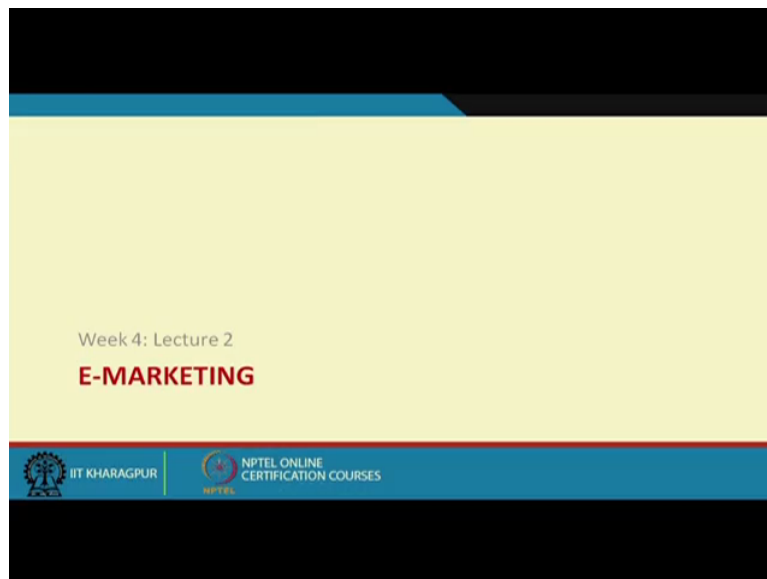


**E-Business**  
**Professor Mamata Jenamani**  
**Department of Industrial and Systems Engineering**  
**Indian Institute of Technology Kharagpur**  
**Lecture 17**  
**E-Marketing (Contd.)**

So we continue our discussion on e-marketing. So last lecture we saw how to develop an online customer.

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We can start with the online servers, we can provide facilities to make them online consumers, then from consumers we can make them prosumers, then we can make them the buyers and finally we can make them as the key customers who can be repeatedly contacted. Now this is about developing the online customers. But there are other activities in support of helping the customer and getting both more business. So what are those activities under marketing?

There are many activities which will actually help in all the 4 Ps of marketing. Marketing is about the product, making it designed, getting input from the prospective customers and designing the product, new product development, then pricing the product, deciding about the place of distribution and how to manage your distribution channels and how to promote your product?

So with respect to this 4 Ps there are many activities under marketing and now we are going to discuss how information and communication technology as help in improving this activities? So what are those activities? They are interactive marketing, sales force automation, sales management, customer relationship management, market research and forecast, advertising and promotion and product management.

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**Activities under Marketing**

- Interactive marketing
- Sales force automation
- Sales Management
- Customer Relationship Management
- Market Research and forecast
- Advertising and promotion
- Product management

**4Ps of marketing: Product, Price, Place, Promotion**

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So of this about customer relationship management and while discussing that we have also talked about your little bit about sales force automation and sales management as well. But we are going to have customer relationship management in great detail we have covered but others we are going to deal right now. So first is case interactive marketing. Interactive marketing is about making a two way contact with the customers.

So by two way contact we mean and both way contact we mean consumer will be able to contact the company and the company will be able to discuss with the consumer. And web has provide a appropriate medium for this which is not possible in your traditional marketing channels like advertisement channels like your radio or TV, etc. Now what are the tools here? The chats, discussion groups, web forms and questionnaires, instant messaging and email correspondence.

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**Interactive marketing**

- Two-way transactions
- Tools: chat and discussion groups, Web forms and questionnaires, instant messaging, and e-mail correspondence

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All these facilities provided by the internet and the web has helped in interactive marketing. Then the next one is your sales force automation and sales management. Real time capturing and analysis of sales data over the internet and providing decision support based on these data has helped the sales force to improve their ability to help the customers and capture the customers in a much better manner.

