Quality Operation Management Strategy as an Indication of Organisational Success

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Abstract:
Operations management is the process that turns different inputs of a business into the output; it consists of all the activities involved in producing a good or service from raw materials. There are different tools to achieve operational excellence or devise a successful operations strategy. Total Quality Management (TQM), Just in Time (iIT) inventory management, Six Sigma approach are to name a few tools used by firms around the globe. However, lean management and Operational Excellence Management System (OEMS) are more modern approaches towards creating and implementing an effective strategy. It is evident from case studies, and industry expert opinions that a quality operations management strategy leads the production of quality goods and services achieves a lower cost of production, lessens error and creates a more efficient production system. Operations management plan is indeed a critical factor of success for an organisation to achieve a competitive edge and sustain in the long run.

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1.0 Introduction:
Operations management is the process that involves converting the inputs of the organisation into outputs while maintaining the standards and undertaking the related activities. It involves any activity that is required to transform goods and services in deliverable forms for the customers (Kumar and Suresh, 2009). Operations management refers to all the activities of managing the raw resources that result in the creation of end service and products. (Slack, Johnston and Brandon-Jones, 2011) The aim of operations management is to achieve the best possible return ratio on the resources utilised in the production of goods or services.

Operations management is a multi-disciplinary field of work, considering it is a set of different activities aimed towards smooth operations process to ensure goods and services meet market expectations in different ways. The quality of operations management would interpret in an operation management process that utilises the most optimum amount of resources and results into quality end products or services in the most efficient manner (Slack et al., 2011).

The ultimate goal of any good operations management process is to achieve a better return, save resources by process restructuring and achieve operational excellence, which is a process of continuous development in operations management by learning, adapting and restructuring sustainably (Mandell, 1999). Contrary to conventional beliefs, operations management evolved and considered both goods and services as one and considers operation process as a renderer of services that may involve delivering products (Slack, Johnston and Brandon-Jones, 2011).

It is a constant process that results in improving all the aspects of the operation in an organisation and by cutting cost on resources through the efficient use of time, labour and materials. Which results in creating a competitive advantage for an organisation, which in turn produces goods and services that cost less, are easily available and are of a quality that exceeds customer’s expectation. Consequently, these leads to growth in market share, revenue, and profitability which is the sign of a successful organisation (Dean and Bowen, 1994).

2.0 Literature Review:
KPI or Key Performance Indicator is a common indicator of success. In this case, I will try to establish a relationship between quality operations management and positive KPI that will indicate a successful organisation to support the claim that a quality operations management leads to an organisation with favourable KPI.
2.1 Quality Operations Management:

The quality of operations management depends on several factors, however, in business context, operations management excellence refers to a state of operations management, which is outstanding in its way of operating the operations of business. Operation excellence, in other words, is a concept which develops with time, the basics of it is a mindset of continuous development. It is more than just a concept of developing operations; it is more about achieving customer delight and competitiveness at the strategic level (Ion, Cătălina, and Georgiana, 2013). In order to prove quality operation lead to a successful organisation, a relationship between operational excellence and business success needs to be established.

2.2 What are the key determinant of a successful organisation?

There is no single factor or determinant that interprets the success of a company, and factors like profit and share price do not represent the fait scenario of an organisation. To undertake the difficult task of linking management and company performance one needs to look closely at factors like how stakeholders are treated, organisational performance in comparison to market or competitors, market share, development over the time span and dealing with risk and cost (Westerveld, 2003).

2.3 Operations management function and its importance:

The scope and functions of the operations management process are the factors where OM can make a difference as a building block of an organisation. These are the factors where OM makes a difference through value addition. These are product design, process design, maintenance, technology, facility utilisation/ design, people development, customer service, quality control, cost reduction, inventory reduction, productivity improvement (Kumar and Suresh, 2009; Slack, Johnston and Brandon-Jones, 2011).

These functions basically sum up how the operations management drives down cost with efficiency, lower inventory, lower time and cost of procurement, smart and efficient workforce, creative production plan to drive down cost, faster feedback time and thus produce a quality product and satisfied customers that lead to competitive advantage for a firm.

Figure 1: Functions/ Scope of Operations management. (Kumar and Suresh, 2009; Slack, Johnston and Brandon-Jones, 2011).
Operations management is at the heart of any organisation; it is responsible for producing goods and services that can meet the expectation of the customers and the market, which is the most fundamental act of any organisation (Slack, Johnston and Brandon-Jones, 2011). Productivity and quality must be maximum to reach the goals an organisation wants to achieve, and it is operations management that is responsible for an efficient production and a constant quality improvement.

Mandell (1999) explained that, with the help of tools like Six Sigma, operations management could reach the goal of ultimate operational excellence, that will not only ensure greater sustainable profit for the business, it will also make competitors incompetent as they will no longer be able to match in cost and profits.

