

# [Applications of operations management concepts](https://assignbuster.com/applications-of-operations-management-concepts/)

Introduction The world’s leading economies are ostensibly heading towards a recession with plummeting stock markets and soaring crude oil prices as consumers are beginning to feel the pinch of the credit crunch. According to analysts, the financial slumps of the past nine months seem to be unmatched since the Great Depression (Elliot, 2008). Unstable and unpredictable market turmoil from various sectors of industries with particular reference to the UK has seen major companies battling the slowdown in consumer spending due to the ongoing effects of the credit crunch which threatens job security (Harding & Elliot 2008).

The snowball effect of the faltering economy has caused companies and establishments to redesign their marketing strategies and approach towards consumers as well as employ various forms of operations management concepts to improve the effectiveness and efficiency of hospitality service operations. This essay aims to discuss various service operations concepts that are currently applied in the industry to increase efficiency and effectiveness of the service process which will benefit hospitality firms in view of the economic challenges faced today. Demand and capacity managementDemand and capacity management has always been an issue for service-oriented establishments where balancing demand and supply almost seems impossible due to the inability to predict and forecast with pinpoint accuracy. Garcia et al. (2002) define the aim of capacity management as the goal of minimizing the waiting time for customers and avoiding idle capacity whilst attending to demand in the most efficient way possible.

Demand management can be viewed as the process that balances the customers’ requirements with the capabilities of the supply chain (Croxton et al. 2002). According to Klassen & Rohleder (2002), there are two approaches towards demand and capacity management. Demand management deals with manipulating demand to match the capacity available whereas capacity management changes the capacity to accommodate the demand. General concepts used to modify the demand in favor of the capacity in establishments include price manipulation and promotional events (Garcia et al.

, 2002). Both price manipulation and promotions can be viewed from a revenue management perspective to simultaneously maximize revenue and manipulate demand. Price manipulation and promotional events aim to balance out peak periods and non peak periods by creating a demand for lower occupancy stages. This diverts a percentage of demand from the peak period to the non-peak period to maintain similar occupancy levels in order for the capacity to be fully utilised.

As capacity management manipulates the supply to accommodate the demand, various approaches such as increasing resources and modifying the product can be used (Garcia et al. , 2002). Increasing resources such as using overtime, adding shifts and employing part-time staff are used to meet the demands during peak periods. Modifying the product includes reducing the quality, standardising the product and making recipients do part of the work to ease out the burdens of productivity in order to accommodate demands.

Product standardisation and reducing quality enables the firm to channel efforts somewhere else in order to meet demands such as increasing quantity. By making the customer do part of the work, it allows the customer to be a part of the workforce and serve themselves. This works in self-catered of self-serviced operations such as buffets and open bars. These approaches towards demand and capacity issues are taken when demands are unpredictable or difficult to forecast which creates a problem for capacity issues and queues.

As a result, insufficient supply to match demand usually results in a lower level of attention to customer needs thus affecting the effectiveness and quality of service. The Momofuku Ko (Property of Momofuku Restaurants), a New York restaurant has taken a radical approach towards dealing with demand and capacity issues. According to Kottke (2008), the restaurant takes only 32 online reservations each night on a first-come first-served basis which controls the demand. Reservations procedures are also scheduled to be made a week in advance which allows demand forecasts and estimates to be far more accurate and enable better inventory management. By doing this, the management is able to supply the demand more efficiently and save on organic wastage.

This concept creates the opportunity to fix the demand and supply to maximize capacity in a balanced and controlled method. Employees thus know exactly what to expect and are well equipped to handle demands making the service operation far more efficient and effective. This concept which determines the demand to manage capacity and supply is a cost-effective method which could be applied to many smaller scale restaurant establishments in the tight economic circumstances faced today. Service Innovation Service innovation has exploded in the last decade for the global hospitality industry where innovation in designs, themes, concepts and services have brought a whole new challenge to the industry, fuelled by the emerging consumer market.

Trends and consumer patterns evolve at such an alarming speed that certain establishments are required to be innovative just to stay in business and maintain market positions. Victorino et al. (2005) consider service innovation as an essential element in the marketing concept because it creates an opportunity for the firm to stay ahead of its competitors through new market offerings. A form of service innovation concept includes the utilisation of technology to enhance the quality and efficiency of service for hospitality operations.

