Working Capital Management
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Lecture - 22
Stockouts Cause Walkouts

Welcome students. So we are in the process of learning the inventory management or say investment in the inventory deciding the amount of the inventory to be kept which will be the optimum amount. So in the previous class I was talking to you about certain costs which are associated to maintaining inventory or not maintaining inventory. In both the cases we have the cost. As we know that in case of maintaining inventory we have the carrying cost, holding cost, shipping cost.

So not holding the inventory and sometime if there is a situation comes up that there is a order received by the retailer or maybe by the manufacturer and he is not able to serve the needs of the consumers. Then the consumer will be it will not be a good step. It will not be a welcome step from the consumer side. He will not like it and sometime we feel or sometime we feel that the reaction is not very sharp as far as the consumer is concerned.

But in the mind of consumer sometime it gives a sharp reaction that this company is not the say you can call it as the company which takes care the needs of the people or the consumers or sometime this retailer is not the say appropriate retailer and there is a there is a shortage of the goods on the shelf of the retailer and they do not feel like to come back to such retailers. So stock-out cost is a very big cost.

Many people misunderstand it or sometime they do not understand the gravity of the problem which comes up because of the stockouts. So we should not allow the situation. Like that we have the orders. People are ready to buy the goods and services from some company or from some retailers but we are not able to serve their needs. So that creates the problem. That situation should also not come up.

And if that situation comes up and if the any say way maybe the retailer or the distributor or the manufacturer is not able to serve the needs of the buyers then it creates a big problem and it has a big cost. It leads to the lost sales, that is a direct effect. But the loss of a loss of reputation, loss of goodwill, loss of say customer preference or customer choice. These are the some indirect costs which are sometime very heavy.

And it gives the impression that these companies or these retailers or these people do not take care of the needs of the people. On many times it has happened with you also when you visit a store or any shop and you have something in your mind that I want to today buy a particular type of the shampoo or maybe some cosmetic or maybe some other thing of daily use or some say thing to eat like salted you can call it snacks.

So these things when we do not find on the store we feel very bad that we wanted to have something but it is not available. So ultimately it creates a problem. First it disturbs the consumer and the aftermath effect of it is to the distributor, to the retailer or to the company also. So we have to take care of it. As I was talking to you that why we are talking of maintaining the optimum level of current assets right.

Whey we are talking of maintaining the optimum level of current assets because from the current assets we have to pay the current liabilities. We have to create that kind of symbiosis that kind of situation in the company that it is only the current assets who would generate the cash and from the current assets only we will have to pay for the current liabilities. Maybe it is a spontaneous finance or whether it is say short term sources of the finance, we have to pay the current liabilities.

So current liabilities become very say quickly due to be paid. So we have to remain say very careful about that and at any particular point of time we are not able to make the payment of the current liabilities as and when they become due the firm is considered as technically insolvent. Everybody understands that the firm is good. Overall financial health of the company is good. It is a very big company. It is a large organization.

Assets of the company, liabilities of the company, financial performance of the company, profitability of the company, there is no doubt about that. This is a means unparallel organization. But you see that if you are not able to make the payment at that time when it is due to be made what impression the other side will carry.

So it means how big your company is, how profitable your company is, how high the level of assets and liabilities is; if we are not able to serve those liabilities, if we are not able to payback those liabilities as and when they become due in that case there comes the problem. So we should avoid that kind of the problems. So you see we are talking about building the optimum level of current assets especially those assets which are least liquid and one is the inventory.

Inventory is the least liquid so we should build up the optimum stock of inventory. Otherwise what will happen? As we are talking about the stock-out cost that same way there will be the stock out of the cash. For example we exhausted the cash, whatever the cash as a current asset we had maybe the cash in hand or cash at bank. Similarly, we exhausted even the credit sales that is accounts receivables also.

And now we have to depend upon the inventory and if the inventory is not saleable if it is not convertible into cash. So what will happen? The company is not able to serve its liabilities, current liabilities at the time when they became due. So that is considered as a technical insolvency. That is a state of technical insolvency because firm is not insolvent. Firm is not bankrupt.

