

**Management Information System  
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**Week - 04  
Supply Chain Management  
Lecture – 18  
Supplier Relationship Management**

Hello. Now in this session, we will be talking about Supplier Relationship Management. The previous section we were talking about supply chain management and suppliers or vendors are a very key component of the entire manufacturing and production set up.

So, we will talk about here how to deal with suppliers, how to maintain relationships develop partnerships etcetera. Because, again things have changed; things are changing the way we are manufacturing, the way we are practicing various business philosophies etcetera. In the last few decades 1960, 1970s of last century, they are no longer valid especially with advent of so much of technology that the way you work has completely changed. ERP is one for example, and it has become so much information driven. So, it is now all information and data driven.

And, we are depending so much on data and information, and management, and analytics, and big data etcetera that the management style itself is changing. So, we need to revisit all these things - classical things. So, new terminologies are coming up, new names are coming up, new areas are coming up in management.

So, these are all part of management. How we can do things? And, of course, the ultimate goal is same, that is, how we can do things better, faster, cheaper and smarter.



And, that is why we need trained managers, skilled manpower and smart people to implement such new management techniques.

Gartner defines SRM as; "The practice needed to establish the business rules and understanding needed for interacting with suppliers of products and services of varied criticality to the profitability of the enterprise".

So, that is very important. Gartner is a global consulting company, which does lot of reporting, management reports and they analyze performance of various companies, and then come up with critical reports for the CEOs and other senior management.

The practice is needed to establish the business rules and understanding again interacting with suppliers of products and services of varied criticality to the profitability of my enterprise. So, now I am directly linking them. So, I making them my partners. , If I have to be a successful business man, if I have to make profit, because that is what I want to do, I need them; I need to look at them as my partners. The view has changed.

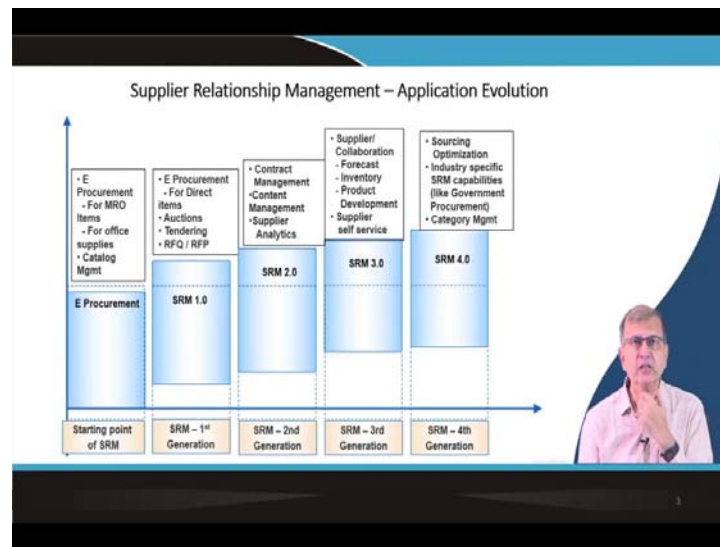
Meta is another Gartner type consulting group defines SRM as, "SRM is the system of applications that automates specific planning, scheduling, shipment, and payment processes between a manufacturer and its critical direct material supplier. So we are actually talking about critical materials only and common standard materials are not part of this study. Because, when we are talking about supplier relationship management, it is about the most value added components; what are the high value items, the critical components etcetera, which are crucial for the success of my business.

SRM systems track both data and process- interchange of flows, as well as provide the management and analytical tools to intelligently track the performance of direct suppliers based on benchmark, historical, and or contractual condition”. Because, again as these are crucial components.

So, I have to rely on them, for both quality and timely delivery. They should not get delayed. And, these could be for the suppliers of my vendors and it is a network of suppliers across the world. Say you take the case of very leading apparel manufacturing company in US, example Levis. Now, they are sourcing all their material for jeans or the denim from say may be India, getting stitched at Bangladesh and then, they are taking it back to US and putting some labels, marketing stuff and selling .

Now, that entire thing needs plenty of coordination. It is total depending on your information flow and data flow. Because, we are now in a connected network and they need to track the status. Multi country operations of movement of goods requires things like customs clearance and all that that processing takes time. Lot of documentation and paperwork is required, when material moves from one country to another country. Legal things are involved and you have to pay taxes when you leave the country and when you enter a new country, then you have to pay customs duties and things like that.

So, all these things take time and these are where you have to depend on third party and the government agencies. So, you have to be very efficient in your own operations, because some of the things you cannot control. So, the things which we can control is where we need to focus, so, that we can we make it faster leaner etcetera.



Supplier relation management- the history of it started with something like we call as E-procurement. E-procurement for MRO; MRO is for Maintenance, Repair and Operations where for things like aircrafts and automobile, and large machineries or transport equipment's, maintenance and up-keep is a major expensive function. This is a business by itself and is known as MRO business.

You need so much of components etcetera, for example, replacing the tires of aircrafts and also very expensive. So, that has to be organized very well. So, that is where E-procurement thing started for these MRO items. For office supplies and catalog management, say the bulk office supplies where you need stationary items like files, pens, pencils in bulk also E-procurement is being used heavily.

