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**SWP 8/93 A FRAMEWORK FOR THE STRATEGIC MANAGEMENT
OF BOTH SERVICE AND MANUFACTURING
OPERATIONS**

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A Framework for the Strategic Management of both Service and Manufacturing Operations

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Abstract

There are very few frameworks that have been developed to facilitate the strategic management of service operations. This paper details the results of a research project carried out to develop and test a standard approach to the strategic management of both service and manufacturing operations.

The research methodology chosen was to use a tested method for the strategic management of manufacturing operations and to assess its suitability for determining the service operations strategies needed by two service businesses. The frameworks developed and the conclusions drawn from this case study research project are detailed in the paper.

1. INTRODUCTION

Strategic management requires an expertise that is quite different from that needed for tactical or operational management. The strategic manager searches for business opportunities that will give longer-term rather than short-term benefits. The strategic manager must also try to anticipate the competitive moves of adversaries and prepare a pre-emptive strike plan. A proposed strategic plan may require the abandonment of established customs and practices which can only be attained by persuading those who must change that change is necessary. Consequently, the strategic manager must be both a visionary and an agent of change. In addition, the strategic manager must also be a planner. It is unlikely that any desired future state or condition will be accomplished without preparing a plan to overcome the many barriers to its realization.

Strategic management therefore involves an assessment of a number of external forces on an organization that cannot be accurately measured but are known to constrain its freedom of action. A problem for the strategic manager is the conceptualization of both these forces and the strategies needed for dealing with them. For this reason, a reference framework of potential solutions to a particular strategic problem can be a helpful management tool. The taxonomy of the strategies recommended should be named so that their objectives are easily understood. One example of such a conceptual framework is the generic competitive strategies model devised by Porter (1980).

Conceptual frameworks have been developed for the management of corporate strategy and for the strategic management of specific business functions, for example the Ansoff (1965) marketing strategy matrix. However, there are very few frameworks designed for the strategic management of service operations.

The aim of this paper is to propose a single paradigm for the strategic management of both service and manufacturing operations. The research findings to support this proposition originate from a study of the practice of strategic manufacturing management in the United Kingdom (Sweeney, 1991). The research findings were used to develop a framework that is designed to facilitate strategic manufacturing management.

In addition to this research work, two case studies of the implementation of Total Quality Management (TQM) in a service business have been carried out. A problem for both the companies studied was how to develop an appropriate strategic service vision for a number of their service departments. In an attempt to resolve this problem, the conceptual framework developed for strategic manufacturing management was used to test its applicability for strategic service operations management. The conclusions drawn from this case-based research are the subject of this paper.

2. THEORETICAL CONSTRUCTS

It is generally accepted among academics researching strategic business management that any theory of business strategy must be a contingency theory. The acceptance of this approach can be attributed to a basic assumption that there is no universal set of strategies that is optimal for all businesses or firms even if one was to disregard their resourcing capability and environmental context. A solution to the problem of trying to gain a better understanding of the interrelationships that influence strategic management is to adopt the contingency theory approach. This consists of a focused examination of the strategy adopted when a specific set of circumstances prevail and to explain the causal relationships identified by qualified generalizations. Steiner (1979) has asserted that "The contingency approach is richer than the universal principles approach to theory building. Inherent in it is more rigour, a deeper appreciation of interrelationships in situations, and an effort to identify causal relationships." This is the approach to theory building that has been adopted for this research work.

Contingency theory provided the rationale for the research methodology chosen and the convergence hypothesis has constituted a reference for the interpretation of the study findings and the conclusions drawn from them. This hypothesis is that management concepts, strategies and approaches will become increasingly similar as economic or market conditions become more alike. This evolutionary process will occur irrespective of geographic location or type of business.

3. A HISTORIC PERSPECTIVE ON SERVICE STRATEGIES

A fundamental theory of business management is that an operations strategy is an enabler of competitive strategy (Hill, 1985) and therefore, service operations must be designed to satisfy the order winning criteria of the target customers (Sasser et al, 1978). This interdependence is shown on Figure 1.

Figure 1 also shows how the competitive strategies employed by service businesses in the United Kingdom have changed during the last forty years. The generalized competitive and operations strategies shown on Figure 1 derive from the use of the Contingency theory approach.