Technology is largely used in the world today to increase efficiency in the operational process by substituting certain tasks of employees which enables them to focus on serving the customer more effectively. Figure 1 illustrates a technology-facilitated service encounter between the customer and the service provider in which both parties have access to the technology used. The service provider uses the technology as an aid in the service process to increase efficiency and effectiveness for various operations. Figure 1: Role of technology in the Service Encounter Source: Fitzsimmons & Fitzsimmons (2006)An example of this would include the interactive menu that has entered the service process in hospitality establishments. This allows customers to take orders in restaurants without a server. In the case of sushi restaurant Sakae Sushi (eater.

com, 2008), interactive display screens are available for every table which gives customers the opportunity to customers to place their orders without being pressured. This concept eliminates ordering mistakes between customers and the servers as well as the ordering time which makes the service process more efficient and reliable. The order will then be displayed on screens in the kitchen where meals are prepared. When ready, servers pick up the food, delete the completed orders and serve customers. Yet another role of technology in the service industry would be assisting the service encounter process between a customer and the service provider. This would be a relationship between the service provider and the technology used to increase efficiency in various activities that would save time and energy which could be channeled and focused on serving the customer effectively.

Figure 2: Role of technology in the service encounterSource: Fitzsimmons & Fitzsimmons (2006) One example for this would be the utilisation of Radio Frequency Identification (RFID) technology which is rapidly evolving the traditional inventory management methods carried out in the world today. Kelly and Erickson (2005) explain that RFID is a form of wireless radio frequency communication between a transponder that transmits information and a reader that receives transmitting signals. RFID could also be used in smaller service-focused establishments as well to effectively manage inventory with unerring precision. It will significantly improve the inventory system. Where formerly responsibilities for manual inventory checks and the counting of goods and products tied up the valuable time of employees now this could be replaced by the RFID technology.

The technology even enables management to better understand products’ life cycles when certain products or stocks are coming close to expiration dates. Kelly and Erickson (2005) mentioned that through this technology lower inventories can be maintained to reduce wastage and even discourage pilferage from employees. Thus, fewer employees would be needed to record, control, and monitor the movements of inventories which minimizes the scope of duties and allows staff to be focused on servicing customers. Leading the change in RFID implications is none other than the world’s largest retailer, Wal-Mart. A study from the University of Arkansas has proven the effectiveness of the RFID enabled stores with a saving of 16% in out of stock items (Hardgrave et al.

, 2005) which would really contribute to the economic efficiency required to face challenges in today’s service industries. Fitzsimmons and Fitzsimmons (2006) however, highlighted that service processes which include the contribution of customers as active participants or co-producers should be considered when applying technological changes. There should therefore be a balance between the human element and technology in service operations. Design concepts Design concepts are creative endeavours that are the results of ideas conceived to establish an effective approach towards creating a tangible or intangible product. Studies have concluded that physical environments play an important role in the formation of impressions for customers both positively and negatively (Bitner 1992). According to Shuman & Scott (2002), there are strong assumptions that a direct relationship exists between the success of a business and the design of the workplace.

Design concepts of visual cues with particular reference to the layout, can enable a smoother flow of operations in a hospitality establishment. Roelofsen (2002) explained the needs of good design in the working environment as it affects various issues such as absenteeism as well as hindrances that would affect overall productivity. Employees need a physical environment designed for comfort and flexibility which is conducive to productivity and performance. Changing the layout design of the restaurant can affect many things such as the service distribution, workflow, capacity and so forth. Hassanain (2006) considers the need to design sustainable and flexible workplaces to create a smoother flow of operations. The Momofuku Noodle Bar (Property of Momofuku Restaurants) is a restaurant in New York City that has reopened after careful considerations of previous mistakes.

