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Lecture – 29 Distributing Services

We are discussing how information communication technology based networks, not only the internet, but mobile phone network or mobile internet. That means internet delivered over smart phones, other devices like tablets or different kind of store forward telephone based networks, voice over IP, which we were discussing and based on that, different types of networks like Whatsapp, etcetera.

These networks originally were very beneficial to services industries as another very convenient channel for delivery. We have discussed how in services, consumers come to the service location like we go to the dentist or we go to a nursing home or the medical service can come to the consumer at home. Like for example, at home medical care or a respiratory assistance plant, a full oxygen supply plant can be taken on rent and installed at home and the whole transaction can be done are for renting over telephone or over the internet and the service will be available to the consumer at his or her home at his or her convenience.

So, initially all these ICT networks, telephone, internet, etcetera expanded the availability of service from 9 to 7 or 9, 11; it became 24 hour service, 7 days a week. It also sort of created possibilities for transactions that could be done as we saw in the previous discussion that is stay at a hotel, the core service could be supplemented by most of the other flower petals of the service architecture, conducted over remotely over the net or over the telephone and so on. So, initially the network was another channel for delivery of service.

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So, we would have titled therefore this section as you see on your screen, delivering services in cyberspace. So, we have physical stores, physical touch points for service delivery and then, we have cyber touch points or virtual touch points for actual service delivery. But, soon we understood that network, all these technology based networks were not just another manifestation of channels as we were discussing with examples.

They started transforming original services and creating many new types of services, for example in Hong Kong, they introduced octopus, which was initially a contact less prepaid card for paying the fare on Hong Kong metro. So, in the rush hours, you did not have to even take out the card from your pocket and present it to the machine, if it was in your pocket, it sensed that you have got in and it automatically debited the fare, when you went out.

Initially, you have to take out your wallet and just present it in front of the sensor pad, but nowadays it just senses as you get on to the train or metro or you get off. But, soon it was understood that this card, which was called octopus and rightly named because just as an octopus had number of tentacles, it was conceived that this stored value card, sort of a debit card, sort of a prepaid card could be used for multiple other services.

So, based on this octopus, all kinds of micro-payment services were developed in Hong Kong, many of those were actually created by the users themselves, they innovated many different types of usages. Today, nothing stops Delhi Metro or Bombay Metro to issue

such cards, which can then be used for different kinds of small value payments for buying snacks or drinks or small grocery items and so it becomes a parallel or an alternate firm of payment. And based on that, many different cash less transactions become possible, enhancing the throughput of services and creating different sort of more efficient delivery mechanisms.

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Or for example, take these shots that we discussed before that these technologies therefore create now service processes, which are different from before, you do not have to queue up any more, long queue at the airport; you can do self check-in using the self service technology offered by this machine. And then soon, these check in could be done on phone and now, you can do the check in on the net; you can even print out your boarding card.

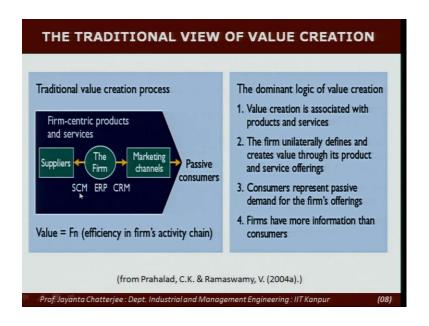
In some cases, you can print out your luggage tags remotely from your home and just deposited at the baggage counter at the airport and if you do not have check in baggage, you have already printed your boarding card, use straight go to the boarding gate. Increases efficiency, decreases demand on infrastructure, in a way also decreases demand on for energy, space and so on.

Over all changes the economy of the service delivery or for example, the ATM, you all know we discussed it before that ATM transaction vastly reduces the transaction cost of a human terror sitting in a physical branch. The virtual delivery can create new service

opportunities, you can take payment services to interior villages, you can create direct delivery of social benefits to people in villages.

So, the point that we are discussing that cyber networks, information communication technology based networks are transforming service delivery, creating new services and opening the doors to many different types of innovations.

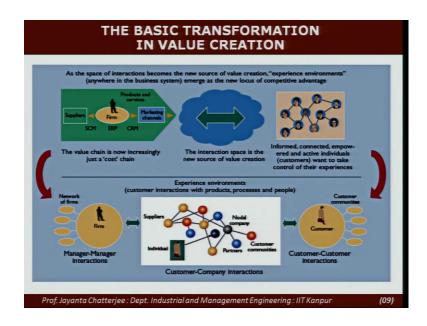
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So, we will go back to previous slides, both inspired by the seminal work of C.K. Prahalad and Ramaswamy, which pointed out that originally organizations operated within it is own sort of boundary. So, to the consumer, a passive consumer that was kind of a black box, so the organisation within itself had operational processes like supply chain management or enterprise resource planning, etcetera.