So, you can buy them in bulk at a lower cost when you go for E procurement. e-commerce using Amazon and Flipkart etcetera can also be called e-procurement. Usually we refer to e-commerce for B2C business and e-procurement for B2B transactions.

This is how SRM started, maybe 30, 40 years back. The first generation SRM is say is e-procurement for direct items. Auction's and tendering involve RFQ (request for quotation). For buying actual production items, whatever is going into my production is termed 'direct materials' whereas, maintenance and office supplies, are referred to as 'indirect materials'.

So, you started with e-procurement of indirect materials which is easier, but when direct material means, the quality factor becomes very important. Because, the component has

to get into my production systems. If, there is a problem, my whole production system gets impacted and delayed and my product quality gets impacted as well.

In the second generation SRM 2 dot 0, we are talking about contract management, content management, and supplier analytics.

Now, we are getting into more of analysis part. When we say contract management. So, what sort of contract? The content part of the contract has to be managed and that is being now done electronically. Tools like Internet and e-mails are making things easier and now you are getting into supplier analytics.

Whatever data is being generated, example- when it was supplied, when it was delivered, how much quantity, quality of that etcetera. So, now, you have started doing analytics and started ranking your supplier according to these analytics, according to their performance. So, whether he is my supplier of A, B, C ranking? So, depending whether he is a 'A' rated supplier, I will giving more complex orders or more quantity or critical items.

I can decide, which supplier to give what type of order depending on their performance and I am analyzing the performance, using analytics. In SRM 3 dot 0, Supplier Collaboration, Forecast Inventory, Product Development, Supplier Self-Service etcetera, so all these things are now coming in. Supplier self-service means, supplier knows what is to be supplied and, you depend on the suppliers. So, he just supplies it. Usually a long term contract is given to the supplier with a periodic (daily, weekly or monthly) schedule of delivery.

And, he gets paid electronically automatically. You do not have to check weight, quality check, and etcetera as he is a trusted supplier and he supplies and he gets his payment. There can be problems, yes, but then you can always you know consider a re-look. This is an interesting model and the supplier is interested in supplying to you and you become his preferred customer, because, he knows that as soon as material reaches the gate, payment hits bank. I do not have to wait for 15 days, for their quality check etcetera to be completed before the payment can be released. Thus it is a win-win situation for both the manufacturer and the supplier.

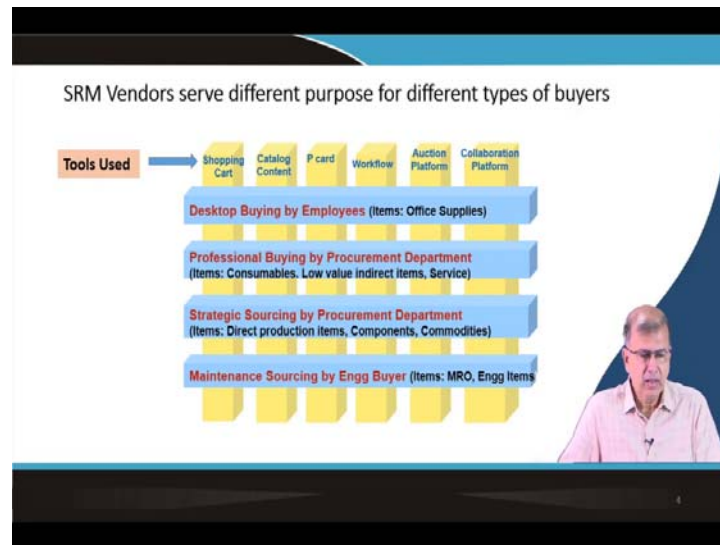
This is how the relationships build up for the partnership. Both parties have to trust each other and to maintain that trust you of course, have to deliver really good quality stuff, because you cannot go wrong there as otherwise the trust will break. A typical example could be Maruti and its suppliers. This model is also essential for establishing the JIT practice.

And, finally, the current Generation 4 is about - Sourcing Optimization, Industry Specific SRM capabilities, like government procurement, then Category Management etcetera. Category management is you have different categories of material so, you can manage them with different suppliers of different categories and your purchase department can also be defined as per those categories.

This is of course, true for large organizations, but not for medium or small organization where large organizations have different or multiple production units or multiple types of products. So, they have various types of products, so it is applicable for there.

In government level now it has all has gone into E tender, E procurement etcetera. So, one of the advantage or reason is that you can avoid corruption. For example, misuse in the manual tendering process there could be some chances of you know information leaks and somebody comes to know about the price and then accordingly quotes.

So, all those things can be taken care of in an e- procurement process and e-tendering situation, where everything is online and real time. So, nobody can really beat or game the system to you know do some misuse or corruption.



SRM vendors serve different purpose for different types of buyers. So, we are a buyer and you are a supplier and they are using number of tools. The tools that they use, some of these names we have also become familiar after all this popularity of e-commerce etcetera, which has become common for everybody. Terminologies like- shopping cart, catalog content, P card (procurement card), workflow, auction platform, collaboration platform etc.

So, we know what is a shopping cart? We also use it in Amazon when we put things in the cart to decide we will buy it later, but I am selecting the items so put it in my shopping cart. Then catalog content of course, what we see in that site the material content is the catalog. When there is a catalog available, then you can go into the details and see different view, the characteristics of the item etcetera and you can decide whether you want to buy that or not.

