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Lecture – 30 Network of Services

Hello, we have been discussing over the last few sessions about distribution of services. As you would have well understood by now that just like goods, services also need to be distributed to reach out to the customers or to bring customers in. Now, just as in case of goods, in services also, one primary purpose of distribution is to reduce the number of transactions and also to reduce the transactions cost overall, particularly, from the perspective of the customer and these transaction costs are both monetary and non-monetary type.

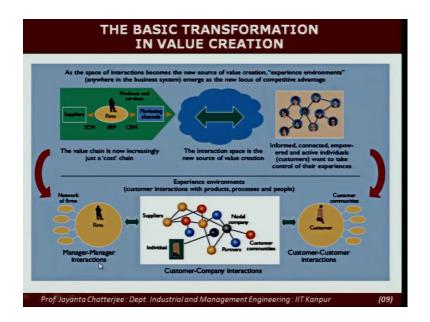
So, fundamentally therefore in service distribution, when we look at location, we always try to determine the location in terms of the consumer convenience. So, convenience, convenience, convenience is the mantra, which will guide our distribution network strategy.

Of course, sometimes we may also locate a particular service distribution point at a location, where infrastructure and resources are available. So, if you are constructing a large mall, which will act as a distribution outlet for number of different types of services some related, mostly related. You will try to locate it, sometimes may be outside the main metro area, so that in terms of travelling, consumers may have to travel too.

However, in terms of parking, in terms of other various non-monetary costs and in terms of the real estate cost and other infrastructural service costs that outside metro location may provide an overall economy, which will be beneficial both for the service provider and ultimately for the service consumer. Today, I would like to discuss few other a little bit more advanced issue in this context to conclude our session on service distribution.

So, this particular session we have titled as Network of Services. Network, because this is a modern idiom that we have already introduced, this the whole concept of value cancellations and value networks or the network view of value creation in services.

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You would remember that we have been discussing that this upper echelon, the kind of model business model represented by the upper part of this picture is now giving way to the modern concept, where we have networks of customers, we have networks of service providers and in the middle, we have also network.

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To clarify this, let us for example look at this picture, this could be actually the interior of any modern mall or a sort of large shopping centre. But, in reality, this is the interior view of one of the modern airports of India, as you know there are two modern fresh minted airports at one in Delhi and one in Mumbai and this could be an interior sort of any one of those or any other airport for that matter across the world.

And just as it shows here, this could be the interior also of a shopping mall or a large supermarket chain and so on. The reason being that today, the airports are not only networks of flying related services; that means, where number of aircrafts land, number of aircrafts take off, in fact 100s and 1000s of landings and take offs happen over the day. And related to this landing and taking off of network, aeroplane, we have number of other services, the fueling services, the maintenance services of the aircraft, the baggage loading, unloading; the passenger loading unloading and all other different kinds of services, which make a modern airport really a very large service factory.

However, these kinds of purely physical, resource heavy, big infrastructure type of service networks are now often complemented by different kinds of information and communication technology networks. Recently, when I was there at a conference in Norway, I flew from Helsinki the main airport of Finland to Trondheim, this, a main an interesting small airport of Norway, a beautiful city and the seat of a major university there.

Now, the entire process of accessing the network and doing the necessary steps, going through the necessary steps for checking in, for baggage deposit or baggage drop as it is called, a large part of that actually happened from my hotel room from my computer. So, I actually could check in on the web, I could print my boarding pass from my computer, I got the conformation or a view of the boarding card on my smart phone, which was acceptable, perfectly acceptable at the airport.

And when I reach the airport, I found to be surprise, this is actually goes a way beyond the kind of automation and self service technology that are deployed at our airports. Here, I could print out my final boarding card, I could weigh my bags and accordingly, I could print out my baggage tags. And I did my tagging myself and I took it to a particular route and there were barcode readers and once my baggage strips were read, I put them on the conveyor myself and the baggage was gone and I got it back perfectly, when I reach my destination later on.

Even the process of going through the so called security check, etcetera, they were of course, the physical security check was there. But, the checking of the boarding card and

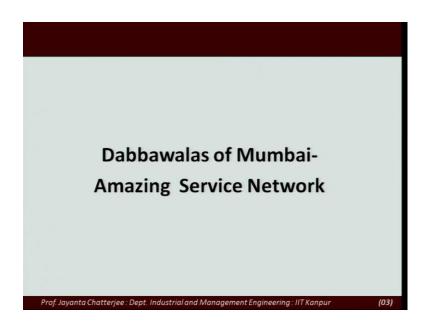
checking of the guidance to the right gate, everything was automated, everything happen through RFID, tags through barcodes and so on and so forth.

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So, as a result a lot of time was available free at the airport before my flight was to take off and that increased my time available for shopping. So, that is why, these modern airports by use of technology or creating networks or sort of outsourcing part of the network or pushing out part of their network beyond the physical boundary of the airport.

