be quantifiable in monetary units or measured in other units. Each responsibility center should be simultaneously measured for both efficiency and effectiveness. Economic efficiency is measured on the basis of calculating the ratio of output factors to input factors. Performance reflects the relationship between a responsibility center's output and that responsibility center's stated goals.

Applying the Balanced Scorecard to Build a System of Indicators to Evaluate Responsibility Centers

Balanced scorecard (BSC) with 4 perspectives: Financial, Customer, Internal Process and Training and Development. Applying the balanced scorecard to evaluate responsibility centers must ensure that businesses can implement the organization's goals and strategies. In the book "The Balanced Scorecard: Translating Strategy into Action," Kaplan and Norton (1996) ^[3] gave some suggestions on building indicators to evaluate a company's responsibility center based on the four aspects of the Balanced Scorecard.

Financial Aspect: Most businesses focus on revenue growth, productivity, and enhancing shareholder value. To measure revenue growth, businesses can use revenue per new products, revenue per employee, or total revenue. Improving financial efficiency is usually accomplished in two ways: reducing costs and improving the use of existing assets. Possible targets within these goals include cost-to-revenue ratio, targets such as revenue growth rate, and asset utilization.

Customer Aspect: The goal for the customer aspect of businesses is to ensure the best service, leadership in product quality and customer loyalty. The customer aspect includes indicators of product and service quality (price, choice, convenience, growth, suitability, uniqueness), customer intimacy (customer understanding, customer answers, market expansion, sustainable customer relationships).

Internal Process Aspects: Indicators in the internal process aspect demonstrate the ability to manage production and business activities; Ability to manage employees, understand customers and ensure environmental and social factors.

Training and Development Aspects: Metrics for training and development aspects are divided into 3 groups: indicators on human resource training, indicators on information systems, indicators on organizational resources.

3. Apply the Balanced Scorecard to Develop Indicators to Evaluate Responsibility Centers in Vietnamese Enterprises

Applying the Balanced Scorecard to Build a System of Indicators to Evaluate Cost Centers in Vietnamese Enterprises

To meet the needs of cost center evaluation and decision making of administrators, periodically or at the end of the responsibility accounting period, evaluation criteria must be determined to demonstrate the level of task completion of these centers after a certain period. At the same time, based on these indicators, administrators implement clear and transparent remuneration regimes for employees. Cost center evaluation criteria system includes:

For Standard Cost Centers, the following indicators are included:

Financial indicators: Indicators reflect fluctuations in direct material costs, direct labor costs by each product type, each cost center and the entire enterprise between the implementation period and the budget period.; The indicators reflect the fluctuations in general production costs according to each type of variable cost, fixed cost, each cost center and the entire enterprise between the implementation period and the estimated period; The indicators reflect price fluctuations by each product type, each cost center and the total cost of the implementation period compared to the estimated period..

Non-financial indicators: Indicators reflecting the quality of products and services (product quality index, specifications, product designs, etc.) implementation period compared to the estimate period; Indicators reflect internal processes (quantity, quality, raw material prices, machine hour efficiency, etc.) implementation period compared to the estimate period; Indicators reflect the learning and development process (training, knowledge fostering, production practice skills, employee compensation, etc.) in the implementation period compared to the budget period.

For Cost Center Estimates, includes the following indicators:

Financial indicators: Includes indicators of changes in variable costs and fixed costs for each estimated cost center and the entire enterprise between the implementation period and the estimated period.

Non-financial indicators: Indicators reflect the quality and efficiency of consulting activities (human resource management, production techniques, product sales, etc.) in the implementation period compared to the estimated period; Indicators reflect the consulting activities process (level of compliance with the process of drafting human resource management documents, production techniques, etc.) implementation period compared to the estimate period; Indicators reflect the learning and development process (training and fostering knowledge and skills in management; proficiency in document drafting; remuneration regime) in the implementation period compared to the period estimates.

