

Evaluation of the existing operations



Introduction

In the initial part of this report, I critically evaluate the existing operations and identify areas of improvement in the system. While undertaking this process, I have also identified some problems in the existing operations, and have suggested some approaches to overcoming them, in line with modern approaches. I have chosen to undertake an analysis of the operations of TBS Publishers Distributors for my work.

Methodology

The information in this assignment is largely sourced from the primary source of information. I personally visited, observed and conducted various surveys and interviews with employees, management and customers for undertaking this assignment. Various websites, journals and online materials have been researched for undertaking this work, though primary source of information is stresses more and given more significance.

I have approached this whole assignment, applying the principles and concepts of Total Quality Management (TQM), i. e., through continuous assessment and improvement of the whole operations system and looking at it holistically from customers' perspective, as well as demanding the consistent participation of all the stake holders involved in the continuous improvement of Quality. The Quality Circles approach and Quality Function Deployment (QFD) has also been applied/recommended to suggest resolution of quality issues that might arise while implementing TQM.

Scope and introduction to the problem

TBS is one of the top selling book shops in Calicut, India. During peak seasons and the launch of bestselling titles, there is tremendous waiting time for customers, resulting in customer dissatisfaction and decreased/lost customer loyalty. After detailed analysis of the operations system (explained in the later part of this report), it was found that the high waiting time for customers was due to the inefficient forecasting of demand, which also contributed to insufficient number of employees. This could be solved by non-adoption of latest modern forecasting methods, as well as integrating all the various resources of the company by implementing an advanced Enterprise Resource Planning software solution such as SAP or Peoplesoft.

About the company

According to its website, TBS is a leading provider of books, music, and other educational services and products in the state of Kerala in India[1]. Kerala is located in South India, and is renowned for its high literacy rate and its advancements in modern educational institutions. TBS have become one of the top book-stores and publishers in Kerala with revenues estimated to be over INR 20 million by their unique combination of customer service, innovation, efficient operations and cost competitiveness.[2]

TBS is headquartered at Calicut in northern Kerala and has branches spread across Kerala in places like Kannur, Kottayam, Trivandrum and Trichur. It also has a vast network of agents across Kerala through which it distributes its products. TBS also sells office stationery, all types of lab equipments, raw materials for labs including chemicals, surgical items and apparatuses, equipment for small industries, computer and IT components, sports and

athletic goods.[3]80% of TBS' revenues, and 85% of its profits are estimated to be from its books business alone, and hence this piece of my operations management work focuses on the books business alone, and whenever a specific shop location has to be mentioned, the main bookstore of TBS at Calicut is taken as reference.[4]

Total Quality Management (TQM)

TQM helps in the delivery of highest quality standards and the subsequent increase in operational efficiency and effectiveness. Thus, TQM constitutes the following: strategy implementation, plans and operational strategies for bringing together all the relevant practical quality control methodologies (Quality Assurance, Reliability Analysis, Statistical Quality Control, Random Sampling Inspection, etc) with the entire organisational mechanisms encouraging the consistent and continuous quality improvement. TQM concentrates in the entirety of the whole system and not just in its individual parts. Failure could be caused by various factors such as culture clashes/shortfalls, teamwork related issues, leadership and management issues, HR related issues, individual motivation issues and employee commitment issues, and other psychological and social issues as well as skills shortage or inadequacies of technical manpower and equipments.[5]

Under TQM, customer is the primary focus, and every aspect of improvement is to be seen from a customers' perspective. A holistic approach is used from an overall organizations' perspective, and the customers are the most crucial and focus point of the whole approaches, and they are treated as the vital component of the whole operations. All stake holders must work together to achieve its objectives, i. e., a holistic approach with customers as the focal

point, and involving all stake holders of an organization. Thus empowerment of employees as well as their team work is very critical for this approach to succeed.[6]

Customer Satisfaction Survey

According to David Garvin, eight characteristics that customers are interested are the following[7]:

Since Customers are the central focus of TQM, a customer satisfaction survey was conducted with a sample size of 250 customers based on a survey questionnaire, to find out what matters most to the customers. In this survey conducted to evaluate the above parameters, it was observed that Features and Performance were the main lagging indicators, and there was much scope for improvement in these areas. The following chart demonstrates the customer satisfaction index (out of a total score of 10), the blue being the present score and red showing the areas which has scope for improvement.

