Logistics & Supply Chain Management

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Lecture 08 : International Logistics

Hello dear friends welcome back to NPTEL online course on logistics and supply chain management. So, in the last session we started discussion on international logistics, we talked about what are the stages in international transactions talking about specifically about the financial transactions. And then, in this session we will try to look into what are the various possible options how we can go internationally right. So, well I am Dr. Vikas Thakur, Department of Humanities and Social Sciences, IIT, Kharagpur. So, as I discussed so, we will be talking about in this lecture about the international market penetration strategies.

We will see how we can go obviously, when we are opting for any of this strategy. there are some pros and cons of this right. So, somewhere we are more cost efficient, somewhere we are you know delivering on time, somewhere we are losing control over quality, somewhere we are diluting our ownership. So, these are some of the major points we will discuss when we will go for either exporting, licensing, joint ventures, ownerships, importing or counter trade right.

Then I will just give you quick highlight of what are the major players. if you talk about international logistics market and then in India and I have included once very small case study. Obviously, for further reading we can go in detail, but here I have included only the small concept. So, these are 6 options we have when we will talk about whether we want to go internationally right. When first question is we discussed in the last session as well why we are going internationally.

Now, this is not we are talking about the backward integration where we were including you know our suppliers from international market. This let us focus only about the forward channel and where we are serving the customers. Now, here the point is we want to serve our customers. internationally right, we want to expand the horizon of our business. So, these are all options available right, how we can go for international market.

So, we will try to discuss one by one each strategy and what are the implications for logistics and supply chain management right. So, if you talk about exporting it is simple that you are just selling your goods and services from one country you are selling to other country right. So, that means, here you are not including any intermediator in that. So, this is most simple and least risky method because no other intermediator is involved. So, what you will do when you are exporting? So, obviously, you will set up your own distribution network right and then you will start selling into the foreign market.

Let us go quickly about these types of exporting, direct exporting. Direct exporting sells its products directly to customer in foreign markets without any intermediaries like I mentioned. This is direct exporting. You are directly interacting with the customer, you have your own fulfillment centers, you have your retail shops and you have may be you are providing the doorstep delivery as well right. So, you are completely working alone.

So, then indirect exporting then what we are doing here we have some trading companies, agents or distributors or local courier partners who are delivering our services. Let us say if I am selling some in products in UK market. So, I may be having one distribution or order fulfillment center in UK from there we will be sorting or doing the cross docking and that cross docking will be done using some local partner right who is already well established in that market in that way maybe we want to avoid right now our investment in expanding the distribution network as well in that because setting up that you know delivery channel also requires resources in that way it can be we will see what are the challenges what are the pros and cons of exporting. So, let us first talk about quickly the benefits. Market diversificatio, obviously earlier you were having one market in one country.

Now, you are having access to so many other markets right. You are going to market 1, 2, 3. So, diversification is there. Competitive advantage already I told you. Let us say one other example.

if I am promoting or as a customer I want credit card right. So, if any company or bank is coming to me and saying that this is one credit card, you can use this credit card for anything for purchasing any type of goods or services or anywhere in the world right. So, that means, is something they are providing as the one stop solution. I need not to care about the exchange rates, I need not to care about you know the I need not to go to the bank, I need not to submit all those letters and then NOC's are required and all documentation to make those transaction. How easy that life be you just imagine one single card right.

right way I am swiping that card here in India or using the same card in same way in some other country. So, you just imagine how it will provide the competitive edge right. Then economies of scale because earlier I was supplying products to market one. So, let us say in Indian market my share is somewhere saturated. Let us say now I have seen the growth period, but over the time it is now it is saturated or moving like this.