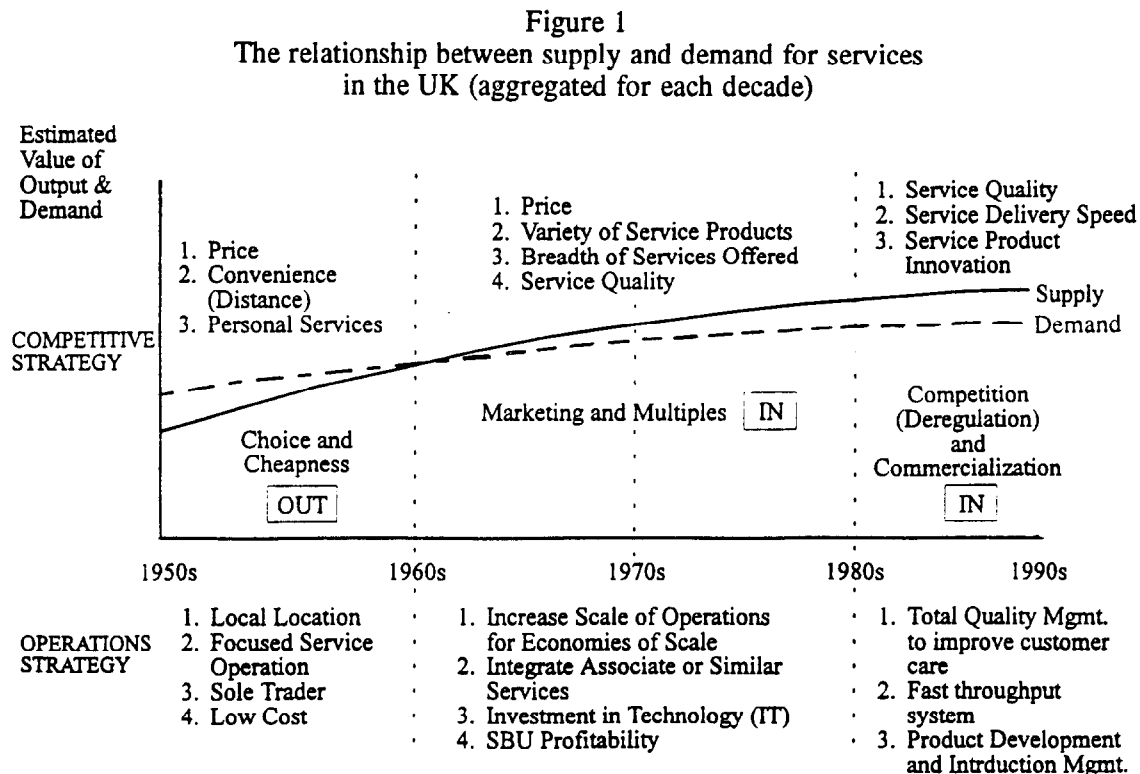


Figure 1 shows how the supply and demand for services have changed in the United Kingdom during the last forty years. The evidence to support the substantial increase in both the supply base and the demand for services can be obtained from a study of the Government statistics on the growing percentage of the Gross National Product that is attributable to the service sector of the economy (Moore, 1986).

Figure 1 shows the 1950s to be a period when there was still an inadequate supply of services and consequently it was a seller's market. This time has been entitled the "Choice and Cheapness Out" period because of the limited power of the buyer. An assumption has been made about the competitive and operations strategies adopted by firms at that time because very little research information is available. The assumed strategies are derived from a study of the current strategies adopted by some service businesses that still retain this seller's advantage, for example the village shop. The management attitude to competitiveness in this type of service firm is similar in many ways to that described by Chase and Hayes (1991) as an "Available for Service" business.

The 1960s and 1970s was a time when competition between the service suppliers increased. The new entrants were the multiples and thus the relationship between supply and demand reversed. The buyer now had power and consequently marketing was used to win new customers and to retain current ones. This period has been described as the "Marketing and Multiples In" period. To establish a share of the services market, the new entrants had to offer a better service to their targeted customers and elected to use lower price and increased choice as their competitive strategy. This has proved to be a very successful strategy when sites are located near large concentrations of targeted customers.

The service operations strategy adopted to deliver this competitive strategy consisted of large and convenient premises designed to provide a wide choice of service products. This approach provided the opportunity to exploit economies of scale and to offer a differentiated service package. This service concept was sufficiently attractive to the buyers to draw many of them away from the personal but limited service provided by the smaller convenience service supplier. The service firm competitiveness of this type of service operation is close to that described by Chase and Hayes as "Distinctive Competence Achieved".