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**Sales force automation and Sales Management**

- Real time capturing and analysis of sales data over the internet
- Online decision support

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Then next is your market research and forecast. Market research and forecast traditional way of doing market research and forecast still remains but now the nature of the data that is that you may otherwise getting in your traditional medium has now changed. Now here without

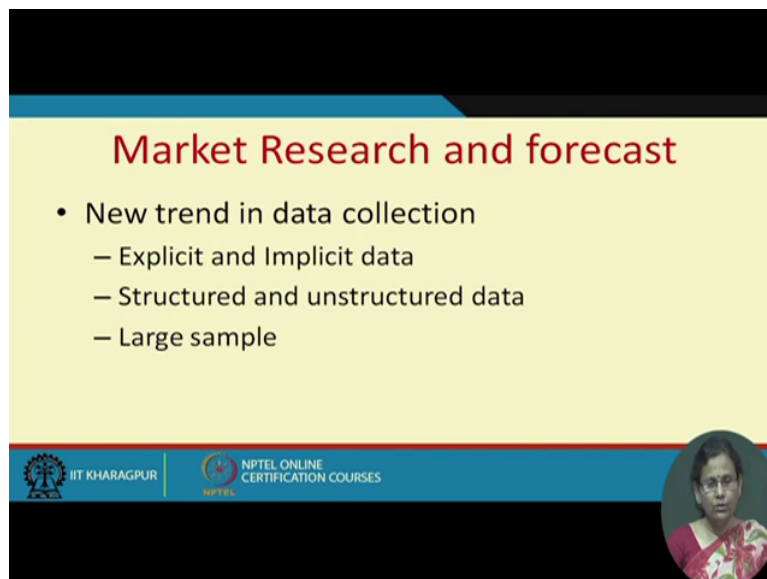
the customer's knowledge during web browsing you can actually collect huge amount of data. Either explicitly you can ask the buyers to give some details about the product, about the process, you can ask them for reviews and so on.

Otherwise implicitly by looking at this is browsing behaviour you can collect a huge amount of data. The data can be either explicit directly asking the customer or it can be implicitly collected by observing the behaviour of the customer. Then this data can be in structured form or it can be in unstructured form. In fact about this structured and unstructured data we have already discussed in one of the earlier lectures but (exam) structured data is basically with proper you can actually put the structured data in a tabular manner.

You can have proper rows and columns to put this data but in case of unstructured data they do not follow a tabular format. They can come in any format. The example of this unstructured data is let us say you are getting the customers reviews. So review data is your unstructured data. Now because of the web previously for market research your sample size was limited.

You can contact very limited number of customers. Now because of the web your outreach has increased. You can collect the data from large number of people. So increase in sample size and the nature of the data has now changed.

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**Market Research and forecast**

- New trend in data collection
  - Explicit and Implicit data
  - Structured and unstructured data
  - Large sample


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So along with your traditional way of market research companies are adopting many innovative ways for forecasting the market and doing research about the market. Then next is

the advertising and promotion. Of course advertising and promotion is the most important activity that has been the way it was conducted has been changed because of the internet and the web.

Now the original principle of promotion has now changed. For example previously companies used to have push principles.

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### Advertising and promotion

- Principles of Online Promotions
  - Push vs. pull
    - Push principles:
      - Promotion initiated by the provider
      - Customer is inundated with unsolicited information (spam)
      - Facility to subscribe and unsubscribe from a push channel
      - Customized push
    - Pull Principles
      - Demand for information is initiated by the user
      - User consciously selects or follows his associations
      - Fees may be paid by the user