2.4 Tools to achieve quality operations management:

In practise, there are certain tools that help reach operational efficiency for businesses, two most common of those approaches are Six Sigma and Lean organisation approach. Initially, in the 80s, the concept of TQM (Total Quality Management) and JIT (Just in Time) inventory management was introduced as a mean of achieving more out of operations management (Kleindorfer, Singhal and Wassenhove, 2009).

TQM:

The TQM is a management approach that aims for success and customer satisfaction in the long run. It looks at improving firm performance through excellence in operations and use of factors like people, process, and plans (Oakland, 2014). The approach of TQM focuses on both hard and soft aspect of operations management in its attempt to better performance.

JIT:

Just in time production or manufacturing is a concept based on Toyota’s TPS or Toyota Production system, it aims at reducing time in different steps of value addition, and attempts to decrease response time from customer to suppliers (Barkman, 1989). The same approach has later been adopted by different firms like Motorolla, IBM in different names. It helps reduce the cost of inventory and production and retain market share by enabling customers to fast response environment.

The more modern approaches towards achieving operational excellence and achieve quality and competitive advantage are through Lean management model and six sigma approach.

Six Sigma:

Six Sigma is a set of tools that utilizes uses statistical methods to ensure that outputs of an operations management are nearly perfect, that there are least possible errors in processes. It aims at defect free output, thus cut cost and become profitable with quality and customer satisfaction (Schroeder et al., 2008). Increasing global competition and drastic technological changes caused the operations management to address the quality factors through continuous changes, and Six Sigma played a major role in achieving quality operations through adapting to those changes (McAdam, Hazlett and Henderson, 2005).

Lean Management:

The concept was initially derived from very successful and recognized TPS (Toyota Production System). The core of the lean approach is to achieve the least waste and superior customer value. The concept revolves around lean thinking which is applicable for both products and services industry. This approach focuses on what is the purpose of the proposed change, what process need to be reengineered, and how can organisation address the people and their problems better and a focus on driving inventory levels down also exposes inefficiencies, reduces costs, and cuts lead times (Womack, Jones, and Roos, 2007; Salah, Rahim, and Carretero, 2010).

OEMS:
The most innovative or contemporary approach is OEMS or Operational Excellence Management System, it evolves around setting a global expectation, following successful practices, seeks accountability and promotes continuous improvement. It defines clear and measurable goals, so the organisation knows where it is heading and how far it is from the target (Caruso, Cigala and Gay, 2013; Chevron Policy, 2016). Lean & Six Sigma approach is the more traditional approach in comparison to OEMS in terms of operations management. OEMS is driven by seven elements that result in the process of continuous change and development.

![Figure 2: Seven Elements of OEMS (Caruso, Cigala and Gay, 2013)](image)

2.5 Tools to measure the quality of operations function:

There are five factors that quantify the success factors of the operations management function of any organisation, the better an organisation performs in these factors, the higher competitive edge it has. They are quality, speed, dependability, flexibility, and cost (Slack et al., 2009). In other words, a quality operations management would interpret in achieving excellence at this five aspect for any organisation. Looking further into these variables, a quality operation would produce quality end products and services, it will be less expensive to produce as the more efficient the operation system is the lower the cost and thus it will also cost less for consumers as well, speed refers to speedy delivery and availability of the products to the customer, dependability factors translates the ease of delivery and reliability of delivery, and lastly flexibility would mean the ability of the operation to meet customisation in the most cost effective manner. In summary, if an organisation achieves all those through strict quality measures in their operations management, it will definitely lead to achieving organisational goals and success for the business (Bititci et al., 1997).
Porter (1985) introduced to us the concept of the value chain; it is the most basic tool to examine the quality of different functions of a business and company performance, and their underlying relationship in an attempt to find out the unique combination that will lead to competitive advantage. In this case, the aim will be to find out how operation function leads to business success.

2.6 How operational excellence leads to organisational success:

The objective of operation management is to serve customers by meeting, providing right item at the right time at the right place (Kumar and Suresh, 2009). While doing so, operational excellence results in producing quality goods and products, and as explained by Elshaer and Augustyn (2016), there is a direct relationship between producing quality products and services and achieving a competitive edge, which translates into success.

Research over the years has proven that organisations that continuously improves the quality of products and services offered by exceeding the expectation of the customers have always led to success in terms of market share, financial returns and brand recognition (Su et al., 2014). It also indicates that the organisation has low variance in what they have to offer and thus more consistency in their offering attract customers.

As explained by Kumar and Suresh (2009), the objective of operations management is to raise efficiency, cut cost, make better use of resources, it is achieved through resource utilisation, and these result into achieving a competitive edge over other players in the market.