Analysis of Operations

Processes under consideration

The operations of TBS was analysed using the concepts of TQM (Total Quality Management). TBS could be categorized into a “ mass service” business, with high capital investment and high volumes, medium variety of service offerings and low level of customization for its customers. The basic business proposition of TBS is that of a service provider of quality books and other services from the publishers to the potential end customers (Figure 1). TBS’ business can also be classified as a service business involving both ‘ Transformation of Place’ and ‘ Transformation of Ownership’ operation. ‘

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Transformation of place' because this business involves a great amount of storage and transportation, and ' Transformation of Ownership'because it involves the change of ownership from TBS to the end customer.

The Value Generation Process / The role of customers in the system

Applying the principles of Total Quality Management(TQM), the customers play a major role in TBS' business since the business of educational services in Kerala is highly competitive, with a lot of small bookstores and a greater competition from pirated books market. There is usually no intellectual property rights or exclusivity agreements, and hence almost all leading book stores in this market offer the same product & services. However, TBS has managed to have a competitive positioning in this market, by ensuring a loyal customer base.

By helping end-customers buy magazines, lab equipments, CDs, books and other educational items, in a very straight-forward and effortless method, TBS generates value for its end customers. Again applying the principles of TQM, for any efficient organization to succeed in the long term, they must offer a ' bargain' for both itself and the customer. This ' bargain' in this case, could be explained in figure 2:

The value generating model could be characterized by the five key tenets (Figure 3) as per the model of service management system[8]by Normann.

Applying the principles of TQM, it can be seen that People, Systems and Processes should work in perfect harmony with each other, under a conducive culture, effective communication and excellent commitment from all stakeholders, as described in Figure below:

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Market Segmentation

The demographics of end customers of this ‘ educational’ market segment transcends across occupations, genders, ages and financial conditions. The key distinguishing feature is the need of these end customers for TBS’ educational products. By applying the principles of TQM, in my observations, it was found that the categories of customers that shop at TBS are (figure 3):

Service blue printing technique[9]

By using the “ service blue printing technique”[10]of Zeithaml & Bitner (2003), the following process maps in the next few pages demonstrates the various buying flow map of TBS’ various customer segments. The various type of customer segments found were:

1. Focussed Customers
2. Topical Customers
3. Unfocussed Customers

These are explained in detail in the next few pages.

1. FocussedCustomers- these were customers who knew precisely what product they would like to buy, seek advice from the customer service personals on its price and stock availability and then make the buying decision. These customers usually only bought the precise product they came looking for, and would spend very little time in the store. The frequency of purchases made by this segment of customers were found to be very high, compared to the other two segments.

2. TopicalCustomers- these were customers who were interested in particular topics. However, they usually are not aware of a specific title/product. They would directly go to the appropriate section of the

store, look at various titles under that topic and the various offers etc, and finally make a decision on which title /product to buy. The frequency of purchases made by this segment of customers were found to be lower than Focussed Buyers, though much higher than Unfocussed customers.

3. UnfocussedCustomers- These were completely random customers, who came to the store without having any plan on which title or topic to buy. They would randomly go through various sections of the store, and make impulsive purchasing decision. The frequency of purchases made by this segment of customers were found to be very low, compared to the other two segments.

Service Concept

Applying the principles of Total Quality Management (TQM), the service concept of TBS can be classified based on the identified customer segments into

1. Core services and
2. Peripheral services

Core:

- a. Location- vital for any book store. TBS in Calicut is situated very close to a busy bus terminal and a leading supermarket, thus making it a very convenient and accessible spot for customers.
- b. Informationcounter/desk- it is very essential and important because it helps TBS' customers make decisions on which CDs, books or other

educational products they need to buy, its location in the store and its inventory status.

c. Variety– a vast number of different services and books are offered at each TBS store, helping customers select their based on their individual preferences.

d. Customer care facility– TBS offers excellent customer care facility to serve their customers. For this, they employ:

e. Ease of reading/browsing –The store layout has been carefully designed in such a manner that the customers can search efficiently and effectively e. g. adventure books by author, Playstation CDs by release date etc.