I want some maybe economies of scale, maybe I want to increase the capacity so that I can utilize all the resources, I can explore the market potential in the foreign markets. So, then economies of scale can be utilized. obviously when you you are increasing your sales growth so then revenue growth will be there right but what are the challenges market entry barriers so obviously when you are going international market first is the local restrictions regulatory authority restrictions right or trade restrictions you can say they have different tax structure they have different legal structure So, all those things you need to take care that is the first basic point for you know you need to address. This is a very big entry barrier you need to understand the local structure legal as well as somewhere ethical structure as well right. then logistics challenges now because you are directly exporting so there will be logistics challenges if you talk about India if you are coming to India geographically it is widespread so if you are a foreign player you do not have expertise how you can just imagine starting business in India and then you covering the hilly areas from north to may be the south and may be the infrastructure parameters are also different somewhere you will get the train facility somewhere you will get you have to go by a road somewhere you can use the ship facility right.

So, that also we discussed about what are the you know restrictions on those infrastructure constraints are there right. So, that is very again very important point. So, this was probably the reason very basic reason why Hero and Honda. they came together and they made a kind of joint venture right because honda was having technology and hero was having that supply chain distribution network for network for cycles Now, they thought that we can exploit this distribution network and we can exploit this technology of Honda and we can do fairly well in somewhere in other market which the hero is not right now and we can go into. your fuel based two wheeler right.

So, then they explored Hero Honda, but then after their breakup. So, then now you can see Hero is going separately, Honda is going separately because Honda got the knowledge for that time, they acquired the knowledge of Indian market, they started setting up their own you know centers, service centers, they got enough knowledge of this industry, but on the other hand if you talk about Hero. They also got the knowledge how you know two wheeler industry works. So, they now they are competing they are competing with each other right. So, this is means logistics challenges are there this is one strategy how you can you know cover those logistics challenges.

Financial risk is there because you are exporting there directly. Let us say you opened up a warehouse may be capacity of 500 ton. and then somewhere you are utilizing today only 350 capacity, tomorrow may be 400 or maybe you are thinking or expanding this capacity or even if you are not thinking and day after tomorrow there is some fluctuation and demand is going down, what you will do with this capacity? This is one distribution center, what you will do with the logistics network? right the whole chain. So, that risk is always there you are investing into that that risk is there. Currency exchange I told you if you are selling for 1 euro you are getting earlier 100 rupees.

Now, you are selling 1 euro may be the currency this currency appreciated rupee appreciated now you are getting only 95 rupees right. So, that also currency exchange rate you need to take care. then we need to take care of legal and regulatory compliance, the intellectual property rights who is having the intellectual property rights. So, that also you need to take care and then obviously, cultural and language barriers are there when you are going overseas. So, that you can avoid by using local like indirect exporting right where you are including some more players and may be the local courier partners who are doing delivery on your behalf right.

So, these are some of the exporting examples you can see Tata Motors. So, Tata Motors exports its vehicle to various international markets including South Africa, Europe and South East Asia right. This is how they have set up their bus network Bajaj Auto. So, they started exporting motorcycles and three wheelers or other commercial vehicles they are exporting to more than 70 countries worldwide. talking about Infosys they are providing the IT software solutions right and across the globe including North America, Europe and Asia Pacific.

So, this is these are some of the examples of exporting right now in from Indian market what we are doing. this is another strategy licensing. So, what we can do is licensor may provide you the licensee with the rights that they can use you know their strategy, their recipe to produce the product and services or maybe to sell the product or services right. So, you can acquire that intellectual property such as your trademarks, patents, copyrights or proprietary technology you can use. Now, when we are going for these kind of licensing or franchisee kind of system, see KFC started their restaurant.

So, let us say they are only working in US or McD, they are working only in US right.

setting up their distribution center all over the world it's not one night work right it may take long time and then if you are not aware about the foreign markets asian market european market other markets so then it is very difficult and will take so long to understand each market Let us not take that headache and we will give it to some local vendors. We will share with them the our resources, our trademark, our recipe, our raw material, our technology so that they can produce similar kind of product in the same quality right. and in that way we can grow our brand image as well so McD let's say you are coming here in India we have McD you are going in europe you have McD options right so anywhere in the world you are going same store you are looking you feel more comfortable okay this is my store right so you feel connected as a customer so this is one point you can increase your brand image what are different types of licensing trademark licensing where you can use mcd brand name their logo or product and services they are selling right, so in your regional market. Patent licensing is you can use the patented technology or any invention done by them like I talked about the recipe secret recipe you can use that.