P-card is a procurement card where it is a prepaid sort of thing,- credit card sort of thing where the material comes in and the supplier gets paid. Because, there is a bank involved, which gives the guarantee. We will discuss again in next slide about P card.

There is workflow which is the information flow, which is happening. As soon as you raise a purchase order, vendor gets information, vendors becomes ready and he starts to deliver the material. As soon as the material comes in everybody ( e.g Production department) comes to know through your SRM tools or ERP systems etcetera.

And, here what you need to know that we are not really talking about a single factory. We are actually talking about large global enterprises, global companies, with multiple factories may be in one country or in multiple countries.

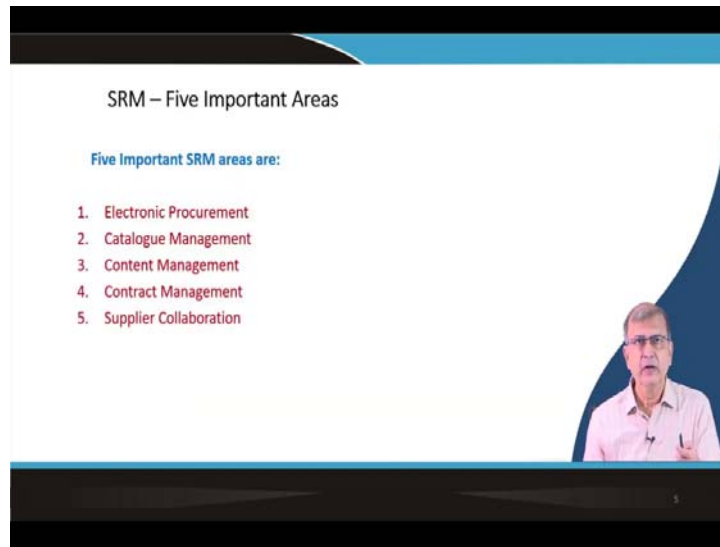
If you have to think in a big scale then you will realize how these automated tools, the management systems, IT (information technology) is playing a very big role in these and without these actually you cannot run such organizations. Today it has become so, important, so all pervasive that you cannot think of running a complex organization larger organization without the help of such tools, such software products, such IT systems.

Without an IT system you cannot today dream of running even any medium or large scale business. May be small scale yes, but not definitely medium scale or big scale. Like a bank for example - can you imagine going into bank and you do not see any computers.

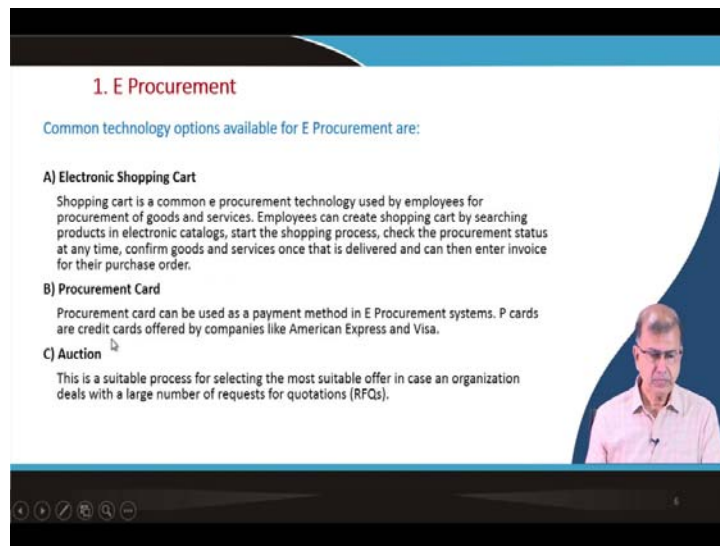
Desktop buying by employees (office supplies), Professional buying by procurement department (consumables, low value indirect items), Strategic sourcing by procurement department (direct production items, components, commodities) and Maintenance sourcing by engineering department (MRO etcetera). This is where we say that various tools are being developed by the SRM vendors to service these requirement by the organizations.

Because the organization needs these various types of material and the SRM vendors have become smart, they have also become IT savvy. So, they are also now investing lot of money in their IT systems, because they also have to match this requirement from their customers.





The five important areas of SRM which we will discuss are:- Electronic procurement, Catalog management, Content management, Contract management and Supplier collaboration.



So, electronic procurement is e-procurement in short, common technology options available, are Electronic Shopping Cart, Procurement Card and Auction. So, shopping cart we all of us actually now a days are very familiar with, check the procurement status at any time, confirm the goods and service once that is delivered and can then enter invoice for the purchase order again, very similar thing we also do on an individual basis when we place order on say Amazon or Flipkart.

Procurement card can be used as a payment method in e-procurement system. P cards are credit cards offered by companies like, American Express and Visa. This is what I was explaining earlier that, when a supplier, supplies a material he gets his payment immediately without any delay. It is something like a credit card when you buy something in a shop you pay by credit card. And, the shopkeeper gets his money may be in the next day or whatever. He submits that slip to this bank and he gets the money.

But, you are actually paying the money depending on when your credit card statement comes; may be 15 days later or 30 days later or whatever. So, the money from your bank will go out only 30 days later. Because, after you get your bill there will be 15 days or so of time that you are allowed for the credit. But, the shopkeeper from whom you got the item, he gets his money in the next day, but you did not pay and you are paying probably after 30 days.

