The KPIs of Productivity Growth for Enterprises of Different Value Creation Types: A Conceptual Framework and Proposition Development

Pao-Cheng Chang, China Productivity Center, New Taipei City, Taiwan
Hsi-Chin Lin, China Productivity Center, New Taipei City, Taiwan

ABSTRACT

Taking Thompson’s (1967) and Porter’s (1980) concepts as the foundation, Stabell and Fjeldstad (1998) summarized the way enterprises create value as three types: value chain, value shop, and value network. Although scholars have written about KPIs to increasing productivity in specific industries, there is a lack of comparative studies on how to increase productivity in industries of different value creation types. For this purpose, this study selected two companies of each value creation type to discuss their KPIs to increasing productivity. It delineated the KPIs for different types of value creation enterprise type and found that transforming more value chain type department function towards value shop and value network can effectively increase productivity. This point can make up for the shortcomings of scholars such as Stabell and Fjeldstad (1998), and Porter (1980) with respect to the “how to strengthen enterprise value creation” mechanism and discussion, and can be regarded as an important contribution of this study.

Keyword: Competitive Advantage, Competitiveness, Customer Relationship Management, Knowledge Management System, Productivity, Value Chain, Value Creation, Value Network, Value Shop

1. INTRODUCTION

1.1. The Importance of Productivity

The term “productivity” was introduced by French economist Francois Quesnay in 1766 and later elaborated on in Adam Smith’s The Wealth of Nations. The most basic concept of productivity refers to the ratio between an organization’s inputs and outputs. A country’s relative strength can be seen by measuring labor productivity and gross productivity across countries, and productivity has always been an important factor in evaluating national competitiveness.

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However, the term productivity seems to mean different things to different people (Prokopenko, 1997). There are major differences in cognition between many people’s definition of productivity. There may even be conflicts in the interpretation thereof (Pickworth, 1987; Brown and Dev, 1999). For example, productivity has been interpreted as an umbrella concept to include utilization, efficiency, effectiveness, quality, predictability, and other performance indicators; on the other hand, productivity has also been narrowly interpreted to mean simply efficiency of productive. This manufacturing-oriented formulation of productivity was represented by Quesnay (1766) in its early days.

For over two hundred years, experts and scholars worldwide had studied a broad range of issues related to productivity, including:

Many people think that productivity is an economic system, the use of technology or knowledge to convert labor, raw materials, energy, and other external resources into products or services. A company’s productivity increases when it has access to good technology. The company may change the organizational structure, management system, and staff work assignments to achieve higher productivity. Thus these are productivity-improving technologies.

Since productivity is an important focus in enterprise management, many companies have established integrated application architecture for the collection, analysis, and output of productivity-related data as an effective mechanism to improve productivity in the head office or various divisions. The creation and distribution of the benefits of productivity, as observed by Saari (2006), a productivity scholar, are accomplished by the real process and income distribution process, while the real process and income distribution process comprise the production process.

1.2. Purpose of Study

Overall, the purpose of this study is to:

1. Summarize industry-specific KPIs to improving productivity to help industry practitioners effectively increase company productivity and thus competitiveness.
2. Delineating different types of value creation enterprise type and KPI for increasing productivity makes enterprise internal evaluation convenient and can be combined with external consultants to carry out enterprise performance evaluation, becoming an effective too for increasing productivity.

2. LITERATURE REVIEW

Drucker (1991) states that “productivity is the true source of competitive advantage.” The importance of productivity to a nation, industry, and even an individual is self-evident. We can say that all competitiveness stems from productivity. However, “productivity” - a familiar yet strange noun – is oftentimes confused by some specious concepts from its definition to application. People in different industries or from different ethnic groups may have different views on productivity. A source of more serious confusion is that many people attach different interpretations to the same set of productivity figures. Therefore, this paper, will deal with the definition of productivity and review the literature for different experts and scholars’ definitions of productivity. Based on a wide body of literature, this paper summarizes the differences between the value chain, value shop, and value network types and the best mechanism for creating enterprise value for each type.

2.1. The Definition of Productivity

Productivity is an important basis for observing operational performance which can be effectively measured at the country, industry, company, or employee level. In the simplest definition, productivity is the ratio of input to output, that is, the things required to produce vs. things produced after a set of processes. Simply put, it is the ratio of actual production to the input invested during a period of time. Inputs may include converting and converted resources such as materials, equipment, customers, and
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