

# The Virtual Knowledge Balanced Scorecard For e-Government

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*"We know that the source of wealth is something specifically human: knowledge. If we apply knowledge to tasks we already know how to do, we call it productivity. If we apply knowledge to tasks that are new and different, we call it innovation. Only knowledge allows us to achieve those two goals"... Peter Drucker*

## Abstract

This paper explores how e-governments can be benefited from the concepts of knowledge management and the Balanced Scorecard. We argue that Balance Scorecard can not only be a proper measurement system to evaluate continuously and proactively the e-strategy implemented by e-governments, but also there is a lot of information that managers and employees can get from this system to convert it into knowledge. Therefore, we also propose a novel approach to knowledge management defined as Virtual Knowledge Balanced Scorecard. Our goal is to build a knowledge system that can be generated from the activities of using the Balanced Scorecard

## 1. Introduction

Organizations and governments have initiated their e-strategies [2, 4]. But, strategy execution is difficult in the new economy: business models are changing rapidly, customer's needs are more demanding, and intangible assets like knowledge and innovations are the key factors for being successful. Understanding these concepts and managing these assets efficiently to create value are fundamental issues of e-strategy. But there are several features of intangible assets that make them incompatible with traditional measurement systems to evaluate the performance of the strategy execution. These measurement systems have been used to manage budgeting, reporting, target, setting, evaluation, and compensation. In addition, Public sector organizations have different groups with their own agenda and interests. As a result, strategy execution can be a nightmare.

Kaplan [7] proposed a strategic measurement system called Balanced Scorecard to help managers link today's actions with tomorrow's goals. His approach to performance measurement is consistent with the initiatives under way in many organizations and governments in the new economy: cross-functional integration, customer-supplier partnerships, global scale, continuous improvement, and team rather than individual accountability. By combining, the financial, customer, internal process and innovation, and organizational learning perspectives, the balanced scorecard helps managers understand proactively

the e-strategy execution with an integral vision. Thus, we believe that the concept of Balanced Scorecard can keep governments looking and moving forward toward their goals.

Furthermore, it is well known the way of trading and doing business has changed. Knowledge and how we manage it have become the most important sources of an organization for sustainable competitive advantage [9]. Knowledge Management allows us to leverage the human potential and enables people to be more effective, which benefit them at a personal level and the organization for whom they are working. Therefore, we believe that it is fundamental that governments manage knowledge proactively.

The aim of this paper has two objectives: (1) to investigate the potential use of Balanced Scorecard for e-government and (2) to propose a novel approach to knowledge management defined as Virtual Knowledge Balanced Scorecard based on the theory of knowledge management and Balanced Scorecard. Our goal is to build a Knowledge system that can be generated from the activities of using the Balanced Scorecard. These knowledge activities can help governments to improve their citizen services proactively and rapidly and get efficiency.

## 2. Balanced Scorecard (BSC)

The Balanced Scorecard asks you to think of your company's mission and strategy from four key perspectives [7]:

1. Customer perspective. Today's typical organization mission says something general about customers. The balanced scorecard requires specific measures of what customers get in terms of time, quality, performance and service, and cost. (How do customers see us?)
2. Internal business perspective. Focus on the core competencies, processes, decisions, and actions that have the greatest impact on customer satisfaction. (What internal processes must we excel at?)
3. Innovation and learning perspective. Measures in this area indicate future success. They measure continual improvements to existing products and processes and introduction of new products and services with expanded capabilities. (How can we continue to improve and create value?)
4. Financial perspective. Financial measures are essential for indicating whether executives have correctly identified their measures in the three foregoing areas, but they can also help determine future direction. (How do we look to shareholders?)



Fig1. The Balanced Scorecard

### 3. Knowledge Management

Knowledge Management is a discipline that promotes an integrated approach to the creation, capture, organization, access and use of an enterprise's intellectual capital on customers, markets, products, services and processes. Furthermore, March [8] considers that Knowledge Management is based on four processes:

1. Generating content that involves two tasks: (1) identifying the desired content proactively. (2) Getting people to contribute ideas.
2. Organizing the information that has been collected. Knowledge sharing systems or tools could be necessary.
3. Developing activities that involve the selection and further refinement of material to increase its value for users.
4. Distributing refers to how people gain access to material. There are two primary objectives: (1) making it easy for people to find what they are looking for. (2) Encouraging the use and reuse of knowledge.

In these recent years, organizations are implementing the concept of knowledge management to increase their effectiveness, efficiency, and competitiveness. Also, some governments have started to consider knowledge as fundamental asset in their strategies for e-government.

### 4. The Virtual Knowledge Balanced Scorecard

The use of Balanced Scorecard by governments when they are evaluating their e-strategies can not only be useful, but can generate critical information to convert into knowledge. Each perspective of the BSC- as a mirror system – allows managers to get information that can be converted into knowledge. But, it is necessary for managers to put in place the following processes: Generating, organizing, developing and distributing. Therefore, this system can help governments and institutions to get efficiency and improve their services and operations, and developing new products.



Fig. 2 The Virtual Knowledge BSC

### 5. Conclusions

We proposed an interesting approach to manage knowledge for e-governments. We also believe that it is fundamental to have a total view of the results of e-strategy from different perspectives (customer, learning and innovation, internal processes, and financial). Thus, Balance scorecard can be a useful instrument to measure performance of the e-strategy execution and to take the necessary actions to get efficiency and to give better service to citizens proactively.

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