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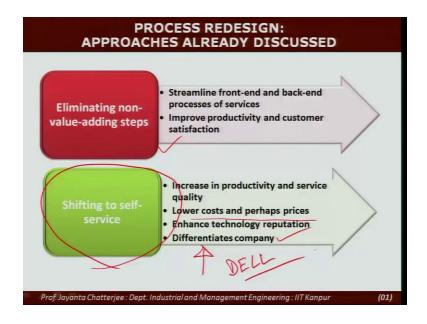
## Lecture – 17 Customer Co-Creation of Services

Hello, I am Jayanta Chatterjee from IIT, Kanpur and we are interacting on this interesting topic of Managing Services and the contemporary issues in the service business in today's world. In the concluding part of this week, in this session and in the next session we will be covering part of the subject which we have already touched upon earlier, which relates to self service technology.

But, really speaking I think the highlight of these two sessions will be this exciting new area of lot of research, lot of new developments and lot of insights that are being contributed by researches from social science, from management, from industrial engineering and from different other disciplines in the domain of service science. In fact, there is a new notation which is called SSMED which has many sponsors, many academicians, many organization as sponsors, as participants.

And SSMED stands for Service Science Management Engineering and Design, which again highlights the point that we had covered during the first week. That service today must be thought of as a system, product service system and it must be looked at from different perspectives. And this multi-disciplinary approach is enriching the service science domain very rapidly and we will see some examples during these two sessions.

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First, I think you will recall this slide which I had shown earlier, I am only showing the last two blocks of that particular slide, that in process redesign when we want to increase efficiency and productivity. We focus on these two areas, one is eliminating a non value adding steps; that means, we try to collapse different stages, so that the customer does not have to run from what we colloquially call pillar to post. So, reduce the number of touch points and make each touch point more comprehensive and more capable.

So, build in more competency in to the touch points and as you recall we also talked about seem less service, which also that approach is helped by this enriched touch points, where service employees are multi skilled and they can actually take on each other responsibility as needed, as a fluid formation on the food ball ground by an expert team. So, that the ball is not dropped and the customer gets a feeling of a smooth flow through the service process.

Now, these things we have discussed before, we did briefly discuss about this interesting area of self service, also known as SST that means Self Service enabled by Technology. This is done mainly to ensure repeatable standard response from the service system and as I take on examples, you will immediately see why we say that. It obviously, also in reduces cost and therefore, may be the service price will be reduced.

And sometimes with clever deployment of technology, encouraging the customer for self service can actually differentiate the company and you can give a competitive advantage.

A great example is Dell computer, Dell computer allowed customers to configure their computers online by clicking on selection menus. So, you select the CPU size, you select the kind of graphic capability, you need select the memory size, you select the screen size, the terminal design and so on and you click, click, click, click create the computer to your choice.

So, you become the end of line system designer and even though the customer therefore, is performing some of the functions earlier performed by employees of Dells computers, earlier computers. In those days, even IBM was in personal computer business, but they also had the traditional structure of reaching the customer through distributors and agents and so on. And so the configuration work was done by employees of the companies like IBM and their distributors and their agents, all those functions of their employees, sales employees by taking over by the customer himself or herself with the help of information and communication technology.

And even though therefore, customer detail lot of work which was earlier done by employees, the customer in fact instead of feeling irritated, a research showed in most cases felt much better. Because, they felt in control of the process, the felt that they have participated in creating their own computer, it enhanced the sense of ownership. And therefore, on the whole it created a differentiation for Dell and it created a competitive advantage for them.

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So, this is a diagram which simply shows that there can be different level of customer participation. So, at the lowest level the customer has very in significant role, may be they just ordering the food and so on, most of the stuff are done by the staff of the organization. On the other hand, there can be high involvement of customer, where most of the work will be done by the customer and these are the ((Refer Time: 07:27)) of so called high and SST.

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The advantages we have discussed, but we can again look at it. So, for example, if you have a ATM machine which is available to you 24 hours 7 days a week, 365 days a year, you do not have to depend on long queues, you do not have to depend on the lack of a tension from the teller or bad behavior from the teller. On certain days, you have very consistent, very reliable service which is the ATM, which is now pretty well known around the country and used even in rural areas with a little bit different design.