Table 1: Cost center evaluation indicator system

Indicator system	Balanced scorecard
Standard cost center	
Direct materials cost variance	Financial aspect
Direct labor cost variance	Financial aspect
Variation in manufacturing overhead costs	Financial aspect
Price difference	Financial aspect
Fluctuations in product and service quality index	Customer aspect
Changes in product and service design specifications	Customer aspect
Rate of meeting demand in terms of quantity and quality	Internal process aspects
Machine hour efficiency, labor productivity	Internal process aspects
Percentage of employees participating in training and skills development	Training and development aspects
Level of proficiency in production technology processes	Training and development aspects
Estimated cost center	
Estimated cost center cost variance	Financial aspect
Rate of improvement in raw material supply processes and procedures	Internal process aspects
Effective application of new technology	Internal process aspects
Percentage of employees participating in training and skills development	Training and development aspects

Source: Compiled by author

Applying the Balanced Scorecard to Build a System of Indicators to Evaluate Revenue Centers in Vietnamese Enterprises

Periodically or after a certain period, responsibility accountants at revenue centers determine the value of evaluation criteria and provide information to administrators about the level of implementation, causes and directions for revenue exploitation in the coming period,... The revenue center evaluation criteria system includes:

Financial Indicators: The indicators reflect the fluctuations in revenue of each product type, each center and the entire company in the implementation period compared to the

estimated period.

Non-Financial Indicators: Indicators reflect relationships with customers

(customer growth rate; rate of customers returning or not returning to buy products; rate of customer complaints and disputes) implementation period compared to the estimate period; Indicators reflect the internal process (growth rate of sales contracts; level of improvement in the product distribution process) implementation period compared to the estimate period; Indicators reflect the learning and development process (proportion of employees attending training courses and seminars; percentage of employees participating in marketing training classes; remuneration, sales supervision) implementation period compared to the budget period.

Table 2: Revenue center assessment indicator system

Evaluation criteria system	Balanced scorecard
Revenue difference	Financial aspect
Customer growth rate	Customer aspect
Percentage of customers returning to purchase	Customer aspect
Customer satisfaction level	Customer aspect
Level of product promotion	Internal process aspects
Sales contract growth rate	Internal process aspects
Number of times collecting customer review information	Internal process aspects
Percentage of employees participating in professional training	Training and development aspects
Number of times employee benefits are implemented	Training and development aspects

Source: Compiled by author

Applying the Balanced Scorecard to Build a System of Indicators to Evaluate Profit Centers in Vietnamese Enterprises

The level of completion of the set targets for the profit center after one period of operation is the top concern of Administrators. Therefore, responsibility accounting needs to determine assessment criteria and provide information fully and promptly. The profit center evaluation indicator system is as follows:

Financial Indicators: Includes indicators reflecting profit fluctuations for each product type, each center and the entire company in the implementation period compared to the budgeted period.

Non-Financial Indicators: Indicators reflecting customer relationships (customer satisfaction rate in terms of selling price, product quality; customer structure, customer segments; market share growth rate,...) compared to the implementation period with the budgeting period; Indicators reflect the internal process (structure of production and consumption products; rate of product quality improvement,...) implementation period compared to the estimate period; indicators reflect the learning and development process (proportion of employees attending training, seminars on production management, sales, finance,...; remuneration regime;...) in the implementation period compared to budget period.

Table 3: System of indicators for evaluating profit centers

Evaluation criteria system	Balanced scorecard
Profit difference	Financial aspect
Ratio of customer satisfaction in terms of selling price	Customer aspect
Customer structure	Customer aspect
Market share growth rate	Customer aspect
Level of product promotion	Internal process aspects
Sales contract growth rate	Internal process aspects
Number of times collecting customer review information	Internal process aspects
Percentage of employees participating in professional training	Training and development aspects
Number of times employee benefits are implemented	Training and development aspects

Source: Compiled by author

Applying the Balanced Scorecard to Build a System of Indicators to Evaluate Investment Centers in Vietnamese Enterprises

Periodically or after an implementation period, reporting and evaluating the investment center is necessary to learn from experience and make appropriate decisions. Therefore, responsibility accounting for these centers needs to determine a system of evaluation indicators, analyze the responsibilities of departments related to investment results, point out the causes and timely development directions. The system of criteria for evaluating investment centers includes: *Financial indicators*: Includes indicators to evaluate the profitability of equity; revenue profitability; return on investment; added economic value;... of each center and the entire company in the implementation period compared to the estimate period.