So, it had connection with suppliers and it had connection with the deliverers, the channels, the topic that we are discussing in these two sessions. So, the channel partners, the organizational operations and the organisations suppliers were in a network, but which was sort of opaque to the consumer. But, what we see today that because of these proliferation of different types of ubiquitous networks, technology based networks that opaque's structure is giving way to a very transparent fluid constellation of networks.

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So, now as we discussed before, the organization the firm itself is part of a network, it is suppliers, it is partners, designers from outside, universities, other knowledge sources, this is one network. Consumers are also in their own network and these two networks interact with each other also our networks and very interesting innovations are derived. For example, today consumers can firm, can be part of many networks, it could be a network of people over 50 wanting to go on a pleasure trip across China.

They can negotiate using a network intermediary like make my trip or Yathra and so on, Goibibo so many of them and using the connections of this network to networks of hotels, airlines, tour operators, tickets for opera shows and so on. A whole range of complex transactions can take place, which allows the consumer network to negotiate better prices from the network, which is on the supply side and there are networks, which facilitate this more efficient transaction, bringing bulk transaction discount to individual consumers. This ability of consumers to quickly become part of a network; obviously, highly enhances their negotiating power and creates many new service delivery opportunities.

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➤ Technological Innovations ■ Development of "smart" mobile telephones and PDAs, and presence of Wi-Fi ■ Voice-recognition technology ■ Websites ■ Smart cards • - Store detailed information about customer • - Act as electronic purse containing digital money ➤ Electronic channels can be offered together with physical channels

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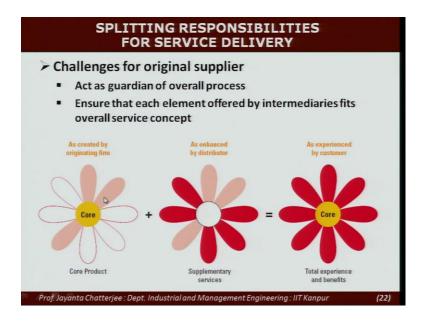
On the service delivery site, we will soon see some other interesting possibilities, but before that, we just want to highlight like Wi-Fi, like voice recognition technology, smartcards, like octopus that I mentioned. All these are kind of becoming a part of a product service system, a confluence of physical channels and virtual channels.

So, the technologies create building blocks, the building blocks are put together often by the customer or the consumer in innovative ways facilitated by network platforms like Google plus or Face Book or Yahoo or many other platforms and thereby, it is not only the advantage of having a virtual store; that it is available 24 hours or you can have better prices, because some intermediaries are no longer required or some physical infrastructure will no longer be required to store 1000s of books.

You can buy now books from various services like Amazon or Flip cart or other Snap Deal, where the suppliers also benefits because, they do not have to accumulate a variety of products in a very large ware house, they can transact with each other. So, fundamentally, they can manage a service like, a Flip Cart can manage two constellations, the customer constellations on one side and the supply constellations another side.

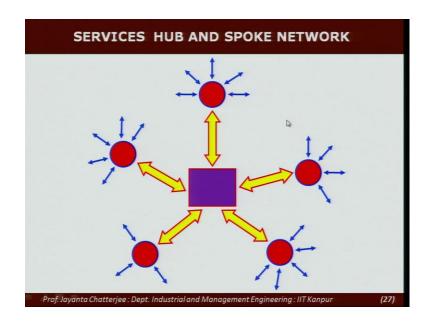
So, you may want one book and one reading glass and one interesting table lamp and they can come from three different sources and can get accumulated and delivered to you. Networks on one side, networks on the other side being connected through another set of networks, so these also allows us to know the customer's better, by us we mean the business site and once we know the customer's better, we can connect them to other customers of similar tastes of similar requirements.

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And that is creates this new role for intermediaries, so earlier intermediaries took the service, they might have added some enhancements like some supplementary services. So, you could buy the refrigerator, the intermediary could give you some power conditioning equipment, voltage stabilisers and so on, they would also add installation service etcetera. So, the intermediary added some supplementary to the core and delivered.

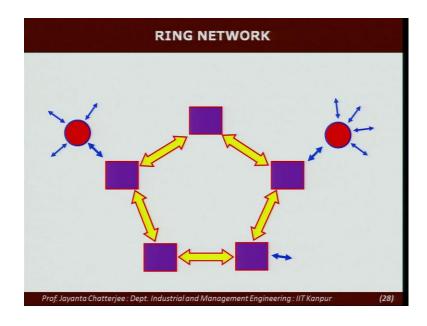
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But, today the role of the intermediary is not this kind of a plus b, going to c, but the role of the intermediary is now more vary it. So, that intermediary is the can now take different shapes creating different types of networks. We can have the traditional hub and spoke network, this is the poor supply. So, this is for example, Indian railway operating through IRCTC.

They can have agents, either they can deal directly with customers or they can deal through IRCTC agents and deal with number of customers and the service will be delivered.