Copyright licensing sometimes the literary work or music, art work or software you can use like the English movie, Hollywood movie you can dub in you know Hindi directly or you can make the sequel or maybe kind of the same. story concept you can again use that with the permission right copyright licensing. Franchising is another option where you get the right to operate in the same area in the same business with the same brand name and model name and operating procedures right. So, obviously, again market expansion is one benefit which you are going for risk mitigation. Now, if you are coming with your burger and you are saying it is better than McD, who will you know admit your this claim? as a customer if you are saying that, but if you are making the same burger, but you are putting name as McD obviously, everyone will come to that they know that much quality or minimum level will be maintained right.

So, low capital investment is required because that building up that brand image marketing that is already done this brand is known for right so that much is not there quickly you can start generating the revenue brand exposure to foreign markets will be there brand will be more highlighted and you as a stakeholder of that brand because now you are also carrying that brand you got the license to reuse that brand so that you will be getting the visibility as well. What are the challenges? Because now on behalf of McD someone else is you know using the same recipe kind of same raw material, but you do not have direct control over the quality. What you can promise in your outlet same obviously your all the stakeholders partners cannot promise right. So, there is no direct control over quality. intellectual property protection can be some way can terms in terms of competitive risk because today whatever may be he is your stakeholder tomorrow he then he can be your competitor as well and because now Honda knows about the Indian market.

So, they can compete with hero. They know the supply chain role of distribution network services center in India. So, where the they need to locate strategic locations they have all data with them right. So, once who are partner the maybe after some time they can be competitors. and then you have dependency on licenses because ah you cannot make changes in that whatever is documented and then if you are serving in the foreign market you want to move even the licensor want to move he cannot move without the permission of the licensee because already you have given permission to someone else to operate in the other market. So, legal and contractual risks are also there.

So, negotiation drafting and enforcement to protect the interest of both the licenses and licensees. So, it is important right otherwise in the end split will be very difficult right like Hero Honda they also struggled while they were splitting separating right, but if it is properly documented then you will be having in the end proper idea how much control the one will be having of the other. So, licensing example, if you see Amul, they are selling their Amul branded products into so many different market 20 countries. You can just see the list is huge and still they are maintaining the product quality and standards. They have the license agreements and they are also training their partners how they can deliver the quality products.

ITC Limited, ITC Limited for these brand Ashirbaz, Sunfeast and Bingo, they are partnering with the manufacturing and distribution. So, they are only using manufacturing and distribution chain. So, they are moving their own product, manufacturing the product and then they are using the third vendor. FAB India is another organization which is working on this and they licenses its brand for retail operations in several countries and local partners to establish and operate FAB India stores abroad right. So, this is how you can get the quick access through your licensing system.

in the foreign market. So, next talking about the next option is joint venture. So, I told you Hero Honda joint venture, Maruti Suzuki joint venture where you are coming to some foreign market and you are exploring the third market where you are not existingly you are operating right. So, even if you are operating existingly. So, even then you can go for you know updated technology or somewhere you can leverage some resources from that company who is coming for joint venture. So, then that way you can understand in terms of joint venture if you see equity joint venture.

So, partners they can contribute as capital and resources to establish a new legal entity right, which can be any limited company and then they hold the ownership stake and they have fixed share in profits, risks and control right, how much they can control. Contractual joint venture like Hero Honda this is for specific period of time if they will survive after that also they can continue, but yes you need to you know define the termination provisions as well in that. So, that is a point in contractual joint venture. A Maruti Suzuki is not contractual joint venture if you talk about Hero Honda was your contractual joint venture. Now, risk sharing because now you two companies are operating one is local one may be foreign player you can risk you can share your risk.

