



Chapter XVII

A Comparative Analysis of the Balanced Scorecard as Applied in Government and Industry Organizations

Nancy Eickelmann
Motorola Labs, USA

INTRODUCTION

Organizations have become increasingly dependent on information technologies to conduct daily operations, achieve competitive advantage and to create and penetrate new markets. This dependence has come at a high price, in 1990 U.S. companies spent over \$154 billion on information technologies. However, organizations have found it difficult to measure the value added from these investments. Survey results found four significant barriers to measuring financial performance related to information technologies including:

- Difficulty of measuring economic benefits
- Inability to determine returns
- Lack of good metrics
- Incomplete records/accounting of investments

The Balanced Scorecard framework provides part of the structure required to overcome these barriers. How organizations can overcome these barriers and successfully measure performance with respect to achieving strategic plans is the focus of this chapter.

This chapter provides a comparison of results of two case studies regarding the use of the Balanced Scorecard measurement framework. The application of the Balanced Scorecard (BSC) is evaluated for a Fortune 500 information technology organization and a government organization. Both organizations have a business focus of software development. The BSC framework is applied and reviewed in both contexts to provide insight into unique organizational characteristics for government and contract software environments. A specific focus is to inform the use of financial measures such as Return On Investment (ROI) in the government context.

The BSC framework provides the necessary structure to evaluate quantitative and qualitative information and identify the critical linkages between financial measures of past performance and key measures of future performance.

Specific objectives of this chapter include:

- A better understanding of applying strategic measurement to measure economic value;
- A characterization of how to choose a core metrics set required for a BSC;
- A characterization of BSC framework requirements in industry settings versus government settings;
- An identification of open measurement issues and further research.

The chapter organization follows a description of two case studies that examine how BSC is applied in an industry versus a government context. First, a brief overview of each organization's strategic vision and goals is given. An analysis of key differences among financial perspectives, customer perspectives, internal business-process perspectives, and learning and growth perspectives for industry versus government organizations is discussed. A unifying thread of the study is to evaluate the use of measurement for the operational, managerial, and strategic purposes of an organization. These case studies provide additional insight into applying BSC in a not for profit government environment. The results also provide a basis for understanding and applying historical cost accounting measures such as ROI in conjunction with measures of long-range competitive capabilities.

BACKGROUND

The BSC architecture provides a framework for translating the strategic plan into concrete operational terms that can be communicated throughout the organization and measured to evaluate its day-to-day viability. The three principles of building a Balanced Scorecard that is linked through a measurement framework to the organizational strategy include:

- 1) Defining the cause and effect relationships,
- 2) Defining the outcomes and performance drivers,
- 3) Linking the scorecard to the financial outcome measures (Kaplan and Norton, 1990).

The initial steps of BSC engage in the construction of a set of hypotheses concerning cause and effect relationships among the stated objectives for all four perspectives of the Balanced Scorecard; A financial, customer, internal business processes, and learning and growth infrastructure perspectives. The measurement system makes these relationships explicit. Therefore, they can be used to assess and evaluate the validity of the BSC hypotheses. The questions asked in each category of the four perspectives are based on the objectives and provide a segue into the cause effect diagramming activity. The measures chosen based on the cause effect relationships provide quantification of the differences between industry and government organizations. There are two categories of measures used in the BSC, the leading indicators or performance drivers and the lagging indicators or outcome measures. The performance drivers enable the organization to achieve short-term operational improvements while the outcome measures provide objective evidence of whether strategic objectives are achieved. The two measures must be used in conjunction with one another to link measurement throughout the organization thus giving visibility into the organizations progress in achieving strategic goals.

The strategic goals of not-for-profit government organizations vary from industry in significant ways. Due to differences the Balanced Scorecard, as applied in industry and government, is approached from two very disparate viewpoints. Industry is very aware of the importance of financial performance measures in managing an organization. Publicly held companies must be responsive to market and shareholder demands. Market share, share price, dividend growth, and other significant results oriented financial measures have been used historically to evaluate an organization. Government organizations must respond to

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/comparative-analysis-balanced-scorecard-applied/23681

Related Content

Ontologies in Computer Science: These New “Software Components” of Our Information Systems

Fabien L. Gandon (2010). *Ontology Theory, Management and Design: Advanced Tools and Models* (pp. 1-26).

www.irma-international.org/chapter/ontologies-computer-science/42883

Condition Monitoring and Analysis Method of Smart Substation Equipment Based on Deep Learning in Power Internet of Things

Lishuo Zhang, Zhuxing Ma, Hao Gu, Zizhong Xin and Pengcheng Han (2023). *International Journal of Information Technologies and Systems Approach* (pp. 1-16).

www.irma-international.org/article/condition-monitoring-and-analysis-method-of-smart-substation-equipment-based-on-deep-learning-in-power-internet-of-things/324519

SEQUAL as a Framework for Understanding and Assessing Quality of Models and Modeling Languages

John Krogstie (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 1611-1620).

www.irma-international.org/chapter/sequal-as-a-framework-for-understanding-and-assessing-quality-of-models-and-modeling-languages/112565

Intelligent System of Internet of Things-Oriented BIM in Project Management

Jingjing Chen (2023). *International Journal of Information Technologies and Systems Approach* (pp. 1-14).

www.irma-international.org/article/intelligent-system-of-internet-of-things-oriented-bim-in-project-management/323803

Neural Networks and Their Accelerated Evolution From an Economic Analysis Perspective

Stelian Stancu, Constana-Nicoleta Bodea, Oana Mdlina Popescu(Predescu) and Alina Neamu(Idorai) (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 6579-6594).

www.irma-international.org/chapter/neural-networks-and-their-accelerated-evolution-from-an-economic-analysis-perspective/184353