# FEEDING MUMBAI (DABBAWALA)

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Abstract —Each city in the world has got beautiful and attractive buildings and views. But, no city in the world other than Mumbai has so called "DABBAWALAS". The dabbawallas are renowned and also known to feed the "MUMBAIKARS" even in difficult situations. Like the Indian Railways, they are coined as the "LIFELINE" of Mumbaikars. If railways come to a standstill even for a single day, a lot of problems are created, likewise if dabbawallas don't work for a single day, working professionals come to a standstill. The work of a dabbawalla is to carry and deliver freshly made food from homes to workhouses.

**Keywords**: Mumbai, Dabbawallas, Six Sigma, Management, Lifeline, Process, Operations, Supply, Demand, Logistics

## 1. INTRODUCTION

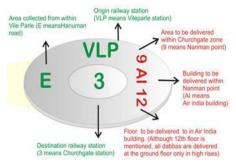
Known as Mumbai Tiffin Box Suppliers Association (MTBSA), but in layman language, are very often referred to as "DABBAWALLAS". The Dabbawallas are famous for their teamwork, co-ordination, as well as for procurement and delivering the dabbas (tiffins) at right place, at right time. The dabbawallas work very effectively and efficiently in the absence of anysupervision, technology and any human policies. Because of the dabbawallas, Mumbaikars can have their homecooked food at workplace. The tiffin boxes are delivered at a very low and a very cost-effective rate. This unique business model fulfils both economic aswell as social needs of the society. Economic in the terms of delivering the tiffins at cheap rates, while social in the sense that customers are satisfied by having homecooked food at workplace.

### 2. LITERATURE REVIEW

The dabbawallas greatly rely on the colour coding which is done with the help of oil paints on the circular lid of each tiffin box. A fluent and an efficient system cannot be sustainable without any coding techniques for identification. The dabbawallas work without any use of the latest technology. They stick to the traditional coding methods. From the exhibit 2 above, we can see, how the dabbawallas use oil paints to make their codes. The code includes the destination station code, the lane name code, office building

code, name of the customer, floor on which the delivery must be done. (Ganguly & Debayandu, 2014)

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Whenever a new dabbawalla joins the organisation, he is taught the coding very thoroughly. If the decoding of the codes goes wrong, the delivery of customer A will be done to customer Z. thus encoding and decoding the codes is very essential. The dabba in a day changes around 5-6 hands. All the members are made very clear about the coding language

that they use.(Linderman & & Matt, 2011)

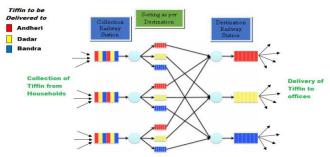
# SELF ORGANISED MODEL

The dabbawallas

follow a hub and spoke model. It is a model used in a centralized system and for integrated logistics to keep the costs as low as possible. In this model, the products/parcels are received from many origins/sources, collected at a central place and then sent for delivering to the destined place.(Parmar & Beena, 2018)

The journey of dabbawallas starts at 9.00am in the morning. They collect the tiffin boxes from various homes in an area and bring them to the nearest railway station. The sorting of the tiffins brought are done at the source railway station. The tiffin boxes are sorted as per the destination railway stations. Once the sorting is done, all the collected tiffins are boarded on the train at the source railway station. The tiffins are then off-loaded from the luggage compartment of the trains. The unloading takes place as per the destination of the tiffins. The unloading is done at around 11.30am-12.00pm depending on the destination railway station.





The dabbawallas cover a total of 60-70 kms every day, wherever the trains are connected in Mumbai. Since, the dabbawallas transfer the tiffins from source to destination railwaystation through trains, railways to work very efficiently and on time is very essential. Once the unloading of the dabbas is done, the dabbas are then loaded on a wooden cart and then each dabba is delivered to the customers waiting in different offices in different areas. The delivery is done in between 12.30pm-1.00pm

Normally, the lunch breaks in offices happen after 1.00pm. so, the dabbawallas are very specific in delivering the dabbas to the customers before their lunch time, so that they can have their lunch in time and then get back to work. In this time, the dabbawallas also break for lunch and they have their food in the areas around the destined offices.