Access to resources hero is having access to Honda technology technology Honda technology is having resources to hero manufacturing sites. manufacturing facilities and their distribution by distribution network. Easy market entry because already Indian player is there, cost efficiency will be there you need not to make that big huge investment to set up your distribution network. Risk diversification because now two players are involved and they have some knowledge about the local market.

So, that way you can diversify the risk. Cultural challenges like if you talk about Walmart acquired 80 percent share in Flipkart and Walmart is something if you read the story about Walmart the organization which is notorious for you know handling the workers. and their worker related policies. They are actually they are customer focused worker related policies are in big big questions, but their customer is their god like that. So, this is how they are promising. so you might have heard about the big tragedy that happened in pakistan at rana plaza building so many workers died but walmart refused to pay compensation to them and yeah in that way their guidelines are very strict you cannot be part of any union otherwise you will be simplified but now flipkart is which is ah you know ah ah started in India by indians so how it will take over how policies will merge another cultural difference will be there so that is obviously strategic alignment again you need to align walmart with flipkart very you know other example is tata tata nano plant which is always very you know good example they started in best bengal singur right but because of farmer agitation and all that they they acquired that land in a proper way right they followed all the procedure policies they started investing thousand crore they invested they came up with the infrastructure all that and then farmer started agitation about that we are losing our land we are losing the climate this that everything started happening.

But now Tata because if you have seen the Tata ad they say that our values are stronger than our steels. if you talk about their steel their values are more stronger than steel this is the promise they are making. So, Tata simply said that they step back that we do not want to make any profit any business on the stake of the farmers interest right. So, they withdrew simple.

So, imagine if there is some other player. So, obviously, then it is not in the hands of Tata only. So, if two companies are coming together that easy decision making will not be there right. So, this is the point I wanted to make control and governance. So, joint ventures you need to clearly mention how much control one is having obviously, now Walmart is claiming 80 percent stake. So, is having the authority with them, but in joint venture where you are having almost equal share you are sharing equally resources.

So, decision making powers will be equally distributed and how will dispute resolution will happen right that also you need to take care. intellectual property protection so obviously when two players are coming so confidentiality and ownership protection of intellectual assets so that secret recipe of Honda is no longer secret for hero right because they are partner somehow. So, they know the technology now the best thing is they know the technology of Honda they can again renovate the same technology and come up with more strong promises right in the market. So, exit strategy because it is joint venture may be contractual. So, you need to decide how the dissolution divestment or buyout will happen in the end right.

So, if you talk about joint ventures Mahindra and Mahindra joint venture with Mahindra sustain. So, a subsidiary of Mahindra and Mahindra and for renewable energy sector worldwide they have done this. If you talk about Hindustan Unilever Limited. So, they have joint venture with Unilever for personal care and home care products. Reliance industries again joint venture with global energy companies for exploration, production and refining operation in various countries including United States and other countries right.

So, these are some of the examples of joint venture where two companies are coming together sharing almost equal part. Ownership is actually the reverse of that where one is taking the ownership of other. So, acquiring it is kind of acquisition. What will happen overnight? So, like what happened with the Ranbaxy. Now, same thing happened with Flipkart as well when Walmart is saying that 80 percent stake is gone that means, ownership is gone.

Now, decision making power is with Walmart right. So, ownership encompasses the right to use, manage, transfer and dispose of assets in their way right. So, they can make the decisions. So, how you can go wholly owned subsidiaries 100 percent your share and then you will be having control of everything right decision making management. So, Walmart can control the flipcart operation in India right how they want to set up the location whatever their earlier cultural ethical considerations were there, but now because

100 percent stake it is not there 100 percent, but if you have owned 100 percent.

So, then you have full control over that. Equity investment, if you are having part of that investment then you gain the access to their markets, customers, technology and distribution channels right. So, equity investments provide a minority or majority ownership position in target company offering opportunities for collaboration, integration and value creation. Franchising, another option where you can include the third party granting them the license kind of thing and they will start operating under your company brand name your you can use the intellectual property right. Acquisition is involving purchasing the existing business assets or subsidiaries. So, in that way you can go for either forward integration or backward integration right.