The founder of the restaurant, David Chang has mentioned that the outlet had to reduce the number of covers by 200 a day to operate smoothly and reduce the queuing line. In order to mitigate the issue, the Momofuku Noodle Bar has undergone refurbishments and reconstruction in the external design to better manage capacity as well as the flow of operations. Figure 3: New layout of Momofuku Noodle Bar Source: http://www. eater.

comA change in the design of the layout to a semi open-kitchen concept has also caused the management to remodel the service operations process. By designing certain positions of seating arrangements that revolve around the open kitchen, the previous distance between tables and the pick-up area has reduced significantly. The restaurant has thus been able to reduce the amount of manpower in service operations while maintaining efficiency and effectiveness. The new design concept has also reduced the process of picking up dishes from the kitchen to individual customers because kitchen staff have now taken up service responsibilities as well. By reducing the responsibility for serving, the number of floor staff can be reduced and focused on attending to customer needs and orders more effectively and efficiently. The design of chairs and tables has also affected the demand capacity.

Chairs were ergonomically designed to provide only the basic functions of a seat without arm rests or back support so that the customers would leave the restaurant once they were finished eating thus increasing turnover and capacity. The minimalist concept for the chair’s dimensions also increases dining capacity which enables more customers to be served at the tables provided. Relationship Marketing Gummesson (1997) defines relationship marketing as a form of marketing revolving around relationships, networks and interaction. Gummesson (1998) also suggests that the customers play a crucial role in creating both quality and productivity in service operations.

It would therefore be disastrous to exclude relationship marketing from service-related operations for any hospitality establishment which is frequently involved with customers on a day to day basis. Relationship marketing can be an important tool to overcome failures in service operations or when the services are difficult for customers to evaluate by customers (Crosby and Stephens, 1987). Priluck (2003) implies that consumers who are satisfied with the relationship would fail to notice or analyze other aspects of the encounter such as product performance or price. Such relationships that are based on trust may allow a consumer to believe that poor product quality was an accidental error that will not be repeated.

For this reason, the relationship between employee and consumers makes the service encounter more effective. Anecdotal evidence has shown that dissatisfied consumers may choose to patronise another marketer thus causing a business to lose annual revenue generated from the customer. The successful relationships created in such situations would be able to buy time to improve the situation before customers are lost to competitors in the market (Priluck 2003). By doing so, customer retention management that is a direct effect of relationship marketing will be able to provide consistent revenue growth and support to a firms’ business. Yao et al (2000) summarizes the dimensions of relationship marketing into bonding, empathy, reciprocity, and trust where these dimensions have a primary impetus to foster a long-term relationship and thereby create the opportunity for repeat purchases.

Employees that apply relationship marketing are more likely to improve in service standards as well as productivity. By applying these dimensions in the service operations, a crucial relationship is formed between the service provider and existing customers which enables service efficiency and effectiveness that results in various economic benefits. This concept is found to be relatively true to the way that Starbucks runs its business operations. Former president, Howard Behar mentioned that “ we are a people business serving coffee not a coffee business serving people.

” The focus of the business is centred on the relationships with clients apart from the products to make the needs and expectations of existing and potential clients the ultimate priority. The relationship between baristas and customers is considered a key component (Gulati et al. , 2002) of the Starbucks strategy in retaining customers. Each barista is trained for 24 hours in customer service to enhance the customer relationship experience that in turn affects the productivity and effectiveness of service operations.

The number of customers retained due to relationship marketing has also supported strong profit growth and sales revenues which is exactly what is needed to combat the economic slowdown in consumer spending. To conclude, the correct application of operations management concepts in hospitality service establishments to increase or improve efficiency enables a better use of resources and makes the service process more effective. This usually results in amplifying the revenue and profit turnovers. This is very much needed in order to compete effectively with competitors in today’s challenging business environment.

References Blojsom (2008): Momofuku Ko. http://www. blojsom. com/blog/david/general/2008/03/30/Momofuku-Ko-accessed 10/04/08 Bitner, M. J.

, (1992). Servicescapes: the impact of physical surroundings on customers and employees. Journal of Marketing 56, 57-71. Croxton, K. L.

, Lambert, D. M. , Garcia-Dastugue, S. J. & Rogers, S. D.