Firm is good, having a good financial health but that is called as the technical insolvency. So same is the case means same situation arises when we go to a shop. We want to buy a product as a consumer but the product is not there. So we understand company is good, company's product is good, everything is good but at that particular point of time when the company is not able to serve anybody's need, any consumer's need so consumer thinks that this company is technically insolvent.

So that situation should not come. So we should carefully think about the stock-out situation and we have not to worry about that. Means here with further think about that many a times you might have seen here that when we visit a shop some distributors or some salesman from the companies they visit the shops themselves and with the permission of the shopkeeper or maybe the owner of the retailer store, they themselves manage the shelves.

They place their goods at a place where they are easily say is the customer can easily see can have a look upon it. Because many a times we feel that if something is available on the shelf and it looks attractive we do not want to purchase it but sometime we go for the unintended purchases also.

So that is also a another skill that you are managing your company, your distributors, your salesperson, sales force and retailer are managing the show in such a efficient manner that even the customer does not want to buy the goods, particular type of the goods, but they are bound to buy it they are forced to buy it because it looks so attractive because it is available on the shelf. So that is a another part of the story. That is a another extreme.

So we have not to allow this extreme to come that we means anybody comes to the store to buy anything and that stock is not available as and when we want to buy it right. So stock-out cost I was just talking to you that is a very high cost. We should avoid this cost and all the times sufficient inventory of all kind of the things should be maintained. I was referring you to a to a survey which was conducted by the Harvard Business School professors, 2 Harvard Business School professors and one of their another fellow.

Three of the people they conducted the survey sometimes back and the survey was conducted across say 71,000 means on the 71,000 consumers across 29 countries right.

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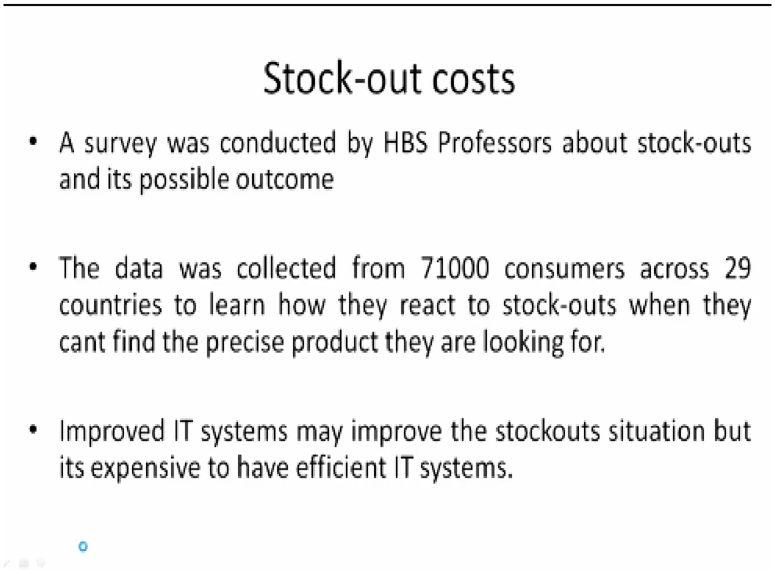

A survey was conducted. These 2 Harvard professors that is Daniel Corsten and then the Thomas Gruen, they conducted a survey on 71,000 consumers across 29 countries to learn how they react to stockouts when they cannot find the precise product they are looking for right. How they find when the precise product they are out to purchase but the product is not available on the shelf, how they react. Means it has many kind of reactions; mostly they are the psychological reactions.

But we have to capture as a researcher as a surveyor we have to capture those reactions and we have to translate how the customer feels at that time. So how the customer feels.