Now, one of the things; obviously, we see immediately that whenever we are using self service technology, there is a certain amount of competency that you need to develop among the users. So, customer education becomes an important part to enable self service technology. Advantages in many other services are quite clear, that instead of long queues at the airport, which is irritating for the customer, takes a lot of time, engages lot of employees from the airlines side, airport side and also introduces some uncertainties with respect to timely arrival and departure of flights. All that can be

mitigated by more and more use of technologies like self checking or web checking or telephone checking or a combination of both. These can therefore, contribute to repeatable, standard, good quality, high quality, response from the service system and that is why we are deploying more and more of this SST instances in all most all service processes.

So, even in restaurants across Europe, now a quite popular deployment of SST is the table itself has a portion, where a touch pad tablet is installed, where all the different menu items are shown with a updates for the day. Today special menu will be shown, all the ingredients of that, all the details about that particular dish, you can actually search in various languages from your table. And you can make selection on your table through this self service tablet and a table top, which integrates with the tablet.

And the order reaches the backend and then you can either go and collect it from the delivery counter or it can be served. In most cases, because of this lack of service personal in a population, low population countries like Finland and Sweden and Norway. More and more restaurants are using the different types of SST facilities as well as self service and yet people feel good, they get a high level of reliable response from the service system.

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Customers can influence productivity and quality of service processes and outputs

Customers not only bring expectations and needs but also need to have relevant service production competencies

For the relationship to last, both parties need to cooperate with each other

So, a point can be made here that is SST or Self Service Technology systems can be what we call fixed response systems or program response system. So, fixed response system

like say tollgate at various, on high ways are now automated, so you do not have to go and pay to a person, you throw some coins of the requisite amount and the gate automatically opens and you drive through.

Even parking lots are now, you actually as you enter you take a ticket and as you go out, you insert the ticket in another machine, it shows how much you have to pay, you put the coins through the slot and the gate opens. Now, these are instances of fixed response SST's as we call them, but or fixed sequence, but there can be variable sequence and variable sequence instances are like the self checking or ATM.

These are all variable sequence, because different people have different needs, somebody may be wanting to check their balance, somebody may want to check balance as well as draw some money. Somebody may use the quick pay facility where fixed amounts are tabulated, somebody may have a particular amount which is outside that.

So, if you want to draw 15,400 rupees you will not be able to use the quick payment, but all these variable responses are available from the ATM system. Self checking, somebody may want to check in for two flights in conjunction or somebody may be just checking in for one flight, somebody may checking in without any check in back age, somebody may be wanting to check in back age. So, these are called variable sequence self service technology systems. Fundamentally SST therefore, means that customer will play the part partially of an employee.

Now, just as an employee we have discussed in detail and we will again when we look at people issues in service, the productivity and quality of service depends a lot on service personnel, that is why even sometimes people say satisfied customers can only be created by satisfied employees. And we will look at all these people management issues and the particular challenges in the service industry in the later session. But, if the customers therefore, as service employees can influence the productivity, can influence the service quality and outcome, then customers must be met competent to do the function properly and that is quite clear from our this diagram as we have discussing.

So, if you want to deploy ATM in rural areas, where men, women can easily use then; obviously, you have to make the ATM use as friendly as possible and also provides certain training to the customers to use it properly. So, this competency build up is important and; obviously, there has to be a continuing sense of happiness or minimum

level of satisfaction. So, that the relationship I can last and both parties can co operative which other. So, that you do not start clicking the machine you rather actually enjoying the company on the machine.

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➤ SSTs are the ultimate form of customer involvement where customers undertake specific activities using facilities or systems provided by service supplier

Customer's time and effort replace those of employees

Information-based services lend selves particularly well to SSTs

Used in both supplementary services and delivery of core product

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And; that means, that there are lot of challenges in user interface design. So, this man machine interface design therefore, is now becoming a very interesting a study and research field in the domain of technology and about service. So, SST's are to summarize ultimate form of customer and involvement they take specific part and more and more information based services or now using more and more of SST.