Operations management strategy on the other hands leads to competitive advantage for an organisation (Lowson, 2003). Which leads to success for a business over time. A successful operations management saves resources like labour, time, and money by performing well and without losing on factors like procurement plans, defects in procured or produced goods, avoiding breakdowns, production setup, non-value added activity, inventory management (Felice, Petrillo and Monfreda, 2013). The result is a smoother running operation which translates into more steady growth and growing revenue.

Operations management can be a method of beating your opponents in the market, achieve higher market share, run a business sustainably and thus, become a successful organisation (Chiarini and Vagnoni, 2014).

Looking at operations management from a resource based view Craigheade et al. (2009) prove in theory that, supply chain strategy, richness of knowledge in operations management and actions taken are key factors in firm performance, and results in innovative cost strategy that results into superior firm performance (Liu and Liang, 2014).

The triple bottom line concept was initially developed by John Elkington in 1994 which he later elaborated in 1997. The triple bottom line concept is a method that proposes a sustainable operations management. The model takes into consideration people thus the society, planet earth thus the environment we operate in, and profit which is the monetary returns that the operations produce. Thus, an operations management approach that idolizes triple bottom line method has concern for all three important aspects of a business including giving something back to the society it operates in, which creates an organisation that is not only financially successful but also considers for the society and the environment (Elkington, 1998; Kleindorfer et al., 2009).

Today the businesses are highly dependent on e-commerce, a major portion of sales of goods and even services are done online, Barnes, Hinton, and Mieczkowski (2003) explain operations management of inventory, delivery, and procurement can be the deciding factors and can end up achieving a competitive edge through e-commerce.

2.7 Case examples to support the claim:
Toyota Production System or which is more famously known as TPS is a form of the lean production system is a tough competition to WCM or World Class Manufacturing. Toyota’s operations management strategy has been a challenge for all other auto makers globally. Operations at Toyota has given Toyota an edge on the competition and become successful in financial aspects as well (Chiarini and Vagnoni, 2014).

Researchers focus on how transforming operations in the healthcare industry by focusing on process, perfection and systematic thinking can improve customer value (Toussaint, 2016). For years, the NHS has been attempting to become a lean organisation in all aspects. NHS has found that the combination of lean and Six Sigma have improved approaches for NHS, it has eliminated waste of resources, reduced variation and can prove to be useful in the long run. However, the combination of six sigma and lean can be cannibalising if not managed carefully (Proudlove, Moxham, & Boaden, 2008).

2.8 Contrasting scenario:

Although, some authors do argue that operations strategy alone cannot be a key indicator of an organisation’s success, as often organisation loses on a high level of quality performance (Su et al., 2014). However, in practice and in reality, operations management is not a onetime process, it is a continuous process that would result in constantly changing, develop, and improve plans around the business to sustain, grow and achieve success.

Operations management quality alone does not a secure success for an organisation. Besides, it is evident that being lean, cost-effective, quality concerned alone cannot assure growth over time. It is continuous operational excellence that results in success for an organisation (Ion, Cătălina, and Georgiana, 2013). Some authors like Dorris (2016), suggests that organisations that focus on only operational excellence focus only on that aspect and fails to innovate a new product or achieve customer intimacy, however, in a broad aspect, operational excellence is a continuous and broader strategy that aims to meet all these targets.

3.0 Conclusion:

In today’s highly changing global environment there is no alternative to focusing on the development of end products and services by focusing on quality operations management that would ensure quality, availability, flexibility, dependability of the product in concern. Through sustainably developing operations standards to meet and exceed customer expectation organisations achieve ultimate competitive advantage (Lowson, 2003).

Operations management process includes several different functions that affect the internal and external factors of an organisation. If we look at any successful business organisation, we will find few common features in its operations process. Looking at operation through the scope of measuring factors, it will be evident that successful business has common response to certain features like flexibility, availability, dependability in terms of their operations process and the products they produce. Using the right tools and management approaches to utilize the best out of available resources, operations management can achieve a competitive edge over the market it operates in and accomplishes its goals in the long run (Shingo, 2009).

An excellent operations management process is indeed one of the substantial factors of an organisation’s overall success. Not only because it drives down cost, produces efficiently and produces quality but also because all these factors achieve a certain synergy that is a unique proposition for the customer, and the organisation thus achieves a unique set of competitive advantage that is not imitable by others. Looking at this through VRIN framework proposed by (Barney, 1991), in an attempt to achieve operational excellence, the firm achieves something that is Valuable, Rare, Inimitable, Non-substitutable. Which in turn becomes the competitive advantage of a certain organisation, and leads it to a continuous process of success through continuous improvement in operations (Duggan, 2012).

References:


