Logistics & Supply Chain Management Professor Vikas Thakur Department of Humanities & Social Sciences Indian Institute of Technology, Kharagpur

Lecture 32 : Strategic Supply Chain Management

Hello dear friends, welcome back to NPTEL online course on logistics and supply chain management. So in the last session we started discussion on identifying what are the various impellers of supply chain management and then we saw that how these impellers are very important to understand the market dynamics and then react accordingly right so that all those customer requirement can be met with the whatever available resources we have with our supply chain right so in this session we will now we will spend couple of sessions on identifying those all the factors in the internal as well as external environment. We'll talk about the strategic development process, how we can formulate the strategy, how we can implement the strategy, and then in the end how we need to, you know, implement the control phase where we can go for if any deviations or any checks are required, so as per that we can go for that right so in this first session of strategic management process so again here the special content has been taken from the strategic management book which is you know written by Ireland, Robert. So these two, three books are there, competitive strategy or strategic management process. So you can just go through because many of the diagrams have been taken from there and then those diagrams have been modified as per the supply chain management perspective, right? so this is the content we will go through quickly we will introduce what is supply chain strategy so obviously planning design execution control and monitoring of supply chain activities so whatever activities starting from the production of the raw material to the end consumption all those activities will try to integrate synchronize using a particular supply chain strategy right so the very basic purpose here is to align the business goals or then we have seen in the last session that we have one overall competitive strategy business strategy right how we are competing with our rivalries right and then how we are making our market segments right so then in align with that strategy. We need to develop our supply chain strategy right so that supply chain strategy obviously we are looking for some unique parameters where maybe we are targeting on cost efficient delivery where may be we are targeting on how we can enhance the experience of the customer where may be we are targeting on minimizing the inventory where may be we are targeting on minimizing the transportation cost minimizing the warehousing cost minimizing the raw material acquisition cost any of these strategies will be part of your overall supply chain strategy and then Then if we talked about push pull supply chain strategy and then we have seen either you can go for make to stock that means

continuously your optimum kind of pull supply chain strategy where you are continuously manufacturing the product, storing those product as inventory near the market in your fulfillment center or then you can go for make to order whenever you are getting the order then you are manufacturing the product.

or engineer to order very customized kind of product where you are completely starting from the you know development of that product you are implementing pull kind of strategy right. So, once you will get the customized order then only you will develop the product and then after testing that product you will finally deliver that that is when we are dealing with very high end you know those customized or special equipments we are dealing with that kind of strategy is implemented there So this strategic management process again taken from that book. So I referred initially. So these are the generic steps.

We will go for supply chain management, but just we will understand what is there. First is your review your current situation. Current situation in terms of your mission, vision, whatever statements you have set up right if you want to be cost leader for next maybe in 20 years how you are aligning all those activities in your supply chain towards to be cost efficient if you want to be highly responsible supply chain how you are aligning all those activities towards the highly responsive supply chain and then how you are setting up your objectives for meeting those responsiveness or cost efficiency supply chain right and then you will Finally, you will pick maybe work with some strategies, how you can go there to your mission and vision statement, how you can hit that mission and vision statement. So, to after developing your mission and vision statement, you need to analyze the environment. We will see some models here in this session, how we can analyze the environment when talking about analysis of environment, both internal as well as your external environment are important.

Internal environment is important because we need to do the internal analysis. What are our strengths? What are our capabilities? and where we are lagging right so that we can you know capitalize on our strengths and we can avoid or may be improve our weaknesses right and then external environment we need to go like may be we are having like kind of tool like pestle tool is there test tool where we can go for analysis of the external environment like political environment, ethical environment, social, technical, environmental analysis, legal analysis so how these factors are changing we need to keep the track of all those environmental factors so when we are talking about analyzing the external environment the very basic point is to identify the opportunities if any opportunities are coming on our way or any threat it is equally important to identify the threat also so that we can you know change our supply chain strategy as per the threat coming like the threat was there during the pandemic we may face some shortage of raw

material because of the shutdown or interruption in your supply chain activities So, how we can build that inventory so that we can meet the demand during that shutdown time or any other disaster if happens how we can come up with the agile kind of supply chain strategy right. Then develop new strategy, when we are talking about developing a strategy we are having different units for developing strategy. First is your corporate level strategy, so corporate level strategy you need to find out how you are targeting whether you are thinking about growth strategy or you are thinking of stability strategy or retrenchment strategy what type of strategy you are thinking of growth strategy let's say we are looking at market as one of maybe the coming opportunity and maybe market is expanding 5% at 5% rate how we can tap out of that 5% 2% we can tap with our brand right so that is kind of growth strategy.

We are looking for stability strategy where maybe market is saturated maybe this is the time whatever customer group we are having right now customer potential we are having we need to stabilize that customer potential .We need to maintain those customers with us only they should not switch to some other brand retrenchment strategy where you are thinking that maybe kind of like in communication industry how your Jio came with the new concept of data free calling free messaging free everything is free So then many companies like where are those Idea, Hutch cellular network, so Vodafone, so those all started collaborating with each other. So that is kind of retrenchment strategies where you are going for divestment strategies, where you are going for liquidification, you are turning some of the assets into your cash and then you are leaving that market or you are diversifying into some other area. So these are some of the strategies you are deciding, so then you are coming up with the business level strategy this is a kind of strategy where you are coming you are talking about your competitive strategy in the market how you will compete with your different players like Jio competed initially they made everything free right and then they came up with the device Jio 5 device where you can you know connect free up to 30 devices I think right and then calling free data free so that means they created that space where every customer is now looking for maybe shifting their network towards JIO so then initially they came up with this free kind of policy for six months then they sensitized that maybe again there is untapped market maybe we need to expand this for another one year then another six months so that maximum share we can we can invite that those customers into our customer group right and then once there will be a kind of monopoly very few players will be there then they can charge now you can see they are coming up with all those plans where you can see they are charging fairly now uh as per that time now their prices are little higher on that side right so this is a kind of strategy where you are going towards that kind of monopoly market where you are only the player left in that market or only two three players are there so then you can you know then in your way you can guide the market functional level strategy now if I am saying that cost efficient strategy what will be your inventory management strategy what will be your distribution management strategy your manufacturing strategy outsourcing strategy so these all strategies will target towards to be cost efficient.

So, that means, inventory management strategy will be to keep the minimum inventory may be centralized warehouse will set up from where the inventory will be channelized to all the market may be it will take more lead time, but in that way we will consolidate inventory at one point where may be we are not keeping at different locations and only keeping at one point right. So, that inventory cost can be minimized, compromised, but that way it will increase the lead time, so responsiveness will be reduced, so that is already we have discussed how one strategy will may be if you are targeting cost efficiency, so some of the you know responsiveness parameters will be compromised. Then in the end we will come up with all the supply chain management plans, how you can implement that implementation strategies at every level at every stakeholder not only in manufacturing unit we talked about this supply chain is complete system how we can implement this with the supplier manufacturer distributor warehousing transportation and transportation agency with all the players right And in the end we have the control process where we will you know measure our output with the setup standards. If there is any deviation we are lacking with the objective whatever we have setup initially we will come up with the corrective actions right how we can correct that how we can take the preventive actions and how we can implement that in such a way those objectives can be established so this is the complete strategic management process right so i tried to explain in supply chain management perspective so here is one video i have included so maybe this link you can just visit and you can see if you are not coming with the you know some supply chain strategy and you are just hitting randomly here and there will not work for you for longer period of time right so you have to come with some that common thread which will bind all these components of supply chain strategy so obviously sourcing also we need to implement the supply chain strategy if cost efficient then we need to hit this point first is the priority right and then we will talk about the delivery in minimum time right and then we will talk about the quality these are some of the parameters we will try to either you can say manipulate in that way if we will increase the cost what will happen may be quality of the raw material will increase if we will decrease the cost what will happen will may be will compromise with the delivery schedule may be will compromise with the quality right.

then logistics strategy obviously talking about logistics means talking about transportation different types of mode how much you are transporting through road through ship through air right those things you need to decide warehousing again part of logistics automated warehousing how you are utilizing the capacity of the warehousing inventory management again part of your logistics management how you are handling

your inventory throughout the network either you are a kind of Walmart kind of player here you are not keeping any inventory in your distribution centers and your distribution centers are kind of your cross docking centers where only vehicles are moving stopping for some time and then they are just reshuffling the inventory coming from different location and then consolidating those inventory as may be area wise pin code wise or whatever right so as per that they are sending in another truck to the another distribution center, right? And then talking about production, production means how much we need to produce where we need to produce when we need to produce. So production facilities where you are going to locate and then scheduling and sequencing how much you need to produce in what sequence you need to produce how many units of A model how many units of B model C model likewise you will take care of your production strategy right and then distribution strategy here we will talk about whether you are outsourcing this distribution part to third party where delivery is maybe a kind of courier partner for you and delivering your services Swiggy, Zometo may be a courier partner for your restaurant where they are taking care of your distribution network and sometime we have seen that these kind of third party logistic provider services are means complete basket from development of product to the final your delivery of the product and even they are taking care of the returns as well we have talked about complete session on third party logistics right .so customer services what is the strategy how you will handle the after sales services how you will handle the returns how will credit the customers if they are processing the returns how you will handle their maintenance requirements right how easily you will replace their spare parts whatever requirements they are having so this is another kind of very important element of strategy we will see now in this era what are you know the existing competition level and how we can get there to get that competitive advantage talking about 21st century these are some of the forces which are you know guiding our market right today market global economy like I talked about it's not local market complete economy. So we have seen that may be positives are there negatives are there global economy you have access to global economy and then if you are having access to global economy right then in that way you are also volatile to global economic disruptions like 2008 recession recently was the probably covid 19 recession also was big in that way but 2009 eight recession which started with the lehman brothers bankruptcy how it disturbed overall market all the markets throughout the world so this is the negative of your global economy .Globalization again positive and negatives we have access to global raw material we have access to global raw material quality technology production technology manpower skill distribution network global customers and in other way global customers are also having access to global market they can you know by product from anywhere any part of the world so that is globalization rapid technological changes another force see technological change when we are talking about may be the improved technology in the product may be the improved technology in the process we are implementing to you know produce that product right but the basic point here i want to highlight is as soon as you are changing the technology your product life cycle will also get shorter right so that means quickly they are renovating the product so again you are replacing the product it's a kind of very big threat for sustainability but another threat is if today you are purchasing iphone 14 then 15 will be there 16 will be there 17 so that iphone company apple is always engaging customers to you know for the repetitive buying behavior and then how much e-waste we are generating in that way.

But in a nutshell these repetitive you know technological changes in the product are replacing the making the older product obsolete and then increasing importance of the knowledge of the customers we have talked about in the last session as empowered customer is one of very big impeller of your supply chain where he is forcing you to change all those things if you are giving me limited features I have access to all the players in the market where I can find out who is the best player who is giving me access to all those features which you are not giving me. So, then we need to formulate and implementation of the superior value creating strategy. Superior value creating strategy means with respect to your competitor so when you will pick that what you will do you will commit. You will commit to that particular kind of strategy commit means now you will start investing your resources all the resources and you will define what your firm will do what you will not do and then that will lead to competitive advantage like I will quote some example like Philips is always coming with the advertisement Innovation and you, so that means their competitive advantage they are highlighting that they are very kind of innovative products, every day they are revising the features, the longevity, the technology they are using, right, so trimming products they are offering you, so that is they are highlighting their competitive advantage. Walmart is a kind of player where they are saying that you will get the minimum cost product in our retail shop or through our online distribution network.

Zara on the other hand they are promising because our strength is what we will do is replenish the latest trends in our showrooms. So, if you want the updated inventory, patterns, trends you come to our showroom. Every week they are changing their patterns, they are changing their styles. On the other hand, if you will talk about any other traditional fashion store, they are taking minimum one, two months to come up with the new design. So this is their unique strategy.

They know what they need to do, what they need not to do. When we are talking about competitive strategy, usually we talk about either you go for costly leadership or you go for differentiation. either you provide minimum cost product lowest cost or maybe then you are talking we are talking about broad market right broad market all the low status products or low customer group or middle customer group will target using cost

leadership because Jio was very well aware that if now this is the era where you know everyone is going for the smart phone so means many now the population is the people who are using the internet is the way this internet technology has penetrated the market is tremendous, right? The rate, I'm talking about the rate of adoption of this new technology, technology diffusion that is happening, right? But earlier if you talk about that time where radio first came in the market, it took couple of decades to mature and to go to the last level. Then TV, then again little faster than that. Smartphone, more faster than that.

Now internet, then you can see how fast this technology is penetrating the end market. So, either you can go for cost leadership or you will go for differentiation, Rolex, BMW, Mercedes. So, these are kind of pairs, they are hardly bothering about the cost features, they are bothering about what extra value they can add to their product, then if we are talking about very narrow market focused cost leadership may be some of the products which are required in industries only not so frequently bought as may be not used at raw material some of the machines they are using let's say many organization are using you know carton boxes to pack their products primary packaging secondary packaging carton boxes are required so some of many companies are checking the strength of that carton box whether that can handle the wear and tear during the transportation warehouse and handling so only one machine is required right and very specific parameters must be there they may be setting for those equipment right so these kind of focused equipments and then required for industry so maybe then if cost efficiency is there obviously i will go for that and then in case of this narrow market again focused differentiation those kind of high end products maybe we are very limited use but very high end products right so those are there so you can see based on these parameters either you are cost efficient or you are providing unique value which others are not providing then you can go for your business level strategy how you can compete with your competitors so you can see quickly here determine and control what is driving your cost right so in that case either you need to alt maybe your production you are taking carrying more of the cost you need to go for automation why don't you remove some of the manpower and go for automation where more productivity will be there and then the defects will be minimized new distribution channel which can ensure may be minimum lead time and maximum coverage of the area with minimum cost advertising media may be what advertising media you are picking is not suitable for the targeted audience and targeted audience is never visiting that may be particular media so how you can go for the best one so let's say if you are promoting some sports related products right so then if you are maybe advertising those products during world cup or IPL or any other sports event so it will get more visibility because only those people who are interested in that will be watching those events right so that you need to find out and then direct sale in place of maybe indirect sale is taking more cost sometimes you need to reconfigure your value chain as

well you need to talk about or think about the raw material, is the raw material carrying extra cost, how we can minimize that cost, can we change the technology of producing that raw material, can we change the grading of the raw material we are using, can we go for forward integration, let us remove all the distribution network and as a dell directly communicate with the customer and supply whatever they want or we can go backward integration where let us acquire all our supplies, we will start producing our supplies and in that way your suppliers will be removed right and then may be change location if you are at very costly location like we talked about how zara is man a handling they are managing cost efficiency with asian locations but there they want to be responsive there they are setting up their manufacturing unit in europe itself talking about some of the cost creating value activities you can directly see I will just pick all those activities which are related to supply chain so you can see cost effective MIS management information system how you can integrate all the players and minimize the cost and then this obviously related to management parameters we can have simplified structure of management not so many layers so that effectively we can control and implement whatever is the common our policy is is to use manufacturing technology our technology is so complex it's very difficult to train first people to standardize that technology then lot of investment is required to implement that how we can find out the low cost raw material monitor suppliers performance as well because if they are performing well only then they can reduce the cost and will provide you more you know concessional rate on that way and you need to link suppliers with the production process enjoy the economies of scale feed large order and you also yourself produce large orders may be in that process you will produce high inventory but then you can minimize the cost so then you need to ensure how quickly you can utilize that inventory in the end market efficient scale facilities effective delivery schedules low cost transportation maybe end mile delivery using electrical bikes or maybe cycles in that way you will be sustainable as well as you will be cost efficient the second point how we can go to the differentiation strategy we need to talk about some of the maybe we can change some unique features we can add in the product maybe some performance parameters which like if you talk about the best performance in the maybe middle class family or lower class family or maybe a little upper class as well if sony is known for their sound systems right so hitachi is known for means kind of leader in the ac industry right and then so many other players where you want to get the Dell is another very good example right so Walmart is another very good example where Walmart is always targeting cost efficient right how you can add sustainability like Myntra did they started adding the paper packaging where we discussed about the complete case right in one of the session how they are using the paper packaging which is 100 percent recyclable so in that way your customer will feel unique in that way and they will feel that this is good source to get our products and these are some of the strategies you can implement to get differentiation where you can either go for technological differentiation or you can implement high quality raw material or you

can use some of maybe fast delivery methods now the best maybe the next best opportunity for e-commerce players to promote maybe or promise 90% of the delivery or maybe 90% of the products will be delivered within one day so that is going to be the future how you can implement that if you are promising that obviously you just imagine how much crowd will be shifting to your platform. If you are promising delivery within one day and then if that much crowd is coming obviously economies of scale will be there right so you can consolidate those prime orders with the normal orders as well and then in routine you are doing those activities may be you will set up more fulfillment centers near to big markets from there you can easily go for those so this is kind of you know USP which you can where you can deliver your product may be customer credit for how longer period you are giving your customer this flexibility today you buy the product tomorrow you can pay how long period you are giving how quickly you are responding to customer things right so if this these are means there can be so many USPs related to all activities you are specialist in warehouse like united parcel services they have automated their warehouses like Amazon is also doing they have setup one of the biggest distribution hub in Delhi near Delhi Gurgaon where they have automated that you know warehouse so automation means how they are saving the cost right so that also you can do so effective supply chain strategy we are talking about obviously that should be synchronized and how it can handle the disruption and how we can mitigate the risk right talking about that we should have collaborative approach as well as we should have the agile supply chain structure.

If the demand is coming for 5 products, we should be able to scale down and we should deliver 5 products. Demand is coming for 500 products, we should scale up and we should deliver that. Resilient, how resilient our supply chain is, Anything is happening in the market, any disaster is happening, any shutdown is there, any strike is there, even then our supply chain is maintaining that minimum inventory safety stock that we can meet the demand. And then digital platform is another thing where you can connect all the players, stakeholders, quickly share the information. in that way you will be more productive if today any spike in the demand quickly you will share with the raw material suppliers we need extra raw material and then it will be shared immediately with the raw material suppliers and as well as your production facility as well as your distribution warehouse distribution management system so that this ERP kind of system IoT where you know AI and ML is taking all the decision making no manpower is involved in taking the decision As soon as AI or ML is just detecting a spike in the demand, quickly responding to it and sharing the plans with all the stakeholders.

When talking about digital structure, you need to create those firewalls where you know any intruder cannot interrupt any time and can disturb your whole supply chain .so cyber

security you need to invest heavily into that right so optimizing your supply chain strategy first is how you can optimize that sales and planning operation planning where sales department is directly linked with the production department how much you need to produce, where you need to produce, what are the customer requirement that sales and operational planning. Workforce management may be you need to train your workforce with better processes, technology you need to equip with your workforce with the latest equipment so that efficiency can be delivered and then supply chain network when we are designing we need to take care of the minimum cost and minimum time we need to deliver. Demand planning, how with the help of AI machine learning we are predicting the demand accurately and then delivering the right product at the right place at the right time. And then optimizing inventory balance you need to maintain between services, level of services.

You cannot promise the highest level of services and keeping the high inventory all the time. So, may be you can reduce that inventory somewhere without compromising the services means being stock out in the market and then you are also ensuring the minimum cost. So, if you talk about overall firm strategic choices we are having these choices right you go for economies of scale produce in bulk and reduce the cost barriers to market entry if those barriers are there for the new players how you can leverage on those barriers and can enjoy the market share right diversification if you want to create little higher barriers to the entry you keep on diversifying into different product features with the latest technology or maybe with the latest industry as well you are coming with the products right product differentiation we talked about industry concentration is something if it is very high that means few players are capturing the most of the industry like I talked about jio right, where most of the share is with the only jio, Airtel, only BSL, only two three players now are left out in the market right. So, market friction this is related to your financial market transactions, how What is the direct indirect cost is involved when we are making these financial transactions. Let us talk about quickly strategy for all the value chain different components we discussed in the last session.

So quickly we will talk about what can be the strategy when we are talking about all the value adding activities. Product development strategy. so portfolio selection how you will define the range of the products obviously based on the market analysis you will prepare your offerings right and then you will decide whether you are producing in house or you are outsourcing if we have the competencies to produce that those product and services obviously we should go for in house and when we are talking about maybe we are less competent maybe there are players who are doing it better than us they have the latest technology the best skills required so then we can think of outsourcing because in that way we can cut down the production cost as well marketing and sales strategy how you

will segment the market based on the different features demographic geography psychographic behavior patterns of the customers pricing all those you can find out right different market segments and then you will pick your segment and will try to position your product right as per the maybe if you are picking pricing so if low price market you are picking so you will target with the low pricing strategies right promotional activities how you will go with the promotional activity different medias are there and then you can go for this is related to marketing but let's come to the supply chain strategy obviously procurement How you'll do the supplier selection? And then if outsourcing is done, how you'll do the repetitive procurement? What quantity, right? So that if the quantity is big, you can make up to that so you can have the better negotiation power and contracting with that. Manufacturing services operations, where you will set up your location, what technology you are going to use, how you'll convert your raw material into finished one, and then how you'll plan your capacity. distribution also important part of supply chain strategy different modes of distribution different way of how you can go for you know different distribution channels where you are talking about either doorstep delivery or customer pick up locations or retail shops or maybe the organized stores right those kind of strategies you can go for and then outsourcing decisions how what are the activities you are outsourcing in your supply chain strategy either you are outsourcing your warehousing part transportation part or any other part.