So, this is the functioning of a procurement card, it is just like a credit card. So, the supplier gets his money as soon as he has supplied. But, the company will be paying the bank or whatever American Express or Visa, depending on whatever their contract is about credit days.

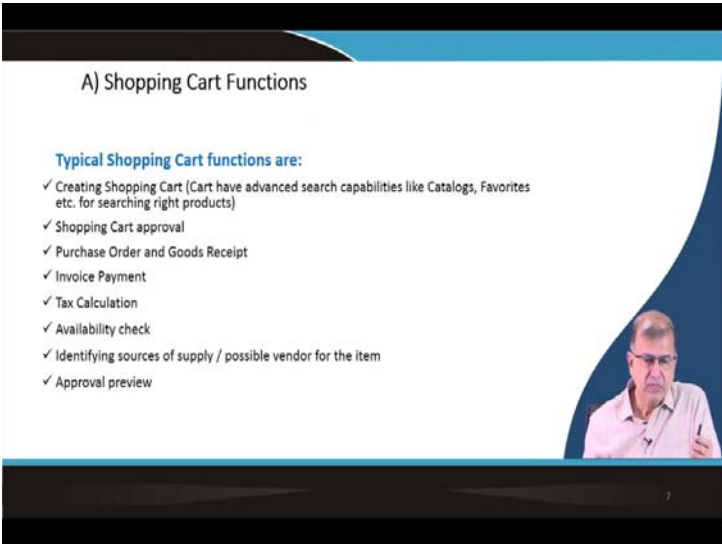
So, these two are not actually linked like previous days. The supplier will supply, then he will submit a bill invoice, then the goods will be inspected, quality check done, approved and then there will be a credit term agreed upon the between the customer and the supplier, for example. 15 days of credit is required. So, after 15 days, his payment will be released. And, then the bank they will prepare a cheque and the cheque will be physically sent to the customer, or he will come and collect the cheque.

So, it was a probably a 20-30 days cycle, but now the supplier gets his money the very next day. So, he is a happy supplier. See, if you are happy supplier, he will also supply you things in time, things in quality, etcetera. And, suddenly if you need something more, he will go out of his way to help you, by working extra hard, extra shift etcetera whatever he will do to meet your request and order.

Because, for him you are a number one customer, because he knows that as soon as he would supply the material, he gets his payment. In any business scenario that is the most important thing, namely, cash flow. How fast can I get my cash?

Auction is another e-procurement concept, which is coming in a big way. This is a process for selecting the most suitable offer in case of an organization dealing with large number of requests for quotation. And, as I told earlier also, it helps to bring in lot of transparency, integrity and honesty.

In auctioning process, where lot of things can go wrong, especially in government auctions, with all these E procurement transparency, those things have got almost streamlined. Most of the wrong doings have been eliminated.



A) Shopping Cart Functions

Typical Shopping Cart functions are:

- ✓ Creating Shopping Cart (Cart have advanced search capabilities like Catalogs, Favorites etc. for searching right products)
- ✓ Shopping Cart approval
- ✓ Purchase Order and Goods Receipt
- ✓ Invoice Payment
- ✓ Tax Calculation
- ✓ Availability check
- ✓ Identifying sources of supply / possible vendor for the item
- ✓ Approval preview

The slide features a blue and white color scheme with a curved design element on the right side. A small video inset in the bottom right corner shows a man in a light-colored shirt speaking.

Typical shopping cart functions are: - creating shopping cart and shopping cart approval. This is of course, not when you buy one book in Amazon. This is we are talking about an industrial purchase of several materials in large quantities (B2B).

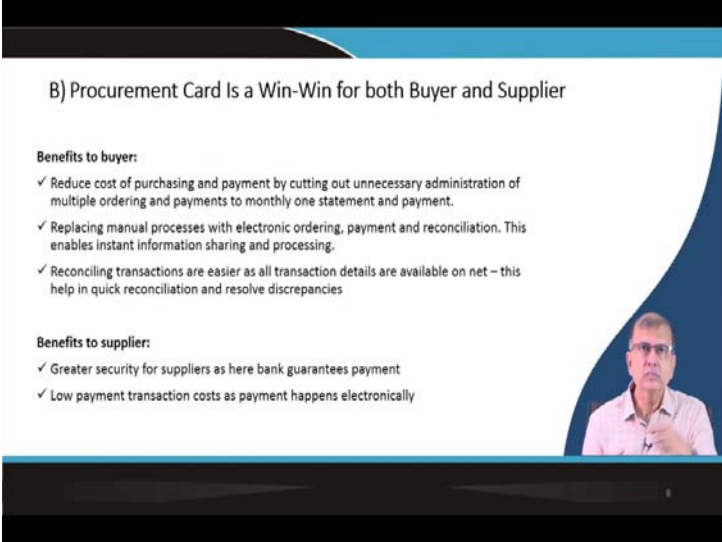
In this process what happens is as I said, suppose you are a shop floor engineer and you want something, -you go to that portal of that supplier and you put your item in the shopping cart. I need so, many things at so much quantity in such and such time. Now, that might need your management approval. May be the purchase department has to oversee and approve that, whether you really need so much quantity in such a time, because he has to pay. The purchase department and the finance department will be involved. So, that is where the approval part comes in. In the industrial scenario, purchase order and goods receipt will need to be processed. There will be a purchase

order and the material will be received and this is a goods receipt. Then there is a invoice payment, because once you receive a material, you have to pay the supplier.