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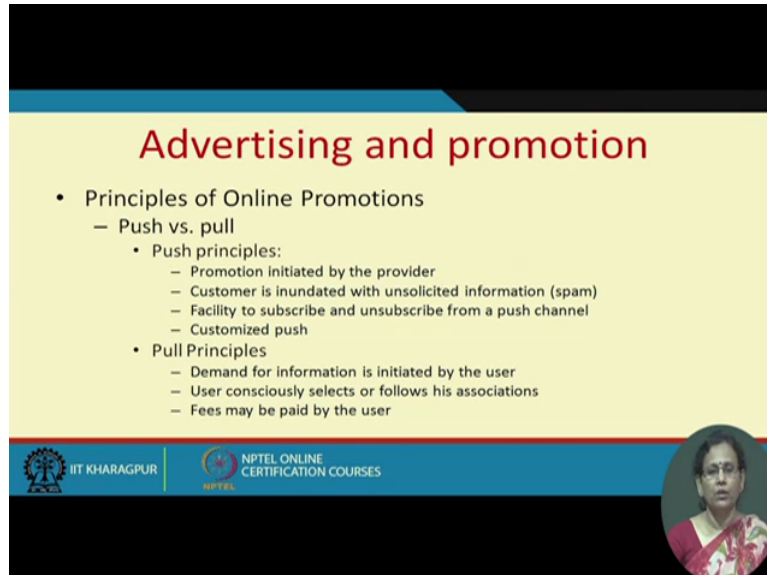
By push principle we mean the promotion was actually initiated by the provider, by the company or the agency who is in charge of promotion of the company. Now customers were actually inundated with (unso) unsolicited information or spams. You might be remembering the days when you were getting large number of such spam emails. And then in case you have a push principle you have to provide a facility to subscribe and unsubscribe from a push channel.

Many times this push is customized as per the users need. Then next came the principle of pull. In case of pull promotion the demand for the information is actually initiated by the user. We learnt about the customer models. So if the online customer model in that we saw if somebody is a online surfer and he is motivated by your company's products and product etc then possibly he would like to know more about you.

So in that case he may contact you because web is a two way channel unlike TV etc. So he may contact you and he can get additional information by the company. So here the user

consciously select or follows his associations with the product. And sometimes he may be so inspired by your product that he can even pay certain money to know more about the product.

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The slide is titled "Advertising and promotion" in red text. It lists the "Principles of Online Promotions" under a bullet point. This is further divided into "Push vs. pull". Under "Push principles", it lists: "Promotion initiated by the provider", "Customer is inundated with unsolicited information (spam)", "Facility to subscribe and unsubscribe from a push channel", and "Customized push". Under "Pull Principles", it lists: "Demand for information is initiated by the user", "User consciously selects or follows his associations", and "Fees may be paid by the user". The slide footer includes the IIT Kharagpur logo, the text "NPTEL ONLINE CERTIFICATION COURSES", and a small circular portrait of a woman.

**Advertising and promotion**

- Principles of Online Promotions
  - Push vs. pull
    - Push principles:
      - Promotion initiated by the provider
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Then what are various types of promotions? They can be through banner advertising. We all know that when we open a website there will be banners. Then on the click of a button you can actually visit an advertisement portal. There can be nano sites. So by nano site we mean you will be actually showing a new page to the customer without leaving your current page. So which means you can have a popup kind of thing coming out which will be a part of your current page.

Either a popup or in the form of a frame it is a new website but it will be coming in your current page. Then it can be a micro site. By micro site we mean you will be totally diverted to a specially designed site for that particular brand. Then you can have the branded content. So in that case a part of your current website will be dedicated for the brand. See in case of micro site you have a different website for the brand. In case of a branded content part of the website will contain the details about your specific brand.

Then you can have embedded contents. By embedded contents we mean you must have realized if you give a query in a search engine then along with the other details which are returned by the search engine some advertisements also are shown (ba) based on the QR search. This is one way of embedding within the content. Then you must have seen within a specific news items you will have a list of news items and in between there will be one message from the advertiser.

So that way also that is not with QR search. You are searching for certain news in a particular category of news and within that category of news you suddenly find out there is one link for a related product or service. So that is through embedded content.

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Then next thing is about how to target the components I mean the various targeting components for promotion. Now whom should you be targeting for promotion? First task is you should be targeting various communities. Now who are the communities? Communities are the virtual groups with similar interest. So you can customize the advertisement for special virtual community websites. Then you can target your advertisements for the content.