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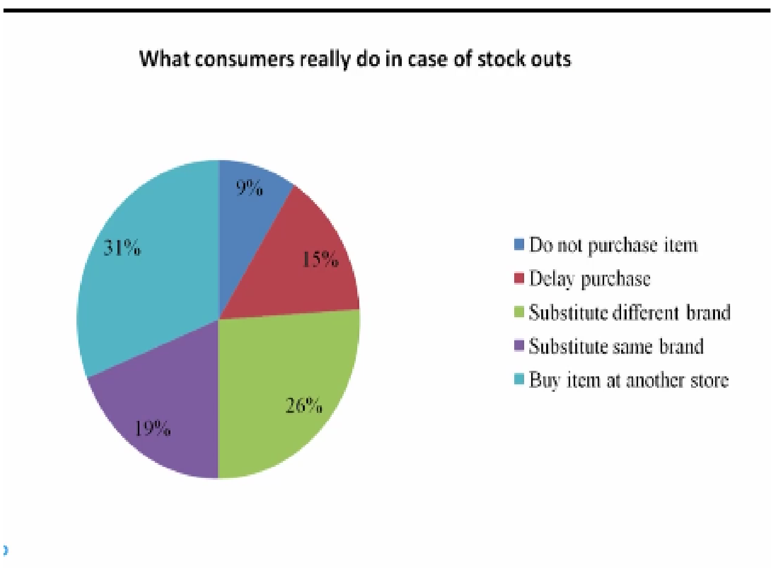

Here is the picture they have presented and they divided their total consumers, 71,000 consumers, who they interviewed and tried to get the information from. They finally say concluded that customer take either of the 5 decisions; either of these 5 decisions and sometime they are not in the interest of the company. Sometime they are against the interest of retailer. So it means whether it is retailer, whether it is company, both are negatively getting affected.

And both are going to pay the cost which is direct cost in terms of the lost sales and the indirect cost in terms of the lost reputation, goodwill. So that kind of the situation should not arise. Now see how the customer feels when he visits, he or she visits the store for buying a particular thing or buying intended good and that is not available on the shelf how they feel at that time. What kind of the decisions they take and what is their reactions.

They have captured their reactions and they divided into 5 broad categories. Number 1, do not purchase item. They come back and they do not purchase the item. So out of that out of 71,000 consumers how many said that they do not buy the item, 9% only. Okay, if it is not available today I will buy it later on but I will not buy any other substitute. I will not go to any store. I will not say replace the store. I will not replace the product. I will not look for any other alternative.

I will not buy the product and he or she comes back. Still it is not that bad. If the person is not buying the product at least you lost the sale for a moment but next time he or she goes to the store and if the production is available, same company same retailer could make the sales in the market and the product could be sold. Only there was a difference of time. Not bad, not that bad. It is bad but not that bad. Now second case is delay purchases.

Sometime we forget purchase. So okay no problem. We are not going to buy it but he may buy it later on but the second thing is delay purchases. This is also not bad. 15% of the people say that okay if it is not available today, I will buy it later on right. So he will delay the he or she will delay the purchase. Again he or she will not look for any alternative, not substitute the product or the store.

And they would like to again come back and to buy the same product from the same store. So 50% or 15% of the people have said that yes we will buy it at the later date. So it means out of the 100% consumers, 24% of the consumer say that either I will not buy it. So it means he may again think sometimes that okay let me go out and to look for the product. But in the second category that is 15% of the people say not today I will come tomorrow.

And they delay the purchases but they do not look for the substitutes. In both the cases 24% consumers are not very harmful but still it is not good. That kind of situation should not arise. Look for the third decision they take. Substitute different brands. This is a large amount of the people; 26% of the people say that if it is not available I will buy the product of any other company. So it means in that case what happened? Company is going to pay the price.

Company lost the sale. That you say that it does not means it does not make a difference that if somebody does not buy it or somebody replaces X company's product with the Y company's product so how does it matter? But it matters. It does not happen at one place. It happens at many places. So the person if likes the product of the other company the substitute then he may never like to come back to the first product so first product lost the market forever.

Lost the consumer or the potential sale forever. So it means substitute different brands, it is a most dangerous situation for the manufacturer, for the brand. For example we want to buy a shampoo, particular type of the shampoo. We buy Head and Shoulder, we are user of the Head and Shoulder.