So, somebody has to check the stock, before you place a material requirement in the shopping cart, whether the material is there or not. It may happen that it is already there in your stores, but you are not aware.

So, you created a shopping cart, but somebody finds out, that the material is already there. So, why do you want to buy again extra? This check is a function called Availability Check, which is done using the ERP software. It is done at the background, whenever, you create a shopping cart for any component ERP is doing all these checks.

Identifying sources of supply and possible vendors for the item and then there will be approval preview. So, all these are functioning of a E R P type of product, which is being used for supplier relationship management. So, electronically at the background as soon as you, as a user, you are creating a request, that is you creating a shopping cart requirement and adding some material into a shopping cart, at the background all these things happen ( Availability check , potential vendors , whether vendors are on approved list or not etcetera ).



**B) Procurement Card Is a Win-Win for both Buyer and Supplier**

**Benefits to buyer:**

- ✓ Reduce cost of purchasing and payment by cutting out unnecessary administration of multiple ordering and payments to monthly one statement and payment.
- ✓ Replacing manual processes with electronic ordering, payment and reconciliation. This enables instant information sharing and processing.
- ✓ Reconciling transactions are easier as all transaction details are available on net – this help in quick reconciliation and resolve discrepancies

**Benefits to supplier:**

- ✓ Greater security for suppliers as here bank guarantees payment
- ✓ Low payment transaction costs as payment happens electronically

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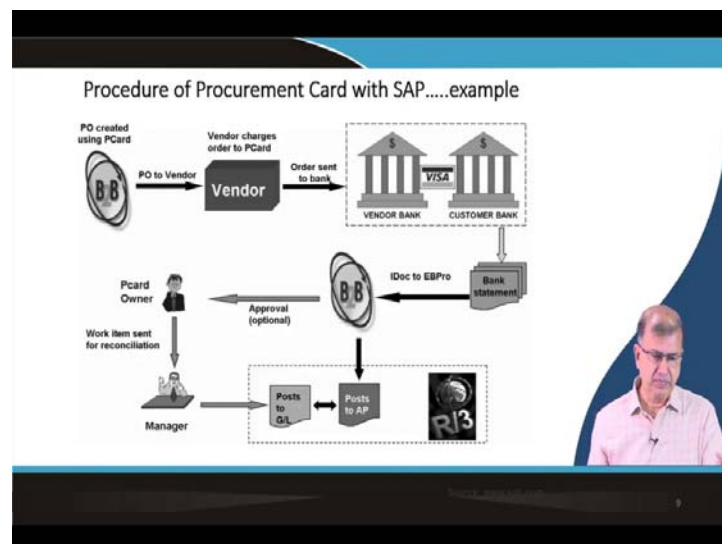
Procurement card: I have already explained is a win-win for both buyer and supplier. Benefits to the buyer, as it reduces cost of purchasing and payment by cutting out unnecessary administration of multiple ordering etcetera. So, payment cycle becomes

very smooth and easy. And so, the whole processing cost will come down, as it saves time and also manpower.

Replacing manual process with electronic ordering, payment and reconciliation: This enables instant information sharing and also if there has been any mistake or error, you can track it because you have done everything electronically. So, there is a record. You can go back and check that when was it payed, quantity etcetera. So, if there is a problem you can always go back and check and do reconciliation.

Reconciling transactions are easier as all transaction details are available on net- this helps in quick reconciliations and resolve any discrepancies. If, there is some problem discrepancies with the supply, quantity, whatever payment terms with your supplier you can go to the internet check the thing and you know both of you can see the same thing, both supplier and the customer. And, you can resolve your discrepancies very fast.

Benefits to the supplier of course, greater security for suppliers as here the bank guarantees payment. The supplier knows that as soon as he delivers, the credit card bank will give the payment. And, then the credit card company will collect the money from the original company. Low payment transaction costs as payment happens electronically. So, all electronic payments is of course, very cheap and fast.



Procedure of Procurement Card with SAP. - SAP is a ERP product, which we had discussed earlier. ERP has all these capabilities hence, SAP product is also used for this E procurement processing.

PO created using P card, PO goes to vendor, PO is a purchase order, vendor charges order to P card, then the vendor now activates his P card, which he sends to his bank. Bank comes to know about a particular order. In this case it is Visa which is ensuring the payment. In a bank statement there is an IDoc. This information document goes to EBPro, which is a SAP program, which handles electronic business procurement. So, it is a B to B; it is business to business, a vendor to the company process.

There is an approval process and it could be optional and could be automated. So, P card owner and the work item sent for reconciliation comes to the manager and he posts to his general ledger, because in the accounts department the material will be received. So, payment has to be made. And, he posts to account payable; that means, payment has to be released to the vendor. This is the SAP process. So, all this is happening within the SAP software. So, SAP is handling this entire procurement process, e-procurement process and P-Card processing.