After the lunch break, the entire process is then repeated in a reverse form. The tiffins are collected from the offices, brought to the nearest railway station, sorted as per the source railway stations and boarded on the train. The empty tiffin boxes are unloaded depending on the source railway station and then using a bicycle, the tiffin boxes are delivered at homes. The empty boxes reach back homes by 4.30pm-5.00pm in the evening. (Thomke & Stefan, 2012)

## **OPERATIONAL STRATEGIES**

Generally, Cost, Quality, Flexibility and Delivery are the four basic and most important operational strategies in any business to run efficiently and profitably.

Cost strategy is defined as producing and delivering the goods/products at minimal possible cost, to gain a competitive cost pricing advantage in the market. It also aims at having reduced waste expenses.

Quality strategy refers to meeting the customers specifications and their requirements in the products demanded by them. It basically refers to meeting the customer needs.

If an organisation has promised any delivery period (e.g.: 24hrs or 1-day delivery), it is the responsibility on the company to adhere to the promises and infact try to deliver the products before the stated delivery time. Also refers to being quick in responding to customer's queries.

Flexibility strategy is the willingness of the company to proactively accept any change in the internal or external environment. Taking decisions in advance and coming up with such strategies in the market, which makes the competitors follow your footsteps.(Masood, et al., 2000)

#### RESOURCE PLANNING:

Everything that a consumer pays to a company, gradually results into a defined process. Any work from start to end, done with an aim to provide utmost satisfaction to the customers is a process. Thus, a process needs resources to be carried on and implemented. Resource planning aims at having necessary inputs at the source, at a right time, at the right place so that the process can be implemented.

#### SIPOC IS THE KEY TO RESOURCE PLANNING

- Supplier- customers lunch boxes
- Input- dabbawallas, bicycles, Indian railways
- Processing- entire process of the dabbawallas from procuring the boxes to the delivery of the same box at the office and then back to homes.
- Output- main aim of dabbawallas is to provide home made fresh lunch to office goers at the time of lunch without any delay. Thus, this becomes the output.
- Customer- customer satisfaction is the success for any business. When customers have their lunch at their office at the time of lunch, they are satisfied by having their home cooked food in time.

## **BOTTLENECKS**

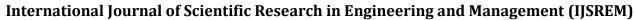
## • SORTING PERIOD:

The dabbawallas currently have a practice of procuring the lunch boxes from the homes, they bring them to the nearest railway station and then the boxes are sorted according to the destination station. The boxes having a common destination e.g. Churchgate, are then cubbed together and all the boxes with different destination stations are loaded in the luggage compartment of the trains and then delivered to the offices, respectively.

The sorting of all the dabbas at the railway station after procuring the tiffins takes a lot of time, and thus it can be considered as a very big bottleneck in the delivery process of the dabbawallas. Due to this, the dabba's delivery period gets extended. They can thus reduce with their delivery cycle by removing this existing bottleneck. To overcome this challenge, following is the suggestion that they should apply: First of all, the dabbawallas should be assigned a fixed and a particluar area or region for the delivery of the dabbas. They should collect only the dabbas to be delivered at a particluar destination (area). A dabbawalla will not collect the fresh dabbas to be delivered at more than one region.

### • HIRING:

Dabbawallas association has employees who are with the organisation since past 35-40 years. They have been loyal to the organisation because they had no qualification and the dabbawalla association would provide job and they could also work for the society.



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dabbawallas process and a great efficiency can be achieved. Any issue can be targeted very easily with the help of the peers and having a formal process.

(Ravichandran, 2005)

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However, the youth now-a-days is very reluctant. They do not want to roam and work hard by lifting the tiffin boxes and delivering them. Children of the dabbawallas are getting education and thus, they all are interested in doing a white-collar job. Currently, the association has most of the people in their 40's and 50's. After a decade, the association would surely face problems for hiring young and energetic employees.