From the 1980s to date, two major changes are concurrently taking place in the service sector of the United Kingdom economy. First, the privatisation of many public service businesses has enforced a change of attitude to competitiveness, this is from one that was predominantly "available for service" to a more customer aware approach. This progression is similar to achieving the "Journeyman" stage of service firm competitiveness, as defined by Chase and Hayes. For this reason, this period has been described as the "Competition and Commercialization In" era. At the same time, those firms that have accomplished the "distinctive competence achieved" stage of competitiveness are now searching for ways to provide "world class service delivery". How can this be attained? Chase and Hayes suggest that this is by offering continuously improved customer service, providing a fast delivery of its service and fast innovation.

What are the operations strategies that are being adopted by the "world class service" deliverer?, that is by the Sainsbury's supermarket business or Marks and Spencer. Total quality management is increasingly being implemented to develop the learning organization and to improve the quality of service delivery. In addition, service organizations are innovating their products at a faster rate than before, either by their own development or by acquisition. Some companies have followed this strategy to the point where the operations function has not been able to absorb the rate of technology transfer needed to deliver the new products with the required quality of service.

Figure 1 is therefore a generalized overview of the causes and the effects of a changing relationship between the supply and the demand for services. A comparison of this model with a similar one for manufactured goods leads to a very interesting conclusion.

Figure 2
The relationship between supply and demand for manufactured goods in the UK (aggregated for each decade)

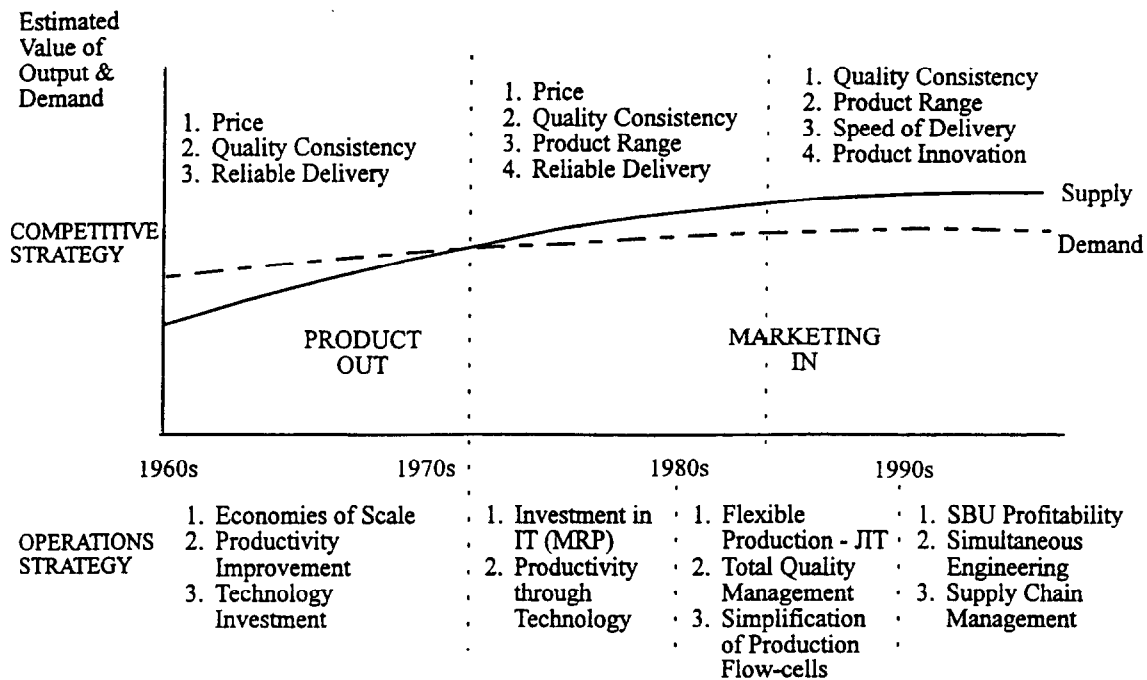


Figure 2 was produced to present some of the findings of an initial study of the strategic management of manufacturing (Sweeney, 1991). It shows that since the war, the increased supply of manufactured goods has also created a buyer's market. However, this reversal of market power took place a little later than in the services market because of the protracted retention of import tariffs. If Figure 2 is compared with Figure 1, it seems that similar generic competitive strategy solutions have been found to compensate for the changes taking place in the current "marketing in" market conditions. If a convergence of the types of customer service criteria used to increase competitiveness is occurring, is it not reasonable to assume that a convergence of the operations strategies used to deliver them will also be observed? This is also shown on Figures 1 and 2.