So, for example, if you want to know your current balance at your bank account till very recently people went to the bank and stood in the line and got their passbook updated. These days you can just call and through a very secure system of passwords and etcetera and you can access, you are balance information just interacting with your telephone, but at the back end of course, there is a computer of the bank. So, these are called IVR system as you know for example, Interactive Voice Response system widely use now in by banks, by customer service departments of mobile, telephone companies or and various other services.

So, wherever the basis of transaction is information as suppose to experience a cystic can be very well deployed, some even experiential services like for example food massage or back massage for tired travelers after long flight and now available as a SST, you just

drop in a few a coins and you sit on the special chair and you can select the menu and you can get the kind of massage you want.

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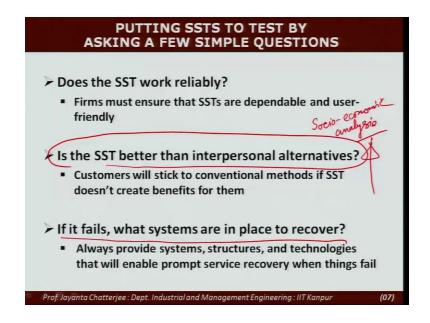
But, there are disadvantages of SST it is not all advantage like time and cost saving or flexibility or convinced. Because, you can ask your bank balance even at mid night which normally you would not had been possible in the human service environment. But, there are disadvantages like there are anxieties and stress related to security till very recently, till some of this double verification systems etcetera very introduced people felt hesitant to use a Tele banking or internet banking, fearing that they are confidential it will become compromised or somebody else we will be able to hack into the account and take away their money and so on.

Those possibilities have been vastly reduced by better use of securities systems and checking's systems, double verification system and so on. But, it is remains a point to consider while deploying SST that there will be a height and level of anxiety and tress on the customer side and therefore, you must design that into the deployment strategy, also there can be some services are seen as social experiences and therefore, people prefer to deal with people.

So, as I know that in a many bank branches they had actually reduce the number of tellers in India when ATM's where deployed. But, in some urban areas, where there are colonies having lot of retired people and for seiner citizens, now the banks have broad

back not exactly tellers, but more like relationship executives. Because, they understand that sometimes people customer's of this profile they like to interact with other human beings have some check chat while they are doing, they are banking and therefore, these relationship executives have been now re introduced in the banking system as suppose to earlier emphasize on as much SST as possible.

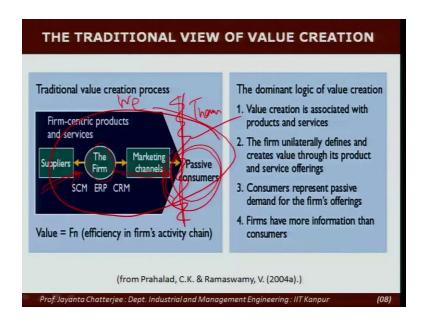
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Before therefore, deciding on whether to deploy or not deploy SST we should check on these simple questions that does the system work reliably is the response going to be again and again repetitively good is the SST better than interpersonal alternatives. Now, here we have to do a socio economic analysis; that means, you should not forget the human angle.

So, even though economically it may be beneficial to convert to auto machine, but it may create some silent irritation in customer's mind and therefore, you need to look at both sides of the equation. And most importantly we have to have recovery system when we use a SST. So, if the system fails then will there be a possibility to recover.

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So, that is all about SST, this session I will end with this particulars slight which shows you, the traditional way value has been created in organizations. So, we have this for the organization in the middle, there are inputs from suppliers into the organization which are then converted through process, operations and then through the marketing channel, so this is the supply a chain and this is the delivery chain you reach the consumer.

So, as you can see that is the clear distinction in this case between the organization and the customer. So, there is a set of across the table transfer as we say; that means, there is a some kind of we and them divide. Now, I have a leaved to this number of times and explain different aspects of it and we are going to take up in the next session this logic, the new logic where we want to dissolve this barrier, we do not want the customer to be passive, we want the customer to be part of the process. And how in today's world with that service oriented philosophy in many businesses we are bringing in this customer as co-creator with a lot of benefits and that is what we will take on in the next session.

Thank you.