But when we went out that a particular variant of the Head and Shoulder we want to buy and if that is not available on the say on the shelf but anyhow I see that okay if the Head and Shoulder is not available which I normally use I will go for the next or the second brand which is available on the shelf say for example the L'Oreal is available on the shelf. So people will replace Head and Shoulder with the L'Oreal.

And if they like it, if they use it and if they like it maybe they will replace it forever. So Head and Shoulder is gone out of that person's choice and that brand of the shampoo is replaced by the

L'Oreal so you see it is a loss of the sale to the manufacturer of the Head and Shoulder. Fourth decision they take is substitute same brands. Substitute same brands. In this case what happens? Head and Shoulder is the one brand. But it can be from the same company there can be other brand also.

They will use the shampoo; they know that who manufactures Head and Shoulder. So if the same company manufacturing the other brand of the shampoo at least they will like to replace it with the same brand. So in that case it is not loss of sale to the manufacturer. It is not of the sale to the retailer and not a very bad decision on the part of the consumer. It is not against the interest of the manufacturer or the retailer but still it is not a good practice.

Last decision is buy item at another store, buy item at another store. If they buy item at another store look whose loss it is. It is a loss of the retailer. It is the loss of the store. Because that retailer, that store could not fulfill the requirement of the consumer who is regularly visiting that store, that day he did not find the product. He will not wait; he will not delay the decision. He will not say say stop buying.

He will immediately go to the another store, nearby store and he will buy the same product from that store. So it is a loss of sale to the retailer. So it means some cases there is a loss to the manufacturer and retailer both. In some cases there is a loss to the manufacturer. In some cases there is a loss to the retailer. So everybody is paying the cost. And we have understood that the cost is both, direct as well as indirect.

So this kind of situation should not be allowed to come up and we should try to maintain sufficient inventory but it does not mean that you maintain the inventory beyond a level because otherwise what will happen that means we want to ensure the sales but we are paying the extra financial cost by investing huge amount of the funds in the inventory maybe at the manufacturer’s level, maybe at the retailer’s level, maybe at the distributor’s level.

That is also not good. So I am time and again emphasizing upon that we have to look for the optimum level of inventory which serves the needs of all the stakeholders. Now what the further have found out, the survey has found out is look at this thing. The further findings of the survey are, what consumers really do in case of the stockouts.

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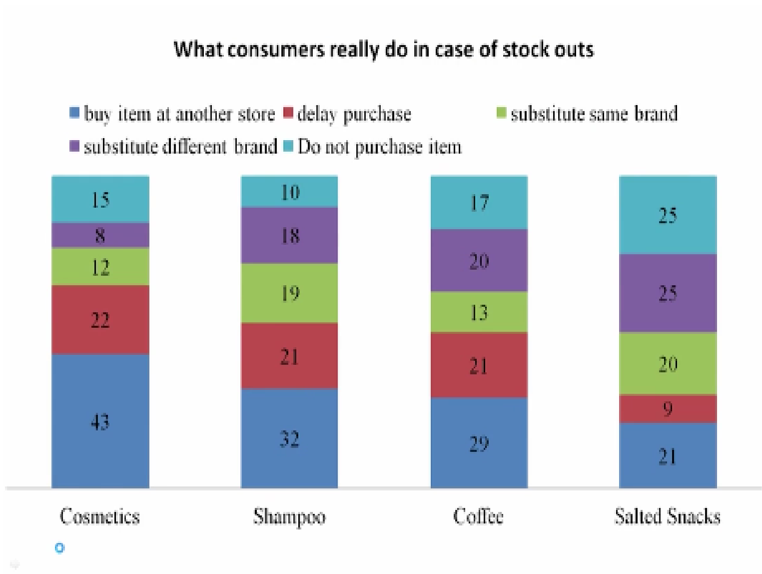

Buy items at another store right. We understand. Now we have the four kind of the products here. The survey included 4 kind of the products. First product was cosmetics. Second was shampoos. Third was coffee and fourth one was the salted snacks. These were the 4 products and these are largely consumer products. See the impact of stockouts is more on the consumer products, less on the consumer durables; less on the consumer durables.