The image shows a presentation slide with a blue header and footer. The main content area is white with a blue curved border on the right side. The title is 'C) Bids and Auctions'. Below the title, there is a section 'Types of Bids' followed by three bullet points: 'Public Bids', 'Restricted Bids', and 'Bids can also be classified as'. Under the last section, there are two more bullet points: 'Online Static Sealed Bid' and 'Online Dynamic Sealed Bid'. In the bottom right corner of the slide, there is a small video inset showing a man in a light-colored shirt speaking. The number '10' is visible in the bottom right corner of the slide.

Bids and Auctions; - Types of bids; - Public Bids, here bid invitations are made accessible to potential bidders via marketplaces on the web. So, we have everything now on the cloud, in the internet and the bidder can reach the company's web page. Then in the company's portal you can find out what is being asked for. One can then use the hyperlink in the portal to log on to E procurement system and enter the bid.

In the portals there will be lot of steps, where you can you know how to login, get a user ID-password, because you have to have controls. And, based on that you can enter your

bid directly into the portal; so, you do not have to fill manually physical forms. Manual processes are gone. It happens instantaneously, because you can just fill up the form online and submit.

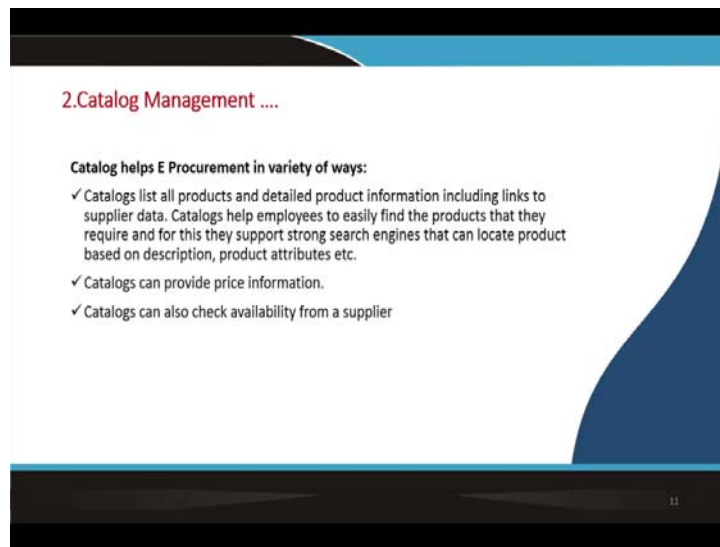
There it could be something called Restricted Bids. In this case bid invitations are made accessible to known bidders via e-mail. In a public bid anybody accessing the portal can bid. Restricted bid is where it is sent selectively to named vendors by email. And, then in the email there will be a link and when they will click the link, then they will be able to access the portal and submit their bid. But anybody else will not be able to do so.

Bids can also be classified as Online Static Sealed Bid; the bidders are allowed to bid only once with the price within a window of stipulated time; so, they can bid only once. So, whatever price you give that is final either you get it or you do not get it. And, online Dynamic Sealed Bid, - this is another concept called a dynamic sealed bid. Here bidders are allowed to improve their price bids till the hidden reserve price level is touched.

Suppose the company wants to buy a material at 100 rupees. Now, the bidding has started and some suppliers are bidding say 150 rupees. It is not approved; because the target price is not met and the bidder knows that his price is not approved.

So, he says next time let me quote 140. Now, there are various players, multiple vendors are quoting somebody saying 140, somebody saying 130, somebody saying 120 and nobody's bid is getting approved, but the bid system is open, and bidding can continue. So, vendors, they will understand that they have to give still lower price.

So, they start reducing and finally, somebody says 100 or may be lower 90 or 95 then the bidding stops. Because, the lowest target price has been reached and then the person, who has bid the lowest 100 or 90 or 95 gets the order. This is a dynamic bidding. The other one was static, vendors could bid only one time.



Catalog management; - catalog helps E procurement in variety of ways. Catalog lists all products and detailed product information. Because when you go online you are physically not seeing a product. So, you need to get the information of the product, how does it look, what are the sizes or the specification etcetera, including links to the supplier data.

So, catalog helps employees to easily find the product that they require. And, for this they support strong search engines that can locate product based on description, product attributes etc. So, when you are buying something, you need to know what you are buying and all possible information about that product. Catalogs can provide price information of course, and catalogs can also check availability from a supplier.

Like, when you go to Amazon you see only two pieces are available. You get that message or may be 5 quantities are available and then you have to decide. That, if I delay probably, I will not get it somebody else will buy it, because you know it is open and online.



**2. Catalog Management**

Three Types Of Catalogs

- ✓ **External catalogs:** Catalog is managed, updated and hosted by the vendor at his own site. This is good for the company as vendor in this case is taking all the responsibility.
- ✓ **Internal catalogs:** Catalog is managed, updated and hosted by the company at his own site. The catalog can have products of various vendors. Advantage of this is look and feel of the catalog can be controlled and is uniform for all products making it easy for employees. The obvious disadvantage is the time and cost needed for company to maintain such catalogs.
- ✓ **A third party manages the multi supplier catalog on behalf of the company:** This multi supplier catalog is managed by a third party content aggregator on behalf of the company. Advantage of this is the consistent look and feel for the catalogs from multiple suppliers. The disadvantage is the recurring expenditure that needs to be paid to 3rd party.