Peripheral:

1. Posters, Newsletters and other communications helps to enhance TBS' visibility and information services by providing helpful information to customers.
2. Sofas – TBS always encourage customers to spend more time in their stores. They have realized that, more time customers spend in the book store, the more they purchase. Sofas are provided inside the store for reading the books in comfortable areas.
3. Internet Connectivity – There is Wireless Internet (WiFi) inside the TBS stores, giving additional revenues to TBS. It also attracts a lot of new and potential customers to the stores, especially travelers and tourists who want to access the internet.
4. Coffee shop inside the stores – Customers use this additional facility as it enables them to spend more time inside the store by having some

refreshment during or after shopping. This facility also attracts potential new or future customers to the store.

Delivery System

In line with the principles of TQM, for delivering maximum value to its customers, TBS has designed and implemented a delivery system which is sketched out in Figure 4. The main components of this system include:

1. For catering to ever changing customer needs and demands, TBS has ensured that it maintain many distinct layers of inventory. In each store, a back-office inventory is always maintained, to ensure availability of much demanded books, whose availability is important to prevent lost sales); also local warehouses are also maintained, enabling TBS to ensure that realistically fast-selling books are available in a timeframe of a maximum of 2 days; a central warehouse is also maintained to ensure that specialized books are stored, for those books that end-customers usually have to wait up to a maximum time frame of 5 days.

TBS views inventory as both an asset and an insurance/guarantee against fluctuating demand, which is common in this turbulent market. However, the large amount of inventory at any point of time in their supply chain costs a lot for TBS, including:

2. Physical/Geographic location: This is a very important factor of its business, because TBS relies primarily on end customers who visit its stores. With more customers visiting its stores, the more probability of sales. Also, it was observed that many new customers who primarily

visit the store's coffee shop become buyers of TBS' other product offering.

3. TBS has a characteristic store plan/layout system, in which titles are grouped into topic (history, economics, politics etc), category (Posters, Blue-rays, books etc) and genre (comics, film etc). TBS also has different parts for “ specials” such as new arrivals, offers/sale etc. to help customers. In addition, facilities such as sofas, coffee shop within the store, clean premises including passenger lifts and toilets. Also, other intangible factors such as a bright and open atmosphere, large passages, passenger lifts and meticulously designed and implemented book-organization helps make it a comfortable experience for end customers.
4. TBS has always ensured that good relationships with their vendors, suppliers, and publishers are maintained. This ensures more author visits, timely availability, higher priority treatment for new releases, and excellent price bargains from these vendors/publishers.

Critical Evaluation of TBS' operating and service delivery system

For measuring the true most important strengths of TBS' operating and service delivery system, it has to be assessed at different levels:

Based on my personal observations of the TBS bookstore and the feedback obtained with the interviews and interactions about the different kinds of customers who frequent TBS, the effectiveness of the operations management system could be evaluated by the following main criteria:

- a. Variety: TBS' end customers demand a vast variety of products including Books, CDs and magazines, and variety inside each of these categories as <https://assignbuster.com/evaluation-of-the-existing-operations/>

well. Hence, TBS has to ensure a right mix of volume as well as variety of CDs, magazines and books. TBS does not have a demand forecasting system right now, and hence it is very difficult to make any reasonable and accurate forecasting of demand in the near future.

b. Availability: The buying decision of any customer is highly dependent on the ready availability of the product. In case the product they are looking for is not available, it is possible that the customer might buy it from its competitors. This is especially critical because TBS' stresses a lot on customer retention and loyalty.

