Chapter 60
Measurement of Service Efficiency in Different Types of Banking Services: Mass Services, Service Factories, Service Shops, and Professional Services

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ABSTRACT
As the share of services in economies grow globally, the efficiency of service production becomes crucial. Despite the many studies on service efficiency, it has proven difficult to find the right measures. The main reason is wide range of services from simple to complex, and from mass to professional services. Consequently, there are no commonly accepted measurement frameworks for comparing the efficiency of different types of services. The Service process matrix developed by Schmenner is one of the most widespread and has been extended and applied by many other researchers. This paper uses the classification of the Service process matrix and its four basic services types recognized in the analysis of service efficiency measurement. The focus of analysis is on banking services, as the industry has services in all of the main services categories. Each category is analysed separately, literature is reviewed for suitable measures and suitable measures of efficiency for all service types are proposed.

1. INTRODUCTION
It has been maintained that world has turned into one huge service system (Spohrer & Kwan, 2009), as larger share of workforce is engaged in services than in manufacturing. Consequently, the efficiency of services, service processes and service production has become vital in modern economies. Many studies have looked into different types of services and provided tools for classifying them for differences. Similarly, service efficiency and service quality have been studied extensively. Still, it is not straightforward to measure the efficiency or inefficiency of a given service. It is too easy to find counter arguments, that as services are different, the differences in...
efficiency are due to these, and not caused by inefficient operations. Consequently, comparing them is a case of comparing apples and oranges.

Many service industries have now a wide range of services available, requiring different approaches to service production. For example, gourmet restaurants and fast food chains operate in the same market, but with widely distinct approaches. The direction of development has been toward more production-line approach to services (Chase & Apte, 2007) embodied by McDonald’s. The wide range of services makes the measurement and comparison of efficiency more challenging. As the question is topical, many approaches for service efficiency measurement have been presented ranging from strategic alignment to operational process measures. Solutions to this challenge can be found from measurement of manufacturing efficiency. The well-known Product-Process matrix (Hayes & Wheelwright, 1979a, 1979b, 1984) provides a tool for measuring the efficiency of manufacturing of different types of products, as well as, finding the right matches of production processes and products. Accordingly, it has been widely used to recognise efficient manufacturing structures and processes. Also, efficiency metrics and measurement schemes have been proposed (for a review, see e.g. Kemppainen, Vepsäläinen, & Tinnilä, 2008).

Superficially efficiency measurement in manufacturing or service operations seems to be straightforward. Simple measures of output compared to use of resources used should accordingly be adequate. However, it is easy to confuse effectiveness and efficiency, i.e. ability to produce something, and efficiency in doing the right things. In a study of hotel services Yu and Lee (2009), divide efficiency and effectiveness into productive efficiency, as well as, service and productive effectiveness. Productive efficiency measures the amount of inputs required for a given service output, where service effectiveness measures the relationship between services produced and consumer output, whereas, productive effectiveness measures the ratio between number of customers and input resources. Hence, there is a need for multiple measures for efficiency and effectiveness, particularly when looking at the extensive range of services. For example, mass services tend to be far more efficient according to resource-output measurement than the more customised and labour-intensive professional services. Consequently, we can observe that forthright measurement of effectiveness does not always give a relevant result, and there is a need for more multidimensional measurement of efficiency by using several measures. Efficiency measures can also be descriptive, i.e. describe and classify the type of services.

Also in manufacturing operations the strategic fit, i.e. the ability to produce efficiently the right products is a challenge. This challenge is even greater in services, as by nature services are intangible, heterogeneous, inseparable and perishable (IHIP). This reduces the tools for achieving efficiency. Also the very wide range of services poses a challenge, making it even more difficult to analyze efficiency. For example, measuring efficiency in a fast food restaurant is more straightforward than determining the efficiency of a financial advisor. In the latter the quality, i.e. value created, of the service, should be taken into account when determining the efficiency. This is not to claim that the quality in a McDonalds is not of importance. Given this challenge, it is no wonder that it has been approached from different viewpoints. For example, strategic service positioning studies look into finding the right position for services by combining resources in the right way. Manufacturing-related approaches to measurement use measure similar to manufacturing operations, while financial measurement uses financial tools to analyze the performance.

Banking services are no exception to the difficulty of measuring service efficiency. Despite studies showing that inefficient service production