By content we mean the advertisements in the websites of other organizations related to your product or services. I was telling you let us say some shoemaker will be showing his advertisement in a website on which is dedicated to the sports. So next is the context. In case of context you target only at those people who are already looking for the information about a subject matter.

Now this kind of context oriented advertisement has become very easy in the web because you can actually track the customers activities, browsing behaviour implicitly without his knowledge.

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**Targeting components for promotion**

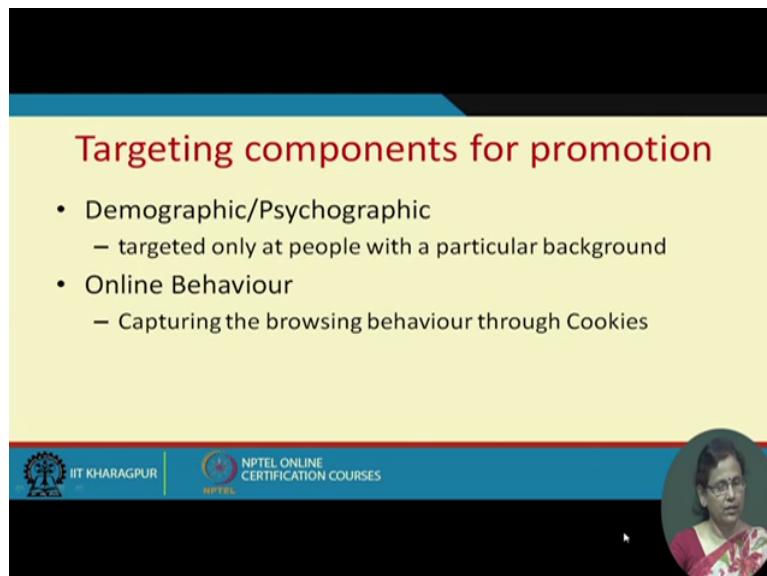
- Community
  - Customised advertisements for special virtual community websites.
- Content
  - Advertisements in the websites of other organizations related to the product/service
- Context
  - targeted only at people who are already looking for information about a subject matter

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Then next targeting component could be your demographic and psychographic details. So many times you provide your demographic and (psychro) psychographic demographic details to the company. And based on your background you will be getting advertisements. Then they can also study your online behaviour through cookies, your search pattern, etc. And they can appropriately fire advertisement to you.


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**Targeting components for promotion**

- Demographic/Psychographic
  - targeted only at people with a particular background
- Online Behaviour
  - Capturing the browsing behaviour through Cookies

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Then next is your product management. What are we doing? We are discussing about various activities under marketing and see how internet and web has helped improving these marketing activities? Now how this product management is being influenced by internet and

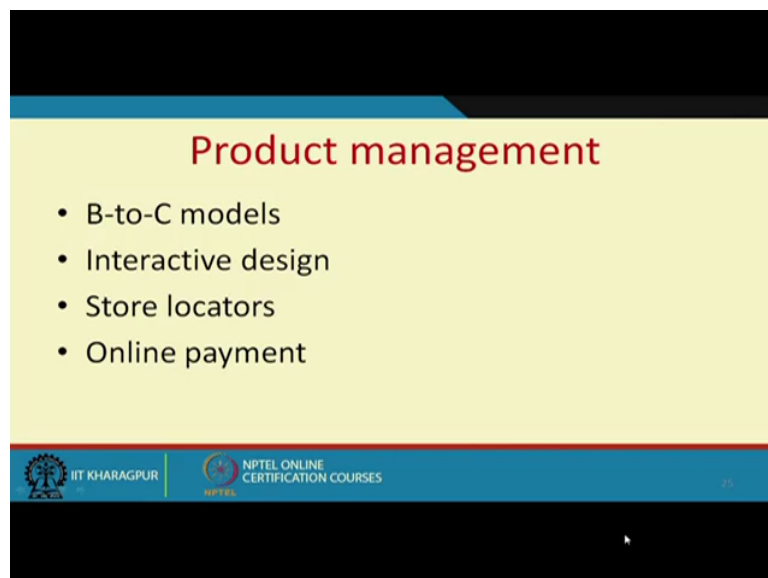


the web? First of all internet is the only medium who has helped the companies to directly meet the customers online.