So, you can acquire or your suppliers or your distributors as well in that way also it can So, when you are acquiring 100 percent you have control, you can control the policies market present and excess obviously. So, Walmart very tough competitor with the Amazon both are coming from US. So, in Indian market why Amazon should be there alone. So, Walmart came and they came strongly with Flipkart right.

So, knowledge transfer will be there obviously. from one organization flipkart you are sharing the knowledge how they were operating and from walmart you can get because walmart is the world largest retailer right in terms of employer if you talk about third largest employer in the world this is the you know strength of walmart risk management obviously, you can do in better way because now you are in broader picture. What are challenges? Capital requirements will be there obviously, regulatory compliance already we talked about right, cultural differences Walmart versus Flipkart best case to understand cultural differences right. how the customers will take Indian customers will take specially when we are saying that vocal for local. And then so many different campaigns we are coming up with the to protect our local vendors right local suppliers. So, but yes that way it will not work ah I think because it is the complete word whole word is one market right so integration challenges are there because both are coming from two different backgrounds right political and economic risk right now maybe walmart is seeking as very good opportunity walmart tried venturing with your bharti airtel as well earlier, but they failed right, but now they came up with the Flipkart who is doing fairly well having more than 60 percent almost 60 percent in some markets and major stake in e-commerce industry if you talk about right.

So, obviously, inflation recession exchange rate fluctuations those risks are always there. If you talk about ownership, Aditya Birla acquired Nobilis and became the aluminum rolling and recycling giant in that industry. Tata Steel, very famous deal you might remember, chorus group and became the largest player globally. Dr. Reddy Laboratory acquired select business divisions and manufacturing facilities in multinational companies, right.

So, let us talk about importing. Here you are bringing the goods or services to your country from some foreign distributor, right. So, just purchasing the goods. So, in that way product you have more options may be earlier you were also selling in the market now you have more options in that way. Cost competitiveness if you are getting cheaper product time to market obviously quickly you to the market because you need not to manufacture it already someone somewhere in the part of world manufacturing that product.

So, easily you can introduce in the market. So, market expansion you will get and risk mitigation. If today you need 100 products, you will import 100 products, tomorrow you need 1000 products, you need 1000 products and then day after tomorrow if you need only 10 products. you will use only 10 products. So, that capacity whatever you have built there is no capacity some other organization is using whether you are using this part or this much part or this much part.

So, you are not bothering because you are importing that. So, challenges trade barriers obviously, are there regulatory frameworks trade restrictions import duties will be there supply chain complexity because many players are there you need to collaborate coordinate with everyone you need to make the trade relations. No direct control over the quality of the product because you are not manufacturing you are just importing that. Currency and financial risk already we talked about exchange rate is one major factor which is affecting this right. Already I discussed with that financial volatility and credit risk obviously, will be there unknown players are there.

So, that risk will be there competitive pressure will be there right. So, many players are there. So, importing example Walmart is importing worldwide they are feeding their suppliers large order this is how they are negotiating amazon india is also partnering with global players to provide you a diverse range of products apple india talking about indian market only they are importing all the products like iphone ipads macbooks to indian market and selling through the their authorized distributor Counter trade is something which will avoid your usually we can see it as a very good viable option when you want to avoid the financial transaction. what we will do two companies will be there one is saying that I am producing birth thousand rupees goods and you are producing worth thousand rupees goods we will not deal in financially you this is a kind of barter system you give me your products I will give you your products right so that way we can remove all the intermediaries we will Somehow we can remove all those documentation and exchange rates all the stakeholders we talked about currency transactions and all that banks and the role of all those agents will be eliminated in that way counter trade is preferred right. So, it involves reciprocal trade agreements between trading partners encompasses various forms of trade agreements widely used in international trade.