It is on the consumer durables also but less. For example if you want to buy a colour TV. We have already decided. Because colour TV is a kind of product which we do not buy everyday. We buy once in a while. So if we have decided in the mind that we will buy only a Samsung colour TV or a Sony colour TV or the LG colour TV that decision is already there in the mind right.

When we go to a retail store and go to a store, electronic store we try to find out that whether Samsung TV is there or not right. But if the Samsung TV or that desired variant of the Samsung TV if it is not available at that time we take two decisions. Either we visit the another store, another electronic store or we postpone the purchase because brand in case of the consumer durables is something which we do not want to change so frequently.

We are satisfied with the Samsung or Sony or LG so ultimately have to buy Samsung product, Samsung colour TV. If it is available today, I will buy it today. If it is available not in one store, in the other store, I will buy at other store. But anyhow I have to buy it, only Samsung. So it is not a loss of sale to the Samsung but is a loss of the sale to the store at that particular point of time. If he buys the product at another store then it is a problem to the store.

So it means in that case the impact is not that much to the company it is to the retailer. But in case of the consumer product which we buy on daily basis right if that is not available on the one shelf or one store we immediately go to another store. If the one company's product is not available we replace with the other company's product. So we have to be very careful as a manufacturer, as a distributor, as a seller that this type of situation does not arise.

So if you look at this, in case of the cosmetics how these 5 decisions of the consumers have affected. Say first is 43% buy item at another store. In case of the cosmetics it is a very big chunk near to the half of the consumers out of 71,000, they buy cosmetics at the other store. So it is a loss of sale to the store. Then 22% people delay purchase. They delay purchase so it means at least the store can expect this person will again come back to me and by that time I should make the product available.

So not a very serious loss. Substitute same brand. If he substitute the same brand it means if the one variant is not available go for the another variant or the cosmetic and same store and same company but some loss of the reputation but not much. Substitute different brands. In this case this is direct loss to the, it is a direct loss to the company. Say 8% of the people. Very few people change the brands.

Because if you use a product of a one particular brand we do not tend to change the brand very frequently especially in the cosmetics which affect your skin here and maybe your taste. So we do not change it very frequently but sometimes we change as in this case 8% of the people, 8% of the respondents have said that in case of the cosmetics we substitute the product we buy normally with the another brand.

So it is a loss of sale to the brand, not to the store and do not purchase item, not at all purchase item. So ultimately it is a loss of sale to the both that is to the store also that is to the company also but maybe you can hope that he has not completely said not to buy the product he may come later on but not with the within the specified period of time.

If that is the time is specified that I will come tomorrow, I will come 2 days down the line then it is a delay purchased season but here do not purchase the item. So he will forget for a moment. Again that thing will come up in his mind. He may visit the same store. Look for the product, if it is available he will buy it. In case of the shampoos we have seen here that 32% of the people buy the product at another store, again a big chunk.

Delay purchases only 21%. Substitute is 19. Substitute with a different brand is 18 and do not purchase the product is small number that is 10%. In case of the coffee in case of the coffee we have seen that 29% of the people buy the same brand coffee at another store. So there is a loss of sale to that store. Delay purchase 21%, then substitute same brand 13%, substitute different brand 20%, do not purchase the item is only 17% right but it is not a small number.

We should look for that if somebody has made up the mind to buy the product he should be served with that product if the product should be available. Even he decided do not, not to buy the product then it may be possible he will come tomorrow; it may be possible he will not come even forever because he has not delayed the purchase. He has taken a decision I will not purchase the product. Again he can think about but he may or he may not.

Think about the salted snacks, 21% because snacks many companies manufacture and sell the snacks in the market. So it maybe mathlab it is not a big difference it does not make a big difference that for example we use the say Lays as a chips, salted chips potato chips. If we use Lays and we are say means habitual, we like to consume the those snacks those chips only those salted potato chips then maybe if the Lays is not available of the blue pack of the Lays is not available I may go with the green American taste.

