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The emergence of service operations management as an academic discipline

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Abstract

During the latter part of the 20th century, the service sector grew significantly in virtually every developed country, with the United States taking the lead. By 2000, services comprised almost 80% of U.S. employment. This rapid growth was caused by several factors including changing population lifestyles, deregulation, and new and improved infrastructure including the widespread availability of new technologies. With the service sector surpassing 50% of the U.S. economy in the 1950s, researchers – especially economists – began to examine the characteristics of services and attempt to apply some of the concepts that were developed and proven in manufacturing. From these early efforts there emerged a growing demand for business schools to develop both research agendas and courses in service operations. Beginning at the Harvard Business School in the early 1970s, and continuing through to the present, research and courses in service operations have evolved from simply applying basic manufacturing concepts in a service environment to recognizing the need for a trans-disciplinary approach appropriately suited to the particular characteristics of service operations. This article traces the evolution of service operations from its immediate pre-business school days through its early years as an academic discipline in business schools to the present, identifying ‘‘pioneers’’ in service operations who truly blazed a previously unmarked trail that many have since followed.

Keywords: Service operations; Academic discipline; Pioneers

1. Preface

‘Those who cannot remember the past are condemned to repeat it.’ Santayana (1905)

It is difficult to decide where to begin in writing an article of this nature. In the end we chose to begin with the two decades immediately preceding the introduction of services as an academic course in business schools, although there were earlier efforts to systemize service processes.

The Industrial Revolution occurred largely in the 19th century and services began to dominate the U.S. economy a century later, so it should not be surprising that the study of services has lagged the study of manufacturing. Adam Smith’s *Wealth of Nations* (1776) provided one marker of the beginning of the Industrial Revolution with his introduction of the concept of division of labor. Then Eli Whitney’s standardization of parts in 1801 set the stage for a process focus in manufacturing and for the industrial revolution. These concepts laid the foundation for Frederick Taylor’s work which began with decades of applying science to metal-working, resulting in his and Carl Barth’s development of the then revolutionary machine feed

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and speed tables (see Kanigel, 1997). Taylor's *Scientific Management* (1911) carried this revolution forward by applying science to human effort. The study of manufacturing processes thus has a century of history. Systematic study of services is a newcomer.

However, there was a true service visionary in the 19th century. Fred Harvey recognized that services could also be managed as processes that could be standardized and systematized, setting the stage for such firms as McDonald's and Burger King in the 20th century. Upon his arrival in Kansas in 1870, Fred Harvey met Charlie Morse, the president of the then fledgling Atchison, Topeka, and Santa Fe Railway. Harvey's initial efforts focused on providing customized hot meals to railroad passengers at train stations within the 30-min stopover for coal and water constraint dictated by the railroad. This was accomplished using the newest technology of the day (the telegraph) to have passenger meal choices sent to the restaurant three hours prior to the train's arrival. He hired and trained a staff of ''Harvey Girls'' who were well paid and well treated. Fred Harvey's ability to identify, define and integrate technology, processes and human resource factors allowed him to provide his customers with high quality, consistent meals that were served quickly in a pleasant and clean environment at reasonable prices. The results were very loyal customers and workers and a very profitable business. In essence, Harvey was applying the Service Profit Chain concept developed by Heskett, Sasser and Schlesinger more than a century later (see Brown and Hyer (2007)).

2. The emergence of services as an academic discipline

The word *service* has its roots in the Latin word *servus*, meaning slave or servant. Prior to the 20th century, services were most often menial work performed for little compensation by unskilled workers. In addition to butlers and maids for the wealthy, service jobs included chambermaids and bellhops in hotels, waiters and waitresses in restaurants, clerks in retail operations and, with the growth of banking systems, tellers in banks. These services were most often provided by independent, privately owned businesses, offering little or no opportunities for promotion. As a result, service jobs were viewed, with some justification, as dead-end positions. Although some services – for example, medicine and dentistry – offered service providers more prestige, they too had humble beginnings, including ridding the body of excess fluids through bloodletting and purging.

However services, in virtually every economy with the United States taking the lead, increased dramatically during the 20th century, especially during the second half. The exceptions to this were countries which adhered to the Marxist-Leninist economic doctrine that categorized most services as *non-productive* and consequently inhibited their growth: the People's Republic of China and the republics of the U.S.S.R. are probably the most well known. Instead, these countries continued to emphasize the manufacturing and agricultural sectors, which were considered to be *productive*. ''This labeling of some services as *non-productive*, can be traced back to Adam Smith's *Wealth of Nations* [1776]. It has been suggested that the deceleration in economic growth in these communist countries during much of the second half of the 20th century was directly linked to their inability to properly develop the service sector.'' (Maciejewicz and Monkiewicz, 1989).

The explosive growth in services, as shown in Table 1, created a need for business schools to develop programs that addressed the unique characteristics of service operations, both in terms of developing research agendas and the teaching of services in the classroom. Several factors contributed to this shift to a service economy, including changing population lifestyles, deregulation, and new and improved infrastructures. In the 1950s and 1960s, economists began to acknowledge the importance of services in the U.S. economy rather than simply relegating them to the ''tertiary'' (other) economic sector.

Prior to 1970, no business schools offered courses that focused on services; there were no textbooks on services; there had been no research conducted on services. Today, 35 years later, courses in service operations are offered in a large number of business schools (although mostly as an elective course); there are at least three textbooks on service operations and several additional texts on services marketing; production management as a course is now called operations management or production and operations management to reflect the services component in the required courses, and significant research has been done in services, resulting in new frameworks and insights into how to better design and manage them (see Chase and Apte in this volume).

This article attempts to chronicle the emergence of services from their humble beginnings to where they are today. This includes looking at the early years of services in business schools when research and courses in services were first introduced, tracing its evolution in business schools through the end of the 20th century. To