4. PREVIOUS RESEARCH

Recently a number of researchers have concluded that there may be very little difference between the strategic management of service and manufacturing operations (Parasuraman and Varadarajan, 1988). Chase and Hayes (1991) emphasized that "Our key conclusions are that service firms, like manufacturing firms, can structure their operations according to a four-stage model of competitiveness and that they can apply the manufacturing strategy concepts of focus (on their most important markets) and integration (of operations) as they move from lower to higher stages."

The foundation for the strategic management of service operations is the strategic service vision (Heskett, 1986). It consists of four elements: a target market, a service concept, a competitive strategy and a service delivery system. Such an approach has for a long time been the tenet for the strategic management of manufacturing operations (Skinner, 1974). However, there are a number of important operational design differences that must be considered when developing a service operations strategy. These are the involvement of the customer in the service production and consumption processes, the perishability and the intangibility of the product.

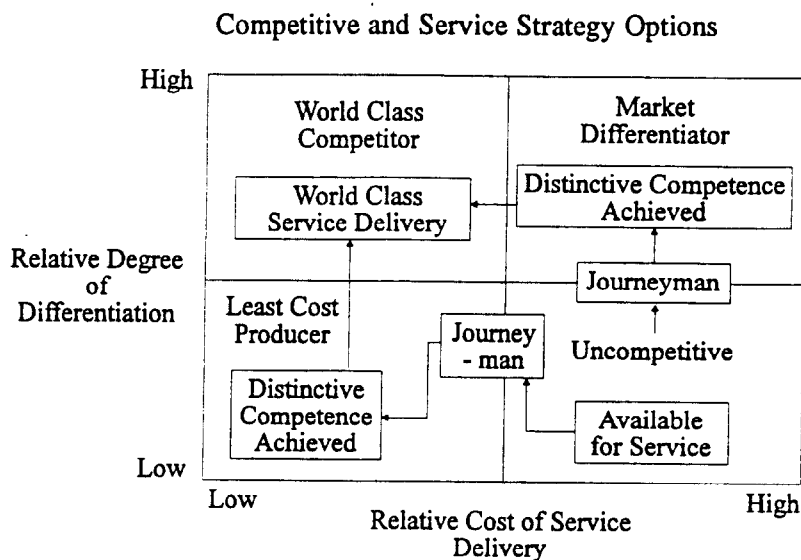
An important and a well known framework, that emphasized these differences, was developed by Maister (1983) and this matrix is a useful guide to the differentiation of generic types of service operations. This model was the first to distinguish whether service value was added in collaboration with the customer (front room) or as a back room activity. This distinction was also linked to whether the product was customized or not. However, very little further development of

this simple model has been carried out since the publication of Maister's original paper. The frameworks detailed in this paper are intended as developments of the original Maister matrix.

5. STRATEGIC SERVICE OPERATIONS MANAGEMENT

In order to determine whether the methodology used to manage service and manufacturing strategies should be similar, since the market conditions for these products are now alike, the conceptual frameworks developed for the strategic management of manufacturing were tested to assess their suitability for the strategic management of service operations. A matrix that links competitive and manufacturing strategies (Sweeney, 1993) was adapted to include the Chase and Hayes (1991) definitions of service firm competitiveness so that it could be used as a reference for determining strategic service visions. This matrix is shown as Figure 3.