c. Customer service experience: The customers overall experience in the store has to be pleasant, and is a very important factor. TBS ensures the availability of different ranks of customer-care service staff, who are well versed with specialist knowledge. Each of them serve about 6-7 customers/hour, and each customer on an average spends 6-10 min at the customer-care counter. TBS provides extra facilities such as a coffee shop, sofas, very clean wash rooms, baby feeding rooms and toilets. It was observed that almost 30% of the customers visit the coffee shop on course of their shopping experience in TBS.

d. In-store promotions: These include promotions such as “ buy 1 get 1 free”, festival celebrations, discounts, celebrity visits and authors' book signing events. During my observation for two hours (2-4pm on a Saturday), 25 in 92 customers opted for a book which was under the promotions section.

e. Purchase quantity per customer– About 35% of customers purchased a minimum of 1 Magazine/CD/book. As described in Figure 6, we could plot a

matrix to identify the various type of customers based on the amount of time they spent in the store, and the number of purchases they made. TBS uses this matrix to identify the most profitable “ high value customers” as well as the least profitable “ unprofitable customers”.

The operational efficiency of the system determines the long term success of a business such as that of TBS. This could be evaluated and measured in various ways:

a. Inventory flow is crucial for a fast-moving business such as educational books. Success is not defined by the quantity of books stocked in each store. But, how fast the product is transferred from the supplier/vendor to the end-customer determines the ultimate success of the business rather than finding the total number of books stocked.

b. We must remove any bottlenecks that are there in any operations system. In the case of TBS, the main bottlenecks identified are:

Bottlenecks in Supplier stage- It is difficult to obtain enough quantities of some best seller books (especially those around which a hype is created even before the launch) from the supplier, as they are sought after by all book sellers, thus resulting in lost sales. This is the case especially during the initial launch of books (Eg: Harry Potter books).

Bottlenecks in in-store Queuing system- Customers are very demanding in terms of the time they spend in a queue in a shop, due to the fast lifestyles and increasing availability of online book shops. During my observations, it

was found that the average dispensation time for each end-customer was 1.5 minutes, and the average queuing time was 6-8 minutes.

Bottle neck in Customer care desk – Customer satisfaction is very important in a highly competitive business such as book stalls. Any lack of customer care personnel, or the quality of service offered, could result in lost sales. The number of customer care personnel in TBS was limited during peak hours, and each customer during peak hours had to wait for an average of at least 3 minutes before he/she got some kind of help/support.

c. Inventory Forecasting – In the books business, it is crucial to effectively forecast demand and manage an optimum level of inventory in the whole system, i. e., both in-store and in warehouses. It must be able to predict much in advance, the expected peaking of sales (for eg: Cake cooking books during Christmas season or sports magazines during the time of a major sports event). TBS does presently this by using a multi-stage inventory, and promotional free home delivery offers during such peak periods.

Suppliers as well as buyers possess enormous amount of power in the educational book industry. To have a profitable business, the books selling companies sign prior long term agreements with different stakeholders:

a. Contractual agreements with publishers – The negotiations with publishers are centered around the following areas:

b. Business factors – Book stalls has to consider other factors such as employee salaries, cost of maintaining the stores, the annual rents etc.

The success of TBS depends heavily on the commitment and performance of its employees, both in-store employees and warehouse employees. The following considerations are needed :

A major book shop like TBS requires many types of personnel for manning the various department inside the store such as administrative, billing, marketing & sales, commercial, Human Resource Management and Inventory Management etc. TBS employees work in triple shifts and at any point of time, employs 13-17 employees inside the store, and during peak hours the number of employees can go as high as 20.

b. Employee Training- Employee training is expensive, and it costs time, effort and money for TBS. To ensure that employees are working to their maximum efficiency, they have to be trained need to be ready to handle the high standards expected of them.

c. Efficiency- The efficiency of staff has to be monitored continuously, and this could be done by measuring various parameters such as average time per customer, average time to fetch a book, number of positive customer feedbacks, etc.