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In Catalog management we have three types of catalogs; external, internal, and third party managed. So, external catalog is catalog managed updated and hosted by a vendor at his own site. This is good for the company as a vendor in this case is taking all the responsibility. So, it is very simple. And internal catalog is where the company itself has its own catalog. So, these are my list of products which I want to sell and the catalog is hosted in my company's portal.

So, catalog is managed updated and hosted by the company at its own site. The catalog can have products of various vendors. So, I take whatever various vendors are supplying, I make a catalog out of that and I host it myself.

In the previous example – External catalog meant each vendor having their own catalog, and I have to go to that vendor's website and see I want this product x and y so many quantities etc. Internal catalog is where I build my own catalog for all things I buy from various vendors. And, then for each product I can identify these are the possible vendors and that is their prices.

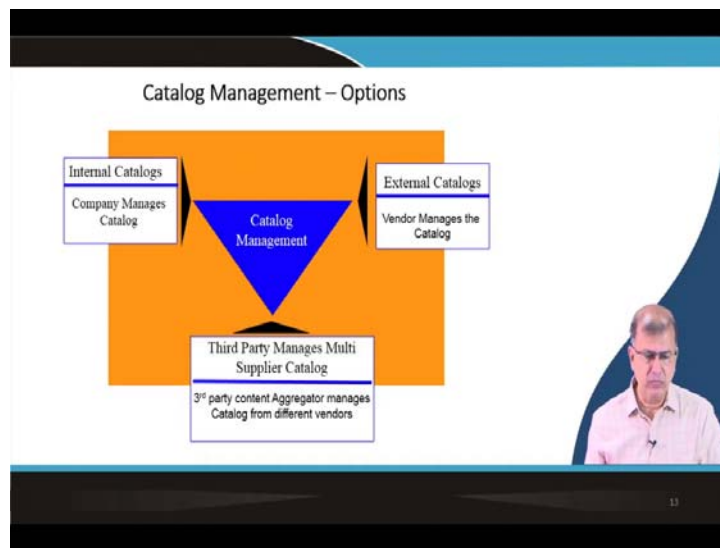
So, I can choose which vendor which price etcetera.

Often, a Third party manages the multi supplier catalog on behalf of the company; we can also upload it to a third party who can manage this catalog entirely on my behalf.

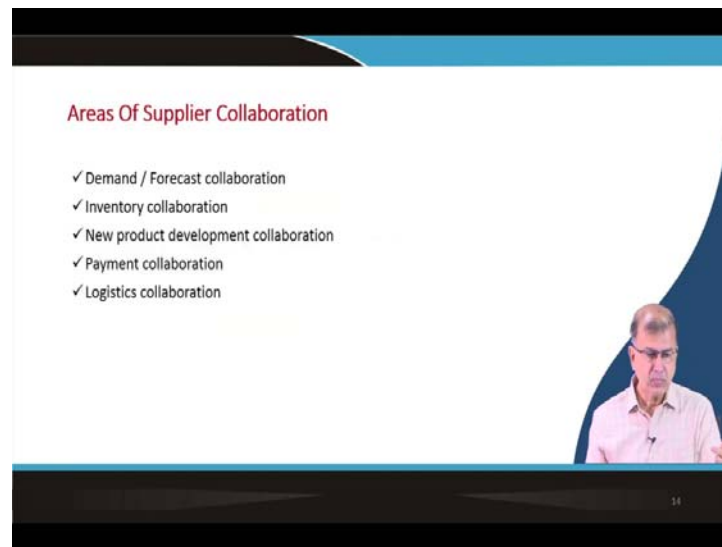
The advantage of this is a consistent look and feel for the catalogs from multiple suppliers, the disadvantage of course, the recurring expenditure that needs to be paid to third party, for hosting your catalog. This is something like outsourcing.

So, cost is a disadvantage. Otherwise there are a lot of advantages as the third party does all the sourcing, getting information, getting updated from the various vendors contacting them etc. So, he is managing the whole thing and it looks very uniform. They do it professionally.

So, there are three types and it is up to you to decide, which one you will follow.



So, again this is just pictorially it is explaining the same thing the three types internal, external, and third party, the areas of supplier collaboration



The areas where there is a collaboration are: - Demand and Forecast collaboration, Inventory collaboration, New product development collaboration, Payment collaboration, Logistics collaboration most of them we have talked about already. Specially, I just want to explain New product development collaboration. When you are developing a new product, collaborating with a vendor is becoming absolutely essential, because they are going to give you the components which you need for your new product.

So, when you start on your R and D work and want to come up with a new product the first thing you need to do is to contact and develop suppliers and develop his capabilities, because it is a new product. So, there will be new components having new design.