Or maybe I can go with the yellow taste which is very simple you can call it as only salted, no spice in that. 9% of the people delay purchase in case of the salted snacks. Okay today it is not available I will come tomorrow. 20% substitute the same brand. So if the Lays is not available I will purchase some other company chips for example say local Haldiram's chips are available or maybe this Bikano's chips are available so we will buy that.

So it means in that case the Pepsi lost the sales. 25% people or say 25% people substitute with a different brand like and do not purchase item forget I will not eat chips. I will not go to any store I will not replace with a new product I will not eat chips and that is also a big chunk 25% of the people. Out of 71,000 consumers if they are saying that 25% of 71,000 people if they are saying that they are not interested it means somewhere 16, 17,000 people have responded that they do not purchase the product.

They neither replace the brand, they do not substitute the brand, they do not change the store. They simply take a decision. I wanted to have chips but if they are not available do not worry I will not take it. In that case again it is a big loss to the manufacturer to the retailer to everybody. So it is a very big cost and we will have to be careful while serving the needs of different kind of consumers in the market.

Now I would share with you some of the other findings of the same paper, same case which was reported by these 2 Harvard professors plus one of their associate on the basis of whose finding we are sharing and we are learning about the stock-out cost. They have said that on their in their survey when they visited different countries they found that out of 100% stockouts they find or the reasons for the stockouts they found, they concluded on the basis of their research that 72% of the stockouts were found on the store because of the inefficiency of the retailer, because of the inefficiency of the retailer the product was not available on the shelf in the store.

It means store is careless. He does not care. Store people do not care what product is available, what is finished which has gone off the shelf which is on the shelf and I have to replace it with the new stock they are careless, 72%. So they are also the party to it so they are also getting affected. They are also losing the sales if people buy the same product at the other store. 28% of the stockouts were found because of the inefficiency of the manufacturers or the companies who manufacture these 4 products, 28% but only.

So it means 72% was the reason that is at the store level inefficiency of the store and only 28% reason were attributed to the manufacturer that manufacture did not bother about that in that particular market or in that particular area we have not received the order for long so let us check whether there is a need for our product or not or sufficient inventory is lying. So they should also be careful in that case. So what happened? What is the solution?

Solution is what they have given the solution they have found the consumers as well as the some of the stores in US as well as in UK they have taken some actions also and how they have improved this situation to deal with the stockouts?

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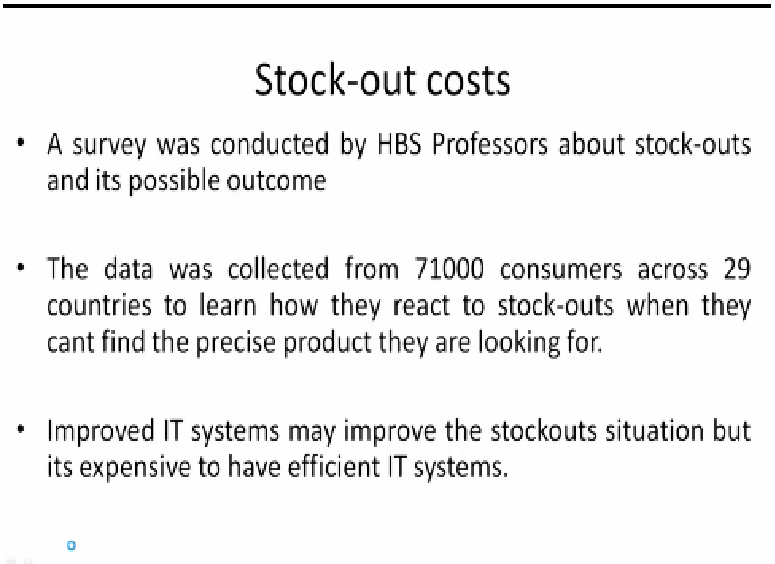

Improved IT systems may improve the stockouts situation but it is expensive to have IT have efficient IT systems. So only important thing is that with the help of IT systems we have the programs, information technique based programs in the systems which keep on telling, the system keep on telling that on one particular shelf this range of the products are kept and this product has gone out of order.