Non-financial indicators: Includes indicators to evaluate relationships (level of investor satisfaction with the project's profitability rate, project payback ability, professionalism in project management, etc.) with investors in the implementation period compared to the estimate period; Indicators for evaluating internal processes (proportion of projects with high profit rates; proportion of new investment projects; proportion of economic, technical and labor norms that must be rebuilt;...) periodically implementation compared to the estimated period; Indicators to evaluate the learning and development process (proportion of employees attending training on production management, sales, finance, strategy,...; remuneration regime;...) implementation period compared to budget period.

Table 4: Investment center evaluation indicator system

Evaluation criteria system	Balanced scorecard
Return on equity	Financial aspect
Return on investment	Financial aspect
Increased economic value	Financial aspect
Level of investor satisfaction	Customer aspect
Percentage of projects with high profit rates	Internal process aspects
Rate of new investment projects	Internal process aspects
The ratio of norms must be rebuilt	Internal process aspects
Remuneration	Training and development aspects
Percentage of employees participating in training	Training and development aspects

Source: Compiled by author

4. Conclusion

The balanced scorecard, since its introduction by Kaplan & Norton in 1992, has provided managers with a comprehensive framework, turning vision and strategy into a system of indicators in four aspects: Financial, Customer Sales, Internal Processes, Training and Development. After more than 20 years, the Balanced Scorecard has been completed and developed by Kaplan & Norton as well as many other scholars around the world to help the Balanced Scorecard be applied to businesses more effectively. Many businesses around the world operating in different fields have used the Balanced Scorecard to evaluate performance. Vietnamese businesses urgently need to form responsibility centers within their businesses, and build a system of indicators to evaluate responsibility centers based on BSC. Researching and applying the Balanced Scorecard to build a system of indicators to evaluate responsibility centers in businesses is a practical need of many businesses. To apply BSC to build responsibility center assessment criteria, the initial condition that Vietnamese businesses need is to form responsibility centers. To form responsibility centers and evaluate the performance of responsibility centers as well as evaluate the performance of responsibility center managers. *Firstly*, perfect the organizational structure of the management apparatus. Companies need to review their organizational structure, governance regulations, and financial regulations to adjust and supplement deficiencies in the direction of clear and transparent assignment and responsibility for each responsibility center. *Second*, clearly decentralize responsibilities in departments. These companies need to develop and promulgate governance regulations, financial regulations, restructure the organizational structure, and implement clear assignments and responsibilities for each specific department. *Third*, build an appropriate and timely reward regime for individuals and departments who complete their work well. After having department reports and a system of indicators to evaluate performance, garment enterprises need to establish an incentive and reward system related to the results achieved by the responsibility center.

5. References

- Garrison Ray H, Noreen EW. Managerial Accounting: Concepts for Planning, Control. Decision Making. IRWIN, INC. Publ, 1991.
- Hansen DR, Mowen MM, Guan L. Cost Management. Accounting & Control 6th Edition. Mason, MI: South-Western Cengage Learning, 2007.
- Kaplan RS, Norton DP. Using the Balanced Scorecard as a strategic management system, Harvard Business Review, 1996.
- Kaplan RS, Norton DP. Balanced Scorecard as basis for Strategy-focused Organization, Harvard Business Review, 2000.
- Niven P. Balanced Scorecard Step-by-Step: Maximizing Performance and Maintaining Results, 2nd ed., John Wiley & Sons, New York, 2006.