Chapter XIV

Using a Balanced Scorecard Framework to Leverage the Value Delivered by IS

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INTRODUCTION
Measurement as a Catalyst for Change

The pace of business and technological change continues to accelerate and the gap between business requirements and the capability of Information Systems (IS) groups to deliver, is getting wider. Very often both business and IS executives fail to understand the value of their IS investments and the factors that underpin IS performance. What is required to address these issues is a broad range of metrics to gauge both IS value and performance.

The fundamental principle underlying the approach described in this chapter is that measurement should be used as a catalyst for change. "*You cannot fully understand a subject until it is measured,*" is a cliche from a famous physicist. The subject matter under review is that of the overall effectiveness and efficiency of an IS group in meeting the business needs. The emphasis is more on the information systems that provide business functionality than on technology processes and technical infrastructure issues.

IS management is particularly challenging as it usually lacks mature measurement. This is paradoxical as the IS industry promotes the use of information systems to more effectively manage businesses.

Scope and Objectives

The objective of this chapter is to discuss a broad range of IS and business metrics, within the Balanced Scorecard (BSC) framework. This chapter does not specifically describe the transformation actions often associated with the results of assessments. The assessment outputs and related metrics do however form an integral part of a strategic framework for action. This chapter uses the term IS which is regarded as a subset of broader IT activity.

Understanding IS Value

Many organizations are questioning the value that they receive from their IS invest-

ments. Most organizations nowadays are not only reliant on IS but have realized that IS can give a business a significant competitive advantage.

Some organizations have chosen to manage their own internal IS departments while others have opted for various outsourcing options. These options range from total outsourcing of all IS activities to outsourcing IS infrastructure, outsourcing systems development, outsourcing the desktop environment, for example, to selective project outsourcing. Whether IS is run in-house or outsourced it nevertheless forms a significant portion of an organizations annual expenditure. Some institutions spend up to 20 percent of their total expenditure budget on IS. Often, e-commerce ventures spend far more on IS. Another popular metric is IS spend as a portion of assets. This can be as much as half a percent.

Few organizations understand how to measure the value of IS. It is not unusual for IS stakeholders and IS executives to have different perceptions on the concept of value. The value that IS delivers to the business will therefore be based on perceptions of the role that IS plays in the organization.

There are many reasons why the value of IS is questioned. In some cases the issue is high IS cost. In many cases however the question is whether IS is, in fact, supporting the business in the best way possible. Where IS is the lifeblood of an organization and forms the core of the business' development strategy, executive management must ensure that not only does IS deliver value but IS is leveraged in the best possible way to maximize business advantage.

It has often been said that value is in the eyes of the beholder. In this context it is difficult to provide a definitive definition of value. Value is a negotiated convention and the business, and the IS group should enter into dialogue and define their own appropriate value definitions and value propositions. To some organizations this may mean operational excellence where IS is used to drive down business expenditure, to improve efficiencies of various processes and to ensure that information is provided to management and to customers in a timeous manner and that this information is error free. To other organizations the IS value proposition may be more strategic. Many examples of this abound in the arena of E-commerce where IS replaces the intermediary between the business and the customer base.

Taking a process View of IT

To position IS within a broad IT framework, we describe the work that IT does in terms of three generic process areas. These are:

- the day-to-day delivery processes
- the software development processes
- the innovation or discovery processes.

The delivery domain contains all the infrastructural IT processes such as the management of the data centre, networks and support activities. It is in this domain that operational excellence is usually the value proposition of choice where the focus is on driving up transaction rates, improving processing efficiencies, maximizing network availability, and ensuring that the information resource is kept current and is error-free. Some have described the delivery domain as those IT activities that take place in the basement of the building.

The development domain is perceived to deliver more value to the business than the delivery domain. Delivery encompasses all systems delivery activities that are defined as those activities that begin with an idea or a concept and end with the implementation of a business solution. Projects could be the design and development of a new business system, the enhancement of an existing application to meet the ever-changing business needs, or the

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