# CONCEPTS USED TO DESIGN THE PROCESS

The factors that they have taken into consideration are:

- WORKFORCE: The association knew that no educated person will do such a painful and hard work of roaming and getting tan in the sun and collecting and delivering the tiffins to offices. So, they targeted the others who are just 7<sup>th</sup> or 8<sup>th</sup> grade pass. Thus, such people get an opportunity of earning for their families and the association got employees to execute their process.
- NETWORK STRUCTURE: The logistics of the Mumbai Dabbawalla Association is a great and a smart combination of the milkman route, the hubspoke model as well as the hub-hub transfer. Dabbawalla association has very efficiently used the concept of the reverse supply chain.
- PROCESS CAPACITY: The dabbawallas have 4 hrs from the point of procurement of the tiffins up to the delivery point. But they are efficient enough to complete the process within 3.5hrs only. It takes on an average 1.30hrs for the dabbawallas to travel in the crowded trains of Mumbai. The first step of procuring the lunch boxes takes around 30 mins. The sorting of the tiffins after procurement as per the destination places takes about 30 mins. The final step of delivery takes the remaining 30 mins. The dabbawallas still have 30 mins left in their hands as buffer time.
- TRANSPORT: The dabbawallas are very cost efficient. They have chosen the cheapest mode of transport in Mumbai. Indian railways connect almost every corner of Mumbai city. Also, it is the fastest route and cheapest route. Thus, the dabbawallas can cater to the entire Mumbai with the help of western railway line.
- STRUCTURE: The dabbawallas have a decentralised work culture. They have a flat organisation. They have just 3 levels so that the complaints and issues have a defined formal process. The management level, the mukadams and the dabbawallas are the members of the Mumbai dabbawalla association.
- DISCIPLINE AND CO-ORDINATION: The dabbawallas must be very disciplined. They worship lord Vitthala. Thus, they cannot consume smoke or alcohol while they are doing their work. Also, a proper co-ordination gives a smooth flow to the

### 3. CONCLUSION

Form the above information, we conclude that the dabbawallas association is a very sustainable business model. It is a mixture of various types of business models e.g.: milkman approach, hub-spoke model, etc.

Apart from this, when the individual dabbawallas are free after 5.00pm, they are indulged with the delivery of online ordered parcels via FLIPKART and PAPER AND PARCELS. Papers and parcel consist of the CEO of the dabbawalla and the CEO of paper and parcels, a 13year old kid, Tilak Mehta. He came up with an idea that how can the posts and parcels be delivered to people without much cost and in bare minimum time period. Thus, he spoke to the CEO of the dabbawallas association, Mr. Talekar. They agreed that this would be a great opportunity for the dabbawallas to earn more as well as a great support to a 13year old kid startup. The dabbawallas can delivery the parcels very easily and in one day. They just must collect parcels from the paper and parcel office and deliver them to the prescribed address. The dabbawallas are here paid a fixed amount per delivery.

Flipkart has entered into partnership with the dabbawalla association for its product delivery. As the dabbawallas know most of the places in Mumbai, it will be easy for them to deliver the goods ordered online and, earn more by working in the spare time. The dabbawallas must collect the order from the local stores and directly deliver the same to the customer's address. This effectively reduces the delivery time. Also, the shipping cost is nullified by this partnership. The individual dabbawallas are paid per order delivered. Thus, for one order delivery, they get paid Rs.20. If in a day a dabbawalla delivers 10 orders, he directly earns Rs.200 extra per day i.e. Rs.6000 extra every month.

### 4. REFERENCES

Ganguly & Debayandu, 2014. Food for thought: What makes Mumbai's dabbawalas successful, s.l.: Economic Times.

Linderman & Matt, 2011. *The incredible delivery system of India's dabbawallahs,* s.l.: Signalvnoise.

Masood, badri & davis, d., 2000. Operations strategy, environmental uncertainty and performance: a path analytic model of industries in developing countries. *Omega- The International Journal Of Management Science*.

Parmar & Beena, 2018. *Hindu Business Line,* s.l.: The Hindu.

Ravichandran, N., 2005. World class logistics operations: the case of bombay dabbawallas. *Research and Publications*.

SARUMATHI, B., SARANYA, B. & JOSEPH, A. S., 2014. Management lessons from the dabbawallas. INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT, 4(8).

Thomke & Stefan, 2012. Mumbai's Models of Service Excellence. *Harvard Business Review*.