Retail Management

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Lecture-47
Merchandise Forecasting, Dollar Control

Hello everybody, welcome to this NPTEL swayam course on retail management, this is professor Swagato Chatterjee from VGSOM IIT Kharagpur, who is taking this course for you. This is your last lecture and we will be discussing about merchandise forecasting and dollar control.

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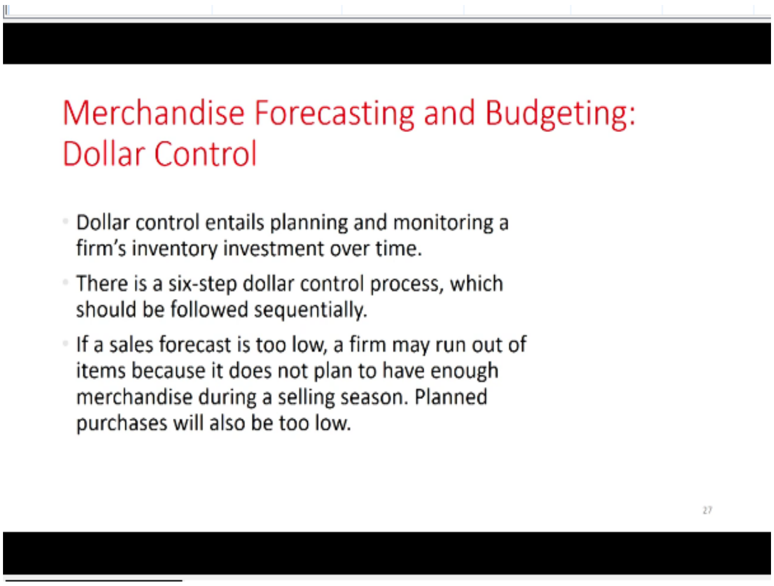

So, merchandise forecasting and budgeting these 2 together is called basically dollar control. Dollar control entails planning and monitoring of firm's inventory investment over time. There is a six-step dollar control process will come to that which should be followed sequentially. And if a sales forecast is too low, a firm may run out of its items because it does not plan to have enough merchandise during a selling session.

Planned purchases will also be too low in those cases. So, it generally goes in hand in hand with the sales forecast that you have and that is why the forecasting plays an important role in the case of dollar control.

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What are the 6-steps? The first step is designing the control unit, so how would you design the control units, whether you are doing the forecasting for the whole organization or whether you are doing it for only one particular chain or one particular category or one particular rescue, so control units; what is your control units you have to find out first. Then you do sales forecasting, I will not go into the details of self forecasting in this class.

You get marketing analytics course is there, please go through that and you will find out what is about sales forecasting, how to do exactly. That once you do the sales forecasting according to the sales forecasting you can do the inventory filing that how the sales will fluctuate and how much should be the inventory level that I should maintain and then at what point I should order, what point I should not order then the reduction planning, planning purchases and planning profit margins.

So, you have to also plan what you will purchase and what will be the profit margin, all of these things comes under the broad domain of dollar control.

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