This product has gone out of order so it means say out space not order I would say but it has gone out of shelf it is finished it is over I should replace or store should replace it with the new product. If that is the case that can help the help to solve the problem to a larger extent and many stores have found out that improved IT systems though they are very expensive but if the store is very large for example we have some big chains you can say that Big Bazaar in India or Reliance Retailers they are in India.

They can they can afford to have that kind of the softwares or that kind of the IT systems. Here in this survey they have reported 2 important cases that there is a one big retailer who is called as H.E. Butt grocery HEB. The small name of the grocer was, is a grocery chain in US. It is a US food retailer you call it is a US food retailer H.E. Butt grocery which is in the short called as HEB they have adopted this system of the means putting in place the efficient IT system.

They are the retailers and by spending money on having the efficient IT systems they have been able to reduce the stockouts to the extent of 22.5%. up to 22.5% the stock-out problem has been solved at the store level by this HEB distributors or the retailers. There is a another retailer, here there is another retailer in say US largely which is called as Sainsbury. So Sainsbury also has say put in place the very improved IT systems.

And in that case normally they have identified number of items and Sainsbury has connected around 2000 items. It is given in the survey 2000 means largely selling items they connected to this IT system and as a result of that improved IT systems, which is linked to the 2000 frequently selling items, top selling items they have been able to reduce the loss of sail by 2%. It means sales have gone up by 2%.

So these stores which are very big in say size, sales amount everything which are very big if means they are able to gain the sales by 2% just immediately after say putting in place the improved IT systems so you can make out that regular gain of the sales will be how much. So that system, the cost of the system will be compensated to the company or the company will be compensated for the cost of say putting this systems in place if we are able to deal with the problem of the stockouts.

So we have to be careful that when we are talking about working capital management we are talking about that on the one side when we are careful about not investing huge amount of capital into the inventory so we should be careful on the other side also that the investment should not be too short. Because short investment creates the problem of the stockouts whether it is a stock-out at the level of or because of the inefficiency of the manufacturer.

Or because of the inefficiency of the retailer or any other means component of the total distribution channel that is again a bad thing. We should avoid that. All the times shelf should be having the product as and when the people visit the store they want to buy the product. The product should be available. So it means not abundance of the products but sufficient desirable amount of the supply of all kind of the product should be ensured. It is the duty of both the sides.

It is the duty of the retailer also. It is the responsibility of the company also. Company's sales force they should continuously keep on visiting and in many a cases companies take the responsibility that companies take the responsibility that their salesperson visit the stores and they know this is the area, this is the shelf where our product is normally kept by the store. So they visit very frequently.

And they see that all variants of our product is available there all the times and if it is not available it is their job to put the product on place. Nobody else will come. We have seen in many cases when we visit the bookstores some good book publishing houses their representative come to the bookstore. They see that means a one particular book is having a low sales.

So what they do is they pick up the book from somewhere put in the backside put it on the front so that any person who visit the store or the shop they can see they can have a look upon that book and they can just pick up the book. If they find the book useful they can buy the book. So it can be done by the manufactures also. It can be done by the retailers also. But if retailers will not do it then it should be the say duty of the supply chain people who are ensuring the supply chain in the store, not the responsibility of the store people.

In many cases the retailers have realized that it should not be a responsibility of the store people or people managing the store. It should be the responsibility of the people managing the supply chain. So everybody has to work towards this and they have to make sure that sufficient quantity of goods in sufficient amount sufficient supply is available all the times at all the stores all the shelves so that the cost of stockouts can be avoided.

So look at the thing which we were thinking about it is not a big deal. If we are not able to serve the customer's need he will come next time. But it is not a that kind of a thing. It is a very serious issue and companies have to think about. While managing their inventory, making investment in the inventory they have think about that not too much investment in inventory but not too less investment in the inventory.

So ultimately again the optimum investment in the inventory because otherwise we will have to pay apart from the many other cost if we are going to avoid the carrying cost, we are going to avoid the holding cost, we are going to avoid any other direct cost it has the stock-out cost. And it is equally important cost, it should be avoided. So here I will stop for this and next time with certain more concepts or aspects of inventory management we will discuss in the next class. Thank you very much.