So which leads to your B2C kind of models. Now you can also provide various interactive designs in your website so that in the presence of a person or with a specially designed something called a software agent they can be interacting with the company.

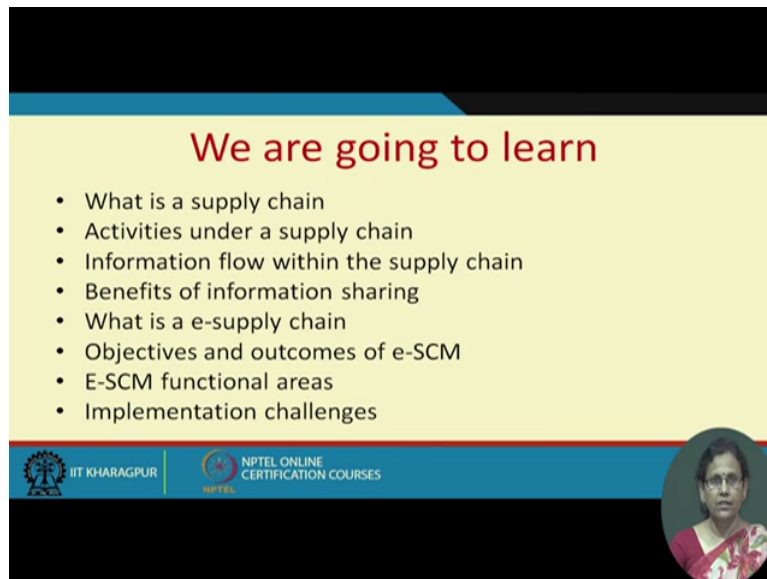
Then you can provide (locasor) the physical store locators over a map and sometimes even if you know your customer is mobile you know and he has allowed he is (shar) sharing his location then wherever he is located around that area whatever store is there that can also be shown, okay? Then providing this online payment facility is again another advantage of using the web which can directly help the customer to buy and make the payment there itself.

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So now we move to a new topic. The topic is on supply chain management. So in this topic we are going to learn what is supply chain management? What are various activities under the supply chain management? Then information flow within the supply chain, benefits of information sharing. Then we will see what is e-supply chain is? And objectives and outcomes of e-supply chain, various functional areas under it and implementation challenges.


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**We are going to learn**

- What is a supply chain
- Activities under a supply chain
- Information flow within the supply chain
- Benefits of information sharing
- What is a e-supply chain
- Objectives and outcomes of e-SCM
- E-SCM functional areas
- Implementation challenges

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To start with supply chain is a system of organizations, people, activities, information and resources involved in moving a product or service from the supplier to the customer.

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**Supply chain**

- A supply chain is a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer.