So broad supply chain structure supplier strategy operation strategy logistic strategy supplier strategy means backward integration how you will handle your suppliers then your mainstream where you are converting raw material into finished one and then your front integration forward supply chain where you are talking about your distribution network, fulfillment centers, final end mile delivery. So that is a kind of you can go for managing all three streams. So design strategy, inventory management, what type of inventory levels you are maintaining ok this is again you need to make the tradeoff between service level and cost of carrying that inventory transportation modes routes carriers right will define your whether you are sustainable if you are using ship or minimum cost carrier if you are using using ship maybe or trains and then road will increase the you know carbon footprint and air will increase your cost, so all those parameters. Operating facilities, very important where you are setting up your fulfillment centers, your inventory locations, your manufacturing hubs, how you are designing the capacity depending upon the market requirement. Information flow, how information will flow throughout your supply chain, so that if you are promising your digital platform, so then quickly information will be shared throughout the supply chain.

Talking about services strategy, service design, how you will design your services, depending upon market requirements, you will develop your offerings. service quality

how you will maintain the consistent quality and you will tie up with your suppliers to maintain that to ensure that customer experience management through you know engaging customers in your supply chain and then delivering the products and services what they want meeting those expectations then you can enhance the customer experience service differentiation how you can create unique value proposition service recovery if something goes wrong with your product and services how quickly you are bouncing back technology integration how you can integrate the technology for delivering the products and then employee training how quickly you are equipping your employees with the latest skills required so that you can ensure the continuous improvement so this is one case study of Unilever which is based on your collaborative planning forecasting and replenishment CPFR strategy, so you know that Unilever is dealing with the packed food items, drinks, personal care items and cleaning products, so FMCZ products, so they developed a five-year strategy under that they focused especially on restructuring their supply chain, where they talked about governance, global procurement, supply chain manager, the engagement of suppliers and technology. So, under that they came up with the promise that now we will streamline our supply chain boosting its ability to meet whatever growth rates we are expecting. So, in that process they merged their 30 warehouses into 5 big distribution hubs. So, in that scenario you can see they reduced the inventory and this was their one of the policy measure that they want to go for zero inventory.

maintaining inventory at 30 location they reduced it to 5 only so then they ensured cross docking because they are not maintaining inventory so they went for cross docking and then you can see because of orders are frequently now influenced by factors that are hard to predict so it is very important to come up with your you know AI ML based forecasting procedures right measures so that forecasting accuracy can be ensured can be enhanced and when they ensure this you can see they witness stronger partnership with the suppliers because now through AI ML and IoT network they are immediately sharing their production plan with the suppliers. So, key take away from this CPFR strategy is they increase the accuracy by 10 percent forecasting accuracy, result in 10 percent reduction in the inventory, no need to keep that high inventory because your forecasting is very very accurate and sales volume also boost by 5 percent. So, a couple of more cases you can see, very small cases just to highlight how they are implementing different supply chain strategy. Eton, which is a worldwide known US organization handling your power management, your electrical, hydraulic system, mechanical systems. So, they developed resilient supply chain strategy during the pandemic to ensure that if even the material shortage is there or labor shortage is there any disruption is there they are ready for that right so how they are ready by multi sourcing increasing supplier collaboration and connecting to its end to end supply chain so this is the supply chain strategy which they implemented right intel is another organization right so they they developed this

ethical sourcing of supply chain they ensured that whatever raw material like tin, tungsten, gold or titanium whatever they are procuring those sources are conflict free and because these are the sources where we are always talking about degrading the environment so they ensured RFID tags on their packaging and bags So, that you can easily identify that what is the origin of those sources those metals they are procuring and you can in the end ensure the ethical sourcing.

So, these are couple of the cases you can just go through how they are implementing different supply chain strategies. so for these books I referred initially you can go for strategic management by Robert and David then strategic management another competitiveness and globalization by Hit Ireland and Robert and then competitive strategy analysis by Robert M Grant right so these are some of the books and references you can go through that's all from this session thank you very much