not only private firms are. So, government organization are also using this kind of strategy which is obviously, to you know cut down the cost. Again those all advantages are there if you are doing that. advantages are there, but what about the challenges? One major challenge is to fix that these many goods are equal to these many goods coming from you. So, to evaluate to create that 1000 rupees goods in your industry, 1000 rupees goods in my industry this is a big challenge and then maybe I am selling you a kind of product which can be easily packed, which can be easily transported and like that, but and easily stored no special cold storage is required, warehouse handling is required that kind of product is there, but you are sending me 1000 rupees product which requires very special attention, special handling, cold storage and packaging is difficult and expiry dates are coming then it is very difficult to negotiate. So, that complexity is there negotiation with those partners is difficult, but once you will clear the things So, maybe you can include those transaction cost and logistics cost.

So, then it will be fair good for both the parties will be win-win situations right. Already I talked about transaction cost may be different for two players right. Not only transaction the legal fees and the you know the local framework requirements trade requirements may be different for these two different industries. Then operational risk will be there delivery delays, inventory management challenges all those things will be there and because you are equating goods with goods.

So, if delivery is delayed at one end obviously, the other end will suffer. So, somehow we can say financial risk that fluctuating exchange rates still you can manage because there is no real currency involved. So, that way you can manage right in a better way if I compare with other models. So, counter trade example if you see Indian oil corporation, they are importing the crude oil from Saudi Arabia and selling them agriculture products and infrastructure development, they are involved in those kind of products. ONGC with their Bidesh limited scheme. They are also you know oil and natural gas corporation, they are also offering so many technical expertise and investment and in terms they are exchanging the energy resources.

So, this is how these trade partners are working you can see FedEx. and Ryder, Expo Logistics, UPS, United your parcel services, DHL these are major companies carrying maximum share talking about Indian Location Logistics, Blue Dot, GATI and FedEx and Mahindra Logistics all these GATI KWE. So, these are the some big players and delivery you might be very aware about these because they are making the deliveries and courier partners with the earlier they were with the Amazon and Flipkart as well now they are I think they are doing eBay or some other players Meesho and all. This is very small case study quickly we will go through. During COVID-19, Peru they faced this obviously each country they faced sudden rise in the demand of medical devices, but this I have taken special this case on shipment of syringe from China to Peru right. So, because to successfully run the vaccination program they need the continuous supply of But, logistic congestion caused by transportation restrictions and obviously, shutdown operations were there, everything was banned.

So, how we can ensure that? So, then they planned some strategy. So, how we can go for within just 48 hours from Shanghai to Peru, how we can deliver the syringes? So, you can go through the detailed case, but here I will just talk about the solution. They contacted with the charter flights and then they worked out what is the passenger area required in each flight. So, whatever area is left out they started tapping that area and they started you know transporting the syringes using that unused area. So, a total of 8 air charters and part charters were made. from southern china where the this factory was located to peru and you can see from shanghai alaska los angeles mexico and lima route this is how these they had to pick this difficult route because the slots were not available and their continuous supply from shanghai to peru was required of syringes right So, result is that after evaluating different options that allowed us to comply with the timing established by client and maintain a reasonable transport cost, the results was success and the syringes arrived on time every month to complete the different phases of vaccination campaign in Peru right.

See, this international trade we spent couple of sessions on this, but is very important because no business in these days is a kind of you can say local business right. So, when you are saying your promises are that you exist overseas as a customer I will always feel that more comfort right. I am dealing with I am taking those brands which are internationally you know. So, everywhere if I will go I will get the services that kind of familiarity is there. So, but the challenge is huge in terms of so many stakeholders are involved then I obviously, we talked about in that video that how Amazon global logistics as partner can solve your problems.

The other problem was the transactions how Amazon wallet can help you know to reduce the cost of the transactions among the multiple vendors stakeholders involved there. So, this is how we can conclude this that international logistics is very important part these days of e-commerce players when you are sourcing your products from different locations and you are finding your customers in different locations. So, these are the references and textbooks you can refer for detailed content and the case is also included there. So, thank you very much that is all from my side.