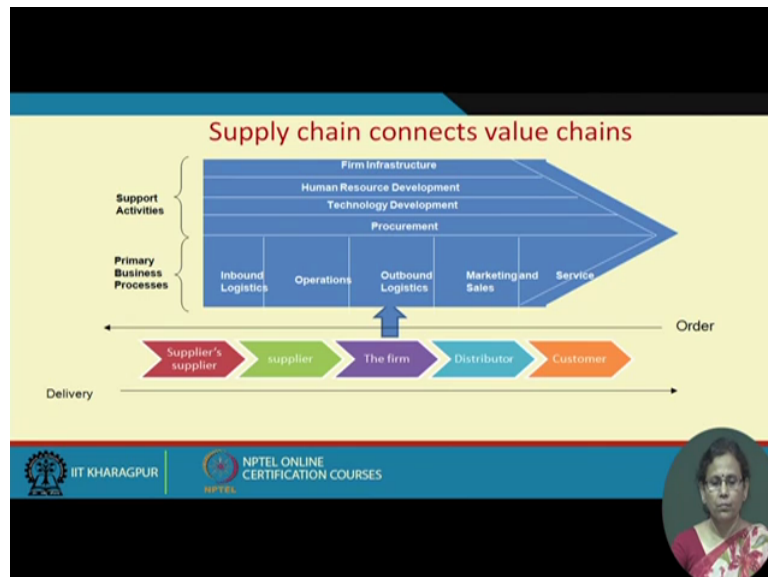
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In fact if you look at the value chain we have discussed it in a very first lecture that no company can actually without help of its channel members can directly reach the customers. You have to go through a number of channel members (direct) for example say even if we are talking about B2C models where a company is able to directly contact the customer but specifically when it comes to delivery of the physical goods you need channel members.

So even if it is an online marketplace or e-commerce company or e-commerce activity of a brick-and-mortar company you need online channel members. So the firm along with its channel members makes the supply chain. So supply chain actually connects the value chains of many organizations.

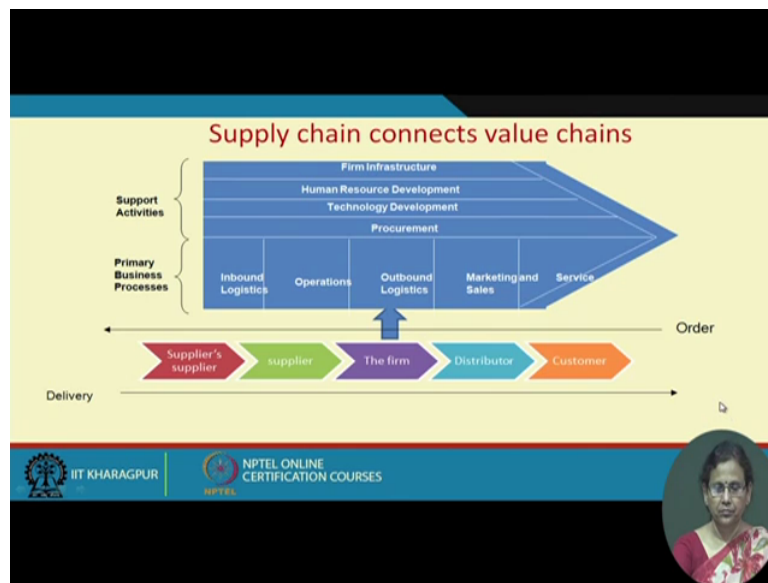
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To remind you what is the value chain? Value chain consists of primary business processes of a organization and many supporting activities. So every company will have their own value chain depending on the nature of the company. Maybe the activities will (differal) differ a bit but the fundamental principles behind these activities will remain same irrespective of the type of production service it is offering.

So if you look at this in fact in the first lecture if you remember we were talking about this supply chain as the value delivering network. So ultimately you will be delivering the value to the (com) end customer through your supply chain. So in the supply chain the order information from the customer moves down and the delivery of the actual product goes to the customer.