So, it is distribution over the cyber network and as a result, they are able to increase the value adds by way of consumer convenience, by way of consumer availability for other value added services like duty free shopping, etcetera. And on the whole, I think the consumer has less hassle, no queues, no problems with transaction with check in clerks and so on and the airport possibly has higher income through the longer time spend by the travelers at the shops and at the restaurants and so on. However, do not think that excellent, highly capable service networks necessarily need this huge infrastructure, deployment of high technology and so on.



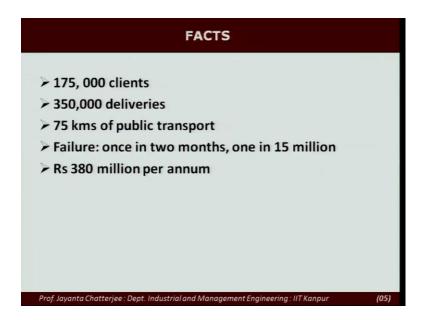
Because, there are examples like the famous Dabbawalas of Mumbai, an amazing service network using very little of information technology, they do use excellent information and coding techniques. But, what we normally mean by ICT, the mobile phones, the internet, the computers, those are not used by this excellent world famous service network. This service network is admired by academicians, by practitioners, the people who are supply chain experts; look at this wonderful network with all.

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And lots of questions are asked, whenever they come to IITs or IIMs or their representatives visit various other conferences. That how do you ensure the robustness of this distribution network or how do you deal with growth or what is going to happen, if you have more competitors and the world is changing, will the Dabbawalas change.

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Let us look at some of the fantastic figures they have, these figures are few years older, I am sure now all the numbers have gone up significantly. At the point, when this particular censes was taken, this particular study was done, they had about 175, 200 thousands clients, which means multiplied by 2. There are those many number of deliveries 350,000 near possibly today half a million deliveries are done.

Because a particular customer means one dabba or a tiffin box is delivered empty, which was used yesterday and the new dabba or the tiffin box is taken from the customer's home for delivery to the customers office. All of you know about this service, basically this service collects freshly cooked lunch from your home and delivers to the other end of Bombay, so people in Bombay mostly live in the sub urbans.

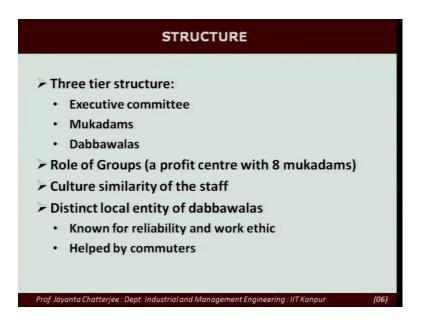
So, it is collected from your suburban home and then, delivered to the city center of Mumbai, the office area of Mumbai. So, it might be picked up from Mulund or Bhandup and delivered at Nariman point or Worli and it is delivered right at your table or in your lunch room and flawlessly. So, it is picked up the right dabba is picked up, right tiffin

box, right tiffin carrier is picked up from the right home and delivered to the right consumer at the right office at the right table, fantastic precision.

And every day, they deliver the previous day's empty tiffin box and pick up the freshly loaded tiffin box, 75 kilometers of public transport mainly the suburban railway system of Bombay, almost acts as a food trunk line. And the most amazing fact that we talk about six sigma, two parts in a million sort of failure rate and this people have one in 15 million failure rate, fantastic quality record.

And they are revenues, etcetera have been well discussed and the whole process if you want to observe, you should go to You Tube or go to Google and you can find a wealth of material and you can see actually the whole thing happening. And I think, there are famous movies also now released based on this whole process, I think that an excellent movie that was released last year was lunch box. So, it was almost a candidate nominee for the Oscars. So, you can also look at that movie and that movie is about something else about a very interesting romance, but it is based on this entire delivery system.

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The structure of the Dabbawala organization is very simple, it is just simple three tier structure and there are groups and mostly the people, who are engage, they are not really employees, they share the overall surplus; that is generated by the operation and so in a way they are entrepreneurs. So, this is actually a cooperative of entrepreneurs and there

all culturally very similar, many of them may be you know not graduates, they may be just educated at school level.

Therefore, rudimentary education, but high intelligence, I think that is how they kind of recruit themselves, they market mostly by word of mouth and by basically spreading out, so and referrals. So, this is the ideal example of customer advocacy, where customer is co opted as your marketer. So, if you look at their annual acquisition of new customers, it has been said that 80 percent or more of the customers actually are coming through referral of existing customers or introduced by existing customers. The people are also the serving people there of similar work ethic, they are very pleasant; people have a generally very good sense of working with them.

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SERVICE NETWORK
> Baton relay system
Hub and spoke arrangement
No historical, theoretical legacy in the design
No use of computer technology
Coding system
Decentralized at the group level
Workday schedule
> 30-35 deliveries (manageable)
Sorting, loading and unloading at peak rush hours
4 handlings of a dabba in a day- coding essential
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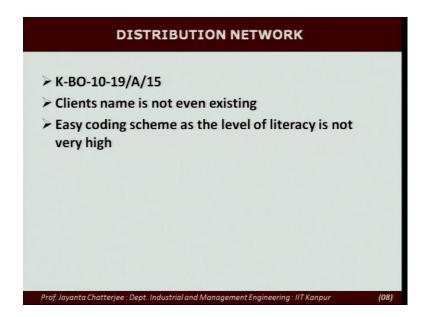
It is very important that today you know the Tiffin, the Dabbawala goes to the home of the consumer at a time, when people are away to offices and schools and colleges. So, you need to be very secure and feel safe that a person is walking into your home to collect something. So, you and this level of security, when we hear so much about taxi drivers, you know committing crimes or different other hired car drivers getting into some heinous crimes, the Dabbawalas of Mumbai have an impeccable record in that respect.