(2002) The demand management process. International Journal of Logistics Management, Vol. 3 No. 2 pp. 51 Crosby, L. A.

and Stephens, N. (1987), Effects of relationship marketing on satisfaction, retention, and prices in the life insurance industry. Journal of Marketing Research, Vol. 14, November, pp. 404-11.

E Customer Service World (2008): Not the Coffee Business Serving People http://www. ecustomerserviceworld. com/earticlesstore\_articles. asp? type= article&id= 357 -accessed 16/04/08 Eater inside (2007) On the House: Momofuku Ko The Full Reveal. http://eater.

com/archives/2007/05/on\_the\_house\_mo. php – accessed 09/04/08 Eater inside (2008) Sakae Sushi http://eater. om/archives/2008/02/eater\_inside\_sa\_2. php Eileen, P. Kelly.

& G, Scott, Erickson. , (2005) RFID Tags: Commercial Applications V. Privacy Rights. Industrial Management and Data Systems. Vol. 105, No.

6, pp. 704-706. Guardian Business News (2008) A financial crisis unmatched since the Great Depression, say analysts. http://www. guardian.

co. uk/business/2008/mar/18/creditcrunch. marketturmoil1 – accessed 06/04/08 Guardian Business News (2008) Kingfisher boss remodels DIY business and cuts dividend in half. http://www. guardian. co.

uk/business/2008/mar/28/kingfisher. retail – accessed 06/04/08Guardian Economics News (2008) High Street Sales Subdued. http://www. guardian. co.

uk/business/2008/mar/27/economics. retail – accessed 06/04/08 Guardian Business News (2008) Credit Crunch Threatens 11, 000 jobs. http://www. guardian. co.

uk/business/2008/mar/31/creditcrunch. marketturmoil – accessed 06/04/08 Gourmet (2008) First Taste: Momofuku Ko http://www. gourmet. com/restaurants/2008/03/firsttaste\_momofukuko -accessed 09/04/08 Gummesson, E. (1997), Relationship Marketing as a paradigm shift: some conclusions from the 30R approach 35/4 pp.

267-272 Hardgrave, B. , Waller, M. and Miller, R. 2005), Does RFID Reduce Out of Stocks? , Sam Walton. School of Business, RFID Research Center, University of Arkansas, Fayetteville, AR. James, A.

Fitzsimmons. & Mona, J. Fitzsimmons. (2006) Service Management: Operations, Strategy, Information Technology.

5th Edition. Mc Graw. Hill International Edition, Asia. Kottke. org (2008): Getting into Momofuku Ko http://www. kottke.

org/08/04/getting-into-momofuku-ko – accessed 10/04/08 Klassen, K. J. & Rohleder, T. R. (2002) Demand and capacity management decisions in services: How they impact one another. Internal Journal of Operations & Production Management, Vol.

2 No. 5 Priluck, R. (2003), “ Relationship Marketing Can Mitigate Product and Service Failures”, Journal of Services Marketing, Vol. 17, No. 1 pp.

37-52 PriceWaterhouseCoopers (2008): PWC Hospitality Directions Europe Edition Issue 12 September 2005 http://blackboard. bcftcs. ac. uk/webapps/portal/frameset. jsp? tab= courses&url=/bin/common/course. pl%3Fcourse\_id%3D\_3207\_1 – accessed 28/03/08 New York Restaurants (2008) Profile: Recently Opened http://nymag.

com/listings/restaurant/ko/ – accessed 09/04/08 New York Restaurants Profile (2008) Momofuku Noodle Bar http://nymag. om/listings/restaurant/momofuku\_noodle\_bar/ – accessed 15/04/08 Shuman, D. and Scott, K. (2002), “ Workplace design can improve productivity: five elements for a changing workplace”, Seattle Daily Journal of Commerce, February, p.

28. The Barista Principle (2002): Starbucks and the rise of relational capital http://www. strategy-business. com/press/16635507/20534 – accessed 16/04/08 Yau, O. H. M.

, McFetridge, P. R. , Chow, R. P.

M. , Lee, J. S. Y. , Sin, L. Y.

M. , & Tse, A. C. B.

(2000) “ Is relationship marketing for everyone? ”, European Journal of Marketing, Vol. 34, No. 9/10 pp1111-1127.