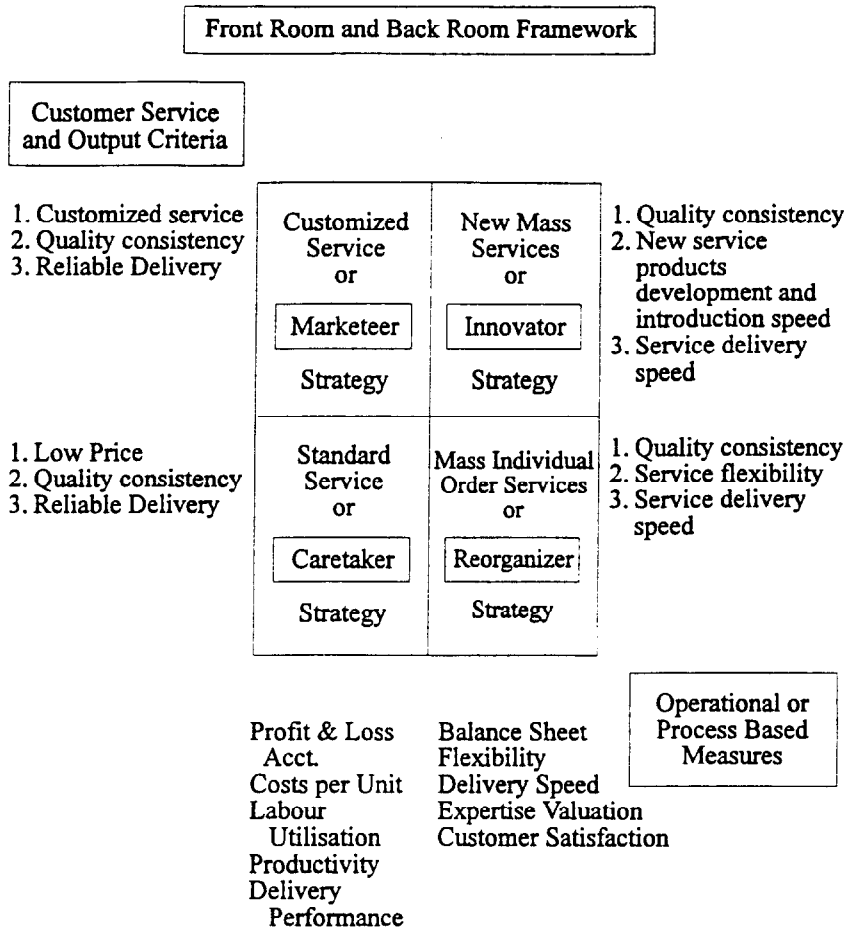
Figure 3



The framework used to relate customer service to manufacturing strategy (Sweeney, 1993), was first tested for the strategic management of back room service operations. It was thought that this framework design would most probably be applicable for the strategic management of back room service operations because they are intrinsically similar to manufacturing activities. The back room service operations selected to test the use of this model were a book club dispatch operation and the production of monthly financial statements.

The resultant model design to link the back room service concept with the type of service operations strategy that is the most appropriate for the task is shown in figure 4.

Figure 4
Service Operations Strategies



The titles given to the generic service operations strategies shown on Figure 4 are intended to convey the objectives for their implementation. For example, the caretaker operations strategy is synonymous with the least cost approach. An organization may choose to implement this strategy if it is unable to use service product differentiation as a means of gaining a competitive advantage. The strategy consists of a least cost supply and a minimum amount of effort devoted to customer support. An example of the adoption of this strategy is a warehouse-based sales operation.

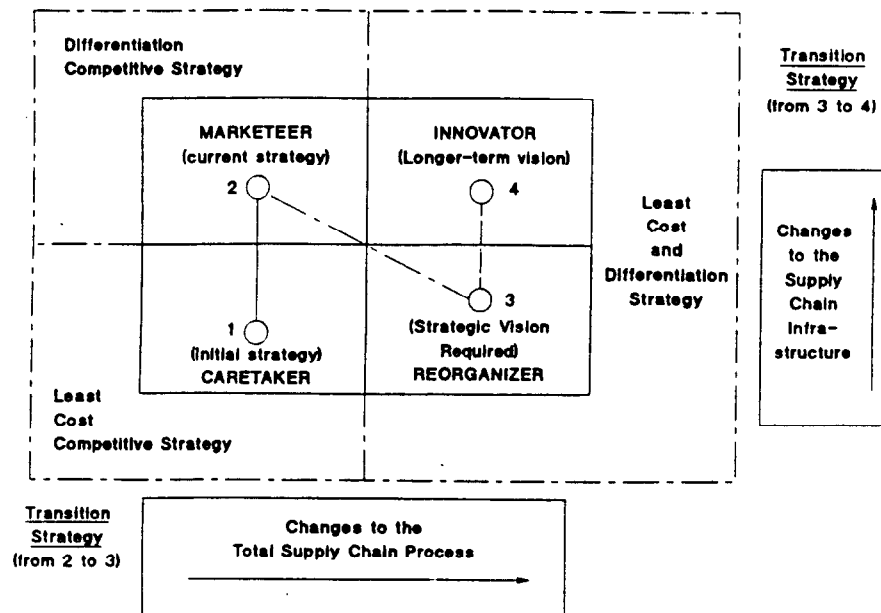
The customer service criteria that this type of service is designed to satisfy are also detailed on Figure 4. In addition, the performance measures used to manage the service delivery system are listed, although the list shown is not comprehensive. The operational performance measures used are those that capture cost rather than service performance. The turnover of this type of service operation is small if compared with the large multiple or mass service delivery facilities. The caretaker strategy was the service vision chosen for the department that prepared and dispatched monthly financial statements.