So, they use a simple relay system, the Dabbas are picked up from homes in a particular areas of Bhandup and delivered to the railway station. So, a particular person collects

from a particular zone and various pickup personnel from the various zones, then they congregate at say this Mulund station or Bhandup station and then, it gets onto the train and then, when it is unloaded at the other end for Worli or for Nariman point or Victoria terminus or at church gate. Then, they will be distributed again through a hub and spoke mechanism and ultimately to reach very fast the destination.

So, imagine that all these Dabbas are picked up within a span of about 2 hours and delivered. So, that the food is still almost hot and fresh. So, freshly cooked food delivered in a very short span of time from a distance may be 30 kilometers away to a destination and precisely location, it comes to your table.

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They use coding systems, I will show you the example of coding system as you see on the top line, this is the very simple coding system, they use which shows the origin as well as the destination. The client name is not even needed and the coding system is suitable for people of all literacy level. And the workday schedule, because this whole thing operates during the working hours, during this time of saying 10 to 4 and each person handles 30 to 35 pickups deliveries quite a manageable size.

And therefore, they distribute the load on people accordingly, so that there is less chance of human error and as I said, there are one Dabba is returned, a fresh Dabba is picked up and similarly, one Dabba is picked up, which is already been used and is handed over for the delivery back to your home, so for handlings per day. (Refer Slide Time: 20:07)



Now, the interesting thing is there are so many new types of competitors, which are now coming up, you know the fast food chain of different types, restaurants are proliferating. So, you can see here, there is a kind of a emerging battle between or among networks. So, fast food chains represent a kind of network, the restaurants and road side vendors or another kind of networks including the udupi restaurant and so on and this Dabbawalas they represent another network.

So, this almost like a spider versus spider, one network versus another network is the nature of this battle. So, not necessarily therefore some of them are high city based, so you do have now drawling of the venture capitalist the so called food delivery apps and food delivery networks like Zomato or Food Panda and so on. They use information technology, communication technology, social networks, social media and they use a smart phone apps and they act as aggregators as well as deliverers.

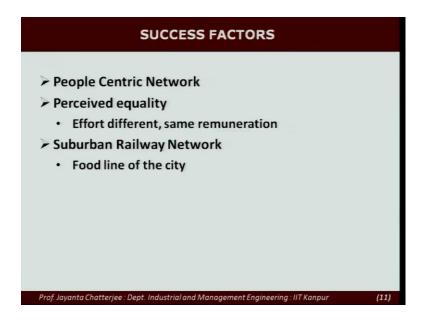
So, they pick up food from multiple restaurants and deliver to multiple customers. So, it is a model of many to many network and the question that comes up is that, this kind of business like Zomato and Food Panda now heavily funded, expanding rapidly, how will they look at this age-old business of the Dabbawalas or how should the Dabbawalas look at them. So, the Dabbawala success factors are in front of you.

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You know, these are entrepreneurs, they are not employees, therefore, there have there is no record of any strike. So, they are highly reliable, very flat structure, mostly a customer acquisition is through referrals and customer advocacy, word of mouth, recruitment of people are also through referrals. So, both service providers and service procurers are known to each other and that creates an exemplary service culture and the clients feels safe and very good record.

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Now, this people centric network, now in competition with many technology centric networks like the Zomatos, the Food Panda and or various other delivery services that are cropping up in most cities and some of them are now multiple cities. So, the question is, this largely human centric networks of the Dabbawalas versus this information and communication technology based food delivery networks, how they will compete with each other, who will survive and what shape will this services take 5 years from now.

 FUTURE

 Key concerns

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So, on behalf, you are invited to this assignment therefore, you are a service management consultant and you are to advice the Bombay Dabbawala organization, we do two slides. In the first slide, you tabulate you chronicle the key concerns, like these emerging competitions from Food Panda and Zomato, the competition from expanding fast food chains, expanding organized food chains like a chain called goli, which survives vada pav, which was mainly an unorganized street food now delivered in multiple hygienic packages from various outlets.

So, all these emerging forms of food, snacks, lunch, dinner, not dinner, but I would say packed lunch, packed snacks delivery system versus the Dabbawalas, what are the key concerns.

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And in the next slide, I would like you to therefore recommend as the service management expert that what will be in your opinion, what should be the key initiatives, the Dabbawala should take, how should they prepare themselves for the future, how will they strategies to be as relevant 10 years from now as they are today. Should they employee technology, should they change the structure of their service network, should they blend the human centric network with technology centric network, where should they go.

Thank you.