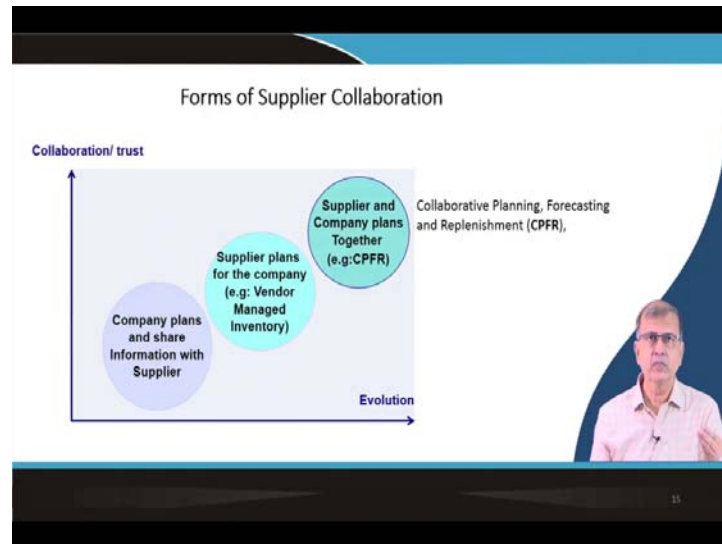
You will have to be inform your targeted vendor, that you are planning to develop these type of thing, can he make these products as per new design and specification.

You approach probably 5 vendors of which, maybe 2 or 3 agree. So, that is where the collaboration comes, because they have to match your speed. Because, you want to launch that product 6 months down the line. What happened in this COVID case for example? Say everything in a rush and people want to develop new products, PPE ventilators etcetera.

So, for each of them there is a corresponding vendor. And, now time was a pressures so can I bring out the product in 1 months' time. I can do it, because I have designed it, but then who will be supplying those materials. I have to immediately rush out to suppliers

who can give me these in such and such quantity within 2 weeks, 3 weeks etc. So, that I can assemble and dispatch these in 1-month time.

So, that is where in such crises period when these collaborations will really become very important. But, in a regular situation also, you have to have collaboration with your suppliers and vendors, whenever you doing a new product development. This is very important.



Forms of supply collaboration where you share information with the supplier, Supplier plans for managing the company's inventory. We have discussed CPFR (collaborative planning, forecasting and replenishment). So, you are doing all the planning, forecasting, replenishment in a collaborative mode along with the vendor. So, these are the various types of collaboration.

In collaboration the trust is increasing at the levels it goes up with the evolution of the stages. We are moving towards right as shown in the chart. So, this is the thing, where we are reaching this dimension known as CPFR.

### Technologies Of Supplier Collaboration

- ✓ **Electronic Data Interchange (EDI):** The oldest message based collaboration technology for transmitting things like Purchase order, Advanced shipping notification (ASN), Invoice etc.
- ✓ **Portal:** The company's portal give access to it's suppliers about delivery schedule, stock information, quality of receipts, rejection in case there is any, payment information etc. Supplier self service (SUS) portals are part of Supplier Relationship management solution of few ERP vendors like SAP.
- ✓ **Inventory collaboration:** Most of the ERP and SRM solutions provide features like Vendor managed inventory (VMI) for supporting inventory collaboration need.
- ✓ **Collaborative Forecasting:** ERP solutions provide advanced collaborative forecasting features in its Advanced Demand Planning solution.
- ✓ **Payment Collaboration - Evaluated receipts (ERS):** Most of the ERP solutions support ERS functionality where GR is settled automatically based on information received from Supplier and payment is released.



Technology of supplier collaboration, - these are the technical tools for example - Electronic Data Interchange Portal, Inventory Collaboration, Collaborative Forecasting, and then Payment Collaboration etcetera. By now you must be familiar with all these technology terms etcetera.

So, nothing much to explain here, various technology which are being used in this collaboration model.

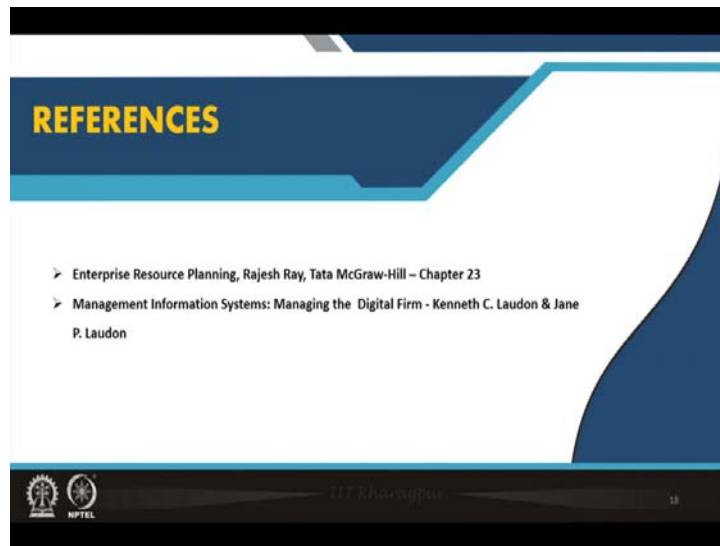
### SRM 5.0 - Activities

|                        |                     |                      |
|------------------------|---------------------|----------------------|
| Purchasing Planning    | Contract Management | Financial Settlement |
| Category Management    | Requisitioning      | Supplier Enablement  |
| Supplier Qualification | Order Management    |                      |
| Supplier Negotiation   | Receiving           |                      |



So, SRM 5 dot 0 the next generation - Purchasing planning, Category management, Supplier qualification, Supplier negotiation, Receiving, Order management. It is just becoming broader, that is all more and more areas are coming in like Requisitioning, Contract management, Financial settlement, Supplier enablement.

So, these are all various ways again management terms, you can read them up in the internet, where plenty of information is available on this.



Thank you very much.