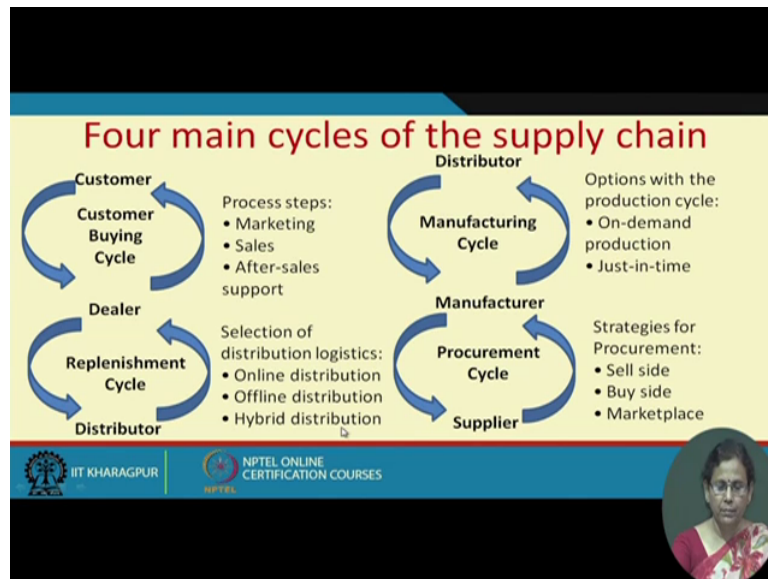
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So there are basically four main cycles in a supply chain. It starts with a customer and the first cycle is called customer buying cycle. So within this buying cycle it is between customer and the dealer and it has various steps. Contacting with the customer, I mean through appropriate marketing efforts, making the sale, providing after sales service, so all these things come under this customer buying cycle. Then you have your replenishment cycle.

Within this replenishment cycle which starts from the dealer and ends with the distributor your work is of deciding the distribution logistics, whether it is a online distribution. In case of a digital goods you can have online distribution. Similarly you can have offline distribution, you can have hybrid distribution and so on.

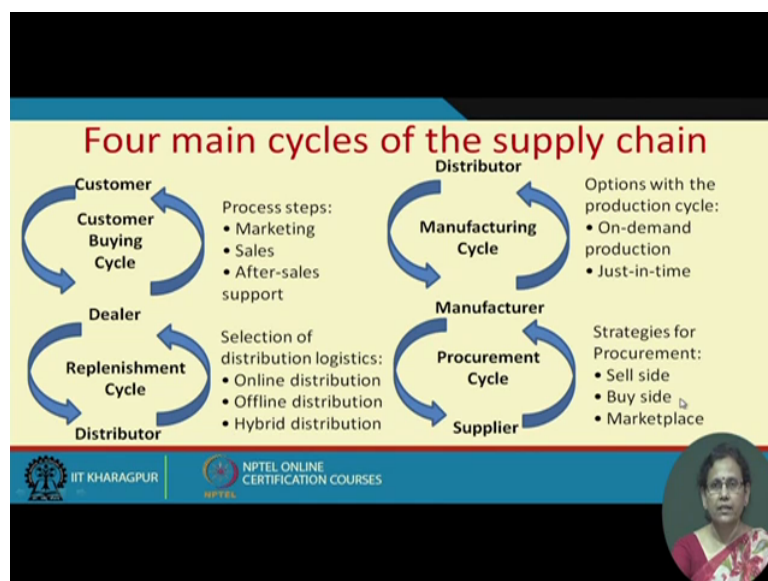
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Similarly next cycle is your manufacturing cycle if at all you are a manufacturer. Suppose you are an online retailer probably you will be placing certain order to the actual manufacturer. So from the distributor it goes to the manufacturer and for manufacturer by to the distributor. This is called manufacturing cycle. So here you can have online production or you can have just in time production in case of your e-commerce environment.

Then there is your procurement cycle. Now what are various strategies? This we have already discussed. We can have a sell side strategy during e-procurement we have discussed which is about catalogue. You can have a buy side and marketplace strategy which is about having B2B auctions or negotiations.