The largest customer who contribute maximum to the bottom line of TBS was found to be the “ unfocused buyers”. Hence, it is imperative that TBS tries to get more of this customer segment to visit their store, and make them spend more time in-store (time spend in the store has shown strong correlation to the purchasing decision). I would like to recommend the following changes, in line with principles and practices of TQM and Quality

Function Deployment (QFD), with the primary focus on customers and continuous quality improvement respectively as their goals.

1. Establishing an Enterprise Resource Planning (ERP) solution-To effectively have a holistic and total approach as envisaged by TQM, I recommend establishing a companywide *Enterprise Resource Planning (ERP) solution* such as SAP or PeopleSoft. This system will integrate all the sub systems of TBS such as Inventory Management, Inventory Forecasting, Billing, Logistics, Human Resource Management, Marketing, Customer Service, Information Management etc. For instance, under the inventory management module, if the stock(inventory) gets below a particular amount (counters set in advance), the system will automatically place the orders for additional stock from the publishers/suppliers.

2. Suppliers could also be given access to the stock levels of each store, or when the customer places a new order, for their particular products. Thus the principle of Just In Time (JIT) inventory management is also implemented. By implementing this system, the waiting time in-store could be reduced drastically resulting in better customer satisfaction. Also, information and orders can be placed/obtained at any place, or customers in remote locations could order and gift products to their friends in Calicut, by ordering online as envisaged by TQM.

Delivery system & demand forecasting before implementing ERP system

3. Improvement in online/web presence- There are a lot of customers who visit the physical TBS store, however this has created bottlenecks in the system, especially in terms of billing counter and customer care desk. This

has translated into customer dissatisfaction, and hence applying the principle of TQM, I recommend establishing a full-fledged, easy to use website, where customers can view the books, preview its pages, and make an order using debit or credit card, and have the book delivered at home. The delivery and payment mechanism could also be made flexible, such as “reserve and pick-in-store”, “cash-on-delivery” etc. Thus the principle of Total Quality Management is applied effectively and efficiently.

4. Loyalty Programs -On top of the in-store customer experience and promotions, TBS should also offer loyalty programs (eg: Reward/Discount cards) to reward and promote repeat/high value customers.

5. Starting aDVD/CD/Bluerrayrentalssection in-store.- The number of customers switching from Books to CDs and DVDs are increasing. Since, we are renting them, customers would come back to return them possibly resulting in future sales. It must be linked both to the online presence of TBS as well as to theERP solutionto be implemented. Thus, customer satisfaction could be improved because they can get all necessary related products from the same roof. Thus, the prime objective of TQM can be successfully satisfied by meeting the demands of customers and making them satisfied.

6. Increase the number ofcustomer-careservicepersonnel- Non availability of personnel or high waiting time for customers in the customer care results in immense customer dissatisfaction, and lost customer loyalty. These have a long term effect on TBS brand and customer perception. Thus, this will ensure that Quality Function Deployment (QFD) objectives are also met, and could save TBS considerable amount of money that would have been lost

due to bad quality. Simple changes such as installing a ringing buzzer in the counter could potentially resolve these issues.

7. Modern Billing Self-Desks- These days, customers are becoming increasingly sophisticated and comfortable with modern technology. They can without difficulty self use a Radio Frequency ID (RFID) billing self-desk by their own. Thus, savings on Human Resources as well as decrease in waiting time for customers can be obtained.

8. Well qualified and personable support personnel- Staff must be well aware of the locations of various titles, and should be passionate about the products they are dealing with. They must be extremely patient, and hospitable. Staff must be always be well dressed and hygienic, and if they are not, it could result in a bad customer experience.

By applying the concepts of Total Quality Management (TQM) and Quality Function Deployment (QFD), we can provide immense value to customers, and drastically improve their satisfaction levels, at the same time providing value to us as well. I recommend, primarily the implementation of an ERP (Enterprise Resource Planning) solution that will holistically and totally look at and improve all the different components of the service delivery system. Customers are the key focus, and priority is given for " Do-it-right-the first-time" approach, rather than rectifying after a problem arises. Thus by implementing the suggested recommendations, the operational profitability of the firm should increase.

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