Figure 4 shows the three other generic back room service operations strategies, that is the marketeer, the reorganizer and the innovator strategies. The book club business initially adopted the marketeer strategy, that is to supply individual customers with their choice of new books from a single catalogue. However, as the firm extended its range of specialist themes, for example a cricket book catalogue, it increased the complexity of its service operation and its quality of customer service began to decline. To correct this quality of service problem and to improve its competitiveness a change of operations strategy was required, that is to a reorganizer strategy. This required organizing facilities and personnel to specific business activities, that is into strategic service and business units.

The innovator strategy is adopted by back room service firms that have established a distinctive competence or brand and strive for world class service through product innovation. An example of this type of service operations strategy is a publishing company or a record company. The performance measures used by firms employing the reorganizer or the innovator operations strategies are more customer service orientated. The impact of decisions upon the total worth of the business are of greater concern to the management than purely cost considerations.

The route to world class service for a back room service business could be from a caretaker strategy to an innovator strategy via all types of generic operations strategy, as shown in Figure 5. Alternatively a shorter route could be chosen by achieving a distinctive competence and then adopting the reorganizer and innovator strategies (see Figure 3).

Figure 5
Strategic Operations Management



It is proposed that this framework is also appropriate for the strategic management of front room service operations. The two front room operations selected to assess the applicability of this framework as a strategic management tool were a teller service and a customer support service. The service vision chosen for the teller service was a marketeer operations strategy. The customer support service required a change from a marketeer strategy to a reorganizer strategy for reasons similar to those that caused the book club to change its strategy for its dispatch operations. The use of this model was found to be useful for the determination of an appropriate strategic vision for both these service activities.

Figure 6 is a list of examples of the types of front room and back room services that incorporate the characteristics of each type of generic service operations strategy.

Figure 6
Examples of Front Room and Back Room Operations Strategies

Type of Operations Strategy	Front Room	Back Room
CARETAKER	<ol style="list-style-type: none"> 1. Fast Food 2. Checkout Service 3. Transport Service 	<ol style="list-style-type: none"> 1. Utilities Supply Mgmt. 2. Transport Organization 3. Office Cleaning 4. Fast Food Preparation
MARKETEER	<ol style="list-style-type: none"> 1. Solicitor 2. General Practice 3. Taxi 	<ol style="list-style-type: none"> 1. Book Club 2. Mail Order 3. Dry Cleaning 4. Market Research Contract
REORGANIZER	<ol style="list-style-type: none"> 1. Health Centre 2. Supermarket Ops. Mgmt 3. Auditing Service 	<ol style="list-style-type: none"> 1. Multiple Stock Mgmt. 2. Credit Card Transaction Mgmt. 3. Holiday/Travel Operations Mgmt.
INNOVATOR	<ol style="list-style-type: none"> 1. Theatre or Concert 2. Promotional Activities 3. Conference Mgmt. 4. Fetes or Fairs 	<ol style="list-style-type: none"> 1. Film Production 2. New Supermarket Product Sourcing 3. New Holiday Resort Research

6. CONCLUSIONS

The framework developed for the strategic management of manufacturing operations has been found to be applicable for the strategic management of services. Further testing of the use of the framework for strategic service management is required before it could confidently be claimed that this is a framework for strategic operations management in general.

However, the gradual convergence of the type of service expected by customers in the United Kingdom for manufactured products or services has increased the probability that a single model that links competitive strategy with strategies that are similar for both service and manufacturing operations could represent current practice. The model detailed in this paper is one that has been developed for this purpose.

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