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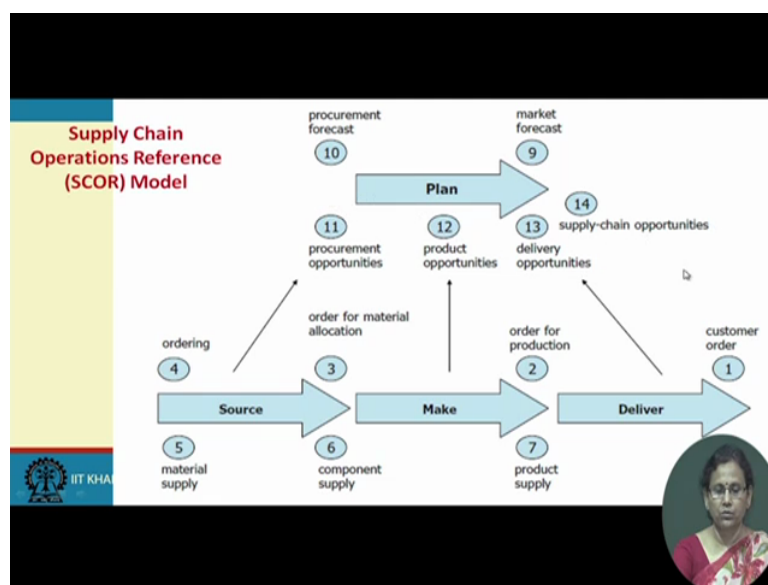


Now if you look at the operations within the supply chain then your supply chain operation reference model, the SCOR model, in fact this SCOR model gives the details of the various activities within the supply chain. So what are the major activities? So they are sourcing, making and delivering. And for everything you have to make a plan. So these are the major activities and within this there are many sub activities. So what are those sub activities?

It starts with the customer's order, then the order for production, then order for the material allocation, then order for ordering the supplier, then getting the material supply, then getting the component supply, then making the product and finally supplying it to the customer.

And in between within each you have to perform a number of planning operations like market forecasting, procurement forecasting, finding procurement opportunities, product opportunities, delivery opportunities and other supply chain opportunities.

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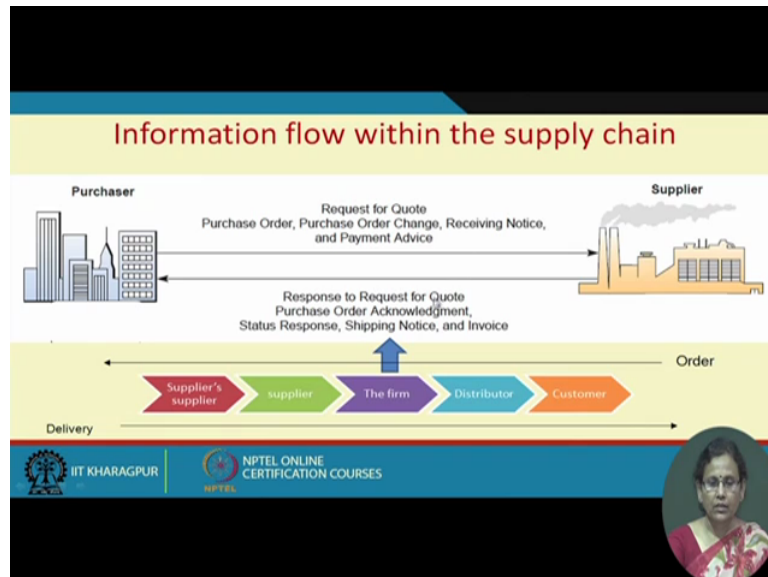


So now for carrying out the activities under this SCOR model when the company connects with its suppliers different kinds of information flow. From the purchaser to the supplier you send request for quote, you send purchase order, in fact you send request for quote in return the supplier sends you response to the quote, then you make the purchase order and then sent to the supplier.

The supplier acknowledges the purchase order and if necessary he may ask for the change in the purchase order. Then he can send you the order status information. You can send him the

receiving notice. Then he can (sha) send you the advance shipping notice and invoice. And finally you can have your payment process activated.

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So with this we finish our discussion and let us try to recapitulate what we did in this lecture. We continued the lecture that we had on e-marketing then we moved to a much broader concept which is your supply chain management. And initially we are trying to understand what are the basic concepts of supply chain?

And from next class onwards we will be moving to see what is the role of information and how this information technology has actually change and (sup) how the way the supply chain used to work? Thank you very much.