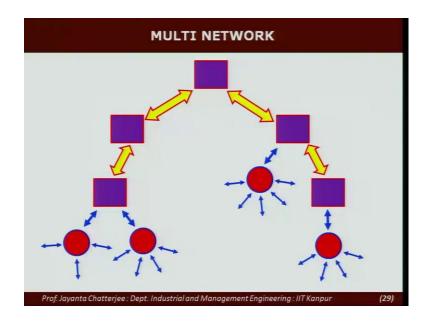
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But it is possible, not in case of many are railways, because of various regulatory reasons. But, it is possible now for number of customers can come together and negotiate for a trip and these customers may not even have known each other. But, they might have been brought together, because they want to visit the same locations in Europe at a particular period and they are all approaching a network like Make my trip or Ibibo.

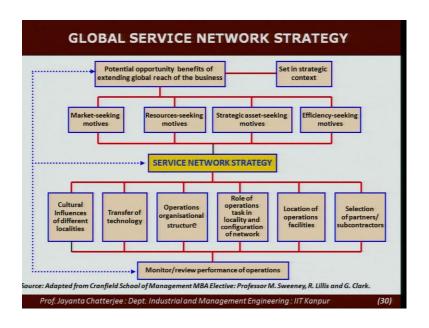
And they are brought together this they become a negotiating block and they can now start negotiating with different networks of tour operators, hotels, transport services and so on in Europe and can create a very attractive tour package. So, fundamentally the networks are creating what we call digital business ecosystem. So, from plain vanilla role of intermediaries or service delivery partners, we are increasingly seeing customers procreating with other customers, value propositions by tapping into networks of service providers, there are multiple formations possible.

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And I would like you to see these three diagrams rather leave aside, this traditional hub and spoke, but look at these two networks, the ring network and the multi network. And see, what a service delivery mechanisms can be improved innovative new services created by thinking innovatively on the power of network and can be very lively topic for discussion on our forum and look forward to your inputs.

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I will only leave this interesting diagram in front of you; this is adopted from one of the interesting work done at Cranfield School of Management. So, here we look at the global

service network strategy, this is to inspire your thinking for service innovation. So, alerting to you from this research work that there are information of this network strategy, there are market seeking motives, resource seeking motives, some strategic asset, complementary asset of each other seeking motives and efficiency seeking motives.

These motives drive the service innovation over network, there are of course, when you go global as we were discussing, many services today as they are born, their born global. So, few create a service like Flip Kart in India or Goibibo in India, they will global, if you create a service like Uber in Germany or Ola cabs, they can very easily go global, this diagram will help you to understand that why they can global go global so easily today as opposed to yester years, when services like star bucks or federal express to yours to expand across the globe.

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	Supplier		Retailer			
	Design	Manufacture	Sales	Service	Logistics	Customer support
Networks		Component manufacture in China	E-P store network	Regional engineering territories	National Distribution centre	WEBSITE
Technology	CAD system	Machines CAM system		Call monitor		Diagnostic equipment
Information	Customer and competitor information	Schedules Quality systems	Customer Database	Service History Call racking	Schedules Routes	Support diagnostics
People	Designers	Production staff	Sales staff	Engineers	Drivers Warehouse staff	Engineers Support staff
Materials	Drawings	Raw materials Work-in progress	Product in store & on Web	Spares	Product Spares	

And lastly, a very important point that traditionally we looked at service after the goods were manufactured designed and manufactured and sold service was thought off. So, service was often called after sales service, but think deeply over this particular diagram, and you realise that today, when you buy an appliance say washing machine or a refrigerator or a TV. You have this access to sort of a how many channel retail service that gives, you can buy over the net you can go to a physical store.

So, there are all these different types of these physical as well as virtual stores; that are available, where you can acquire. But, time will come, it is already there in computers, where you can start at the very end, you can interact with a web-based service, available for in Dell computers and many other today. You can configure your own computer, the monitor or the memory size, the kind of CPU and everything.

And then, it will go backward and it will fetch, it will trigger a forward moving action of component sub assemblies all coming together and finally, getting delivered installed operated at your place. So, earlier this was like a tale, today this tale is whacking the whole system, so the end point, the customer is highly empowered, because of these networks and the networks firming ecosystems.

As a result of which time is not far, when you can in figure with your own mobile and your own personal desires and it will be delivered to you and very interestingly, education which was quite regulated and straitjacketed for delivery. So, you had bachelors, master, different courses, degree certificates and so on. Physical delivery places like the colleges, universities, institutes, may all give way particularly for the higher education to customer pulled personnel requirement twice compiled, knowledge packages.

Compiled from different sources over a network and delivered in different ways to the end consumer over networks. So, this diagram that we saw for newspaper, giving way to something like this music, giving way to different network enabled service like these may permeate and transform very traditional services, like education or health care.

Lot of innovation are still to come, but they are coming and I would like you after today's session to look at those three network diagram that I am presented to you or rather five, this two diagram from Prahalada Ramaswamy work and these three diagrams and these three types of networks to inspire your discussion, your interaction with peers in this course or to think purpose possible new service that will be beneficial that service providers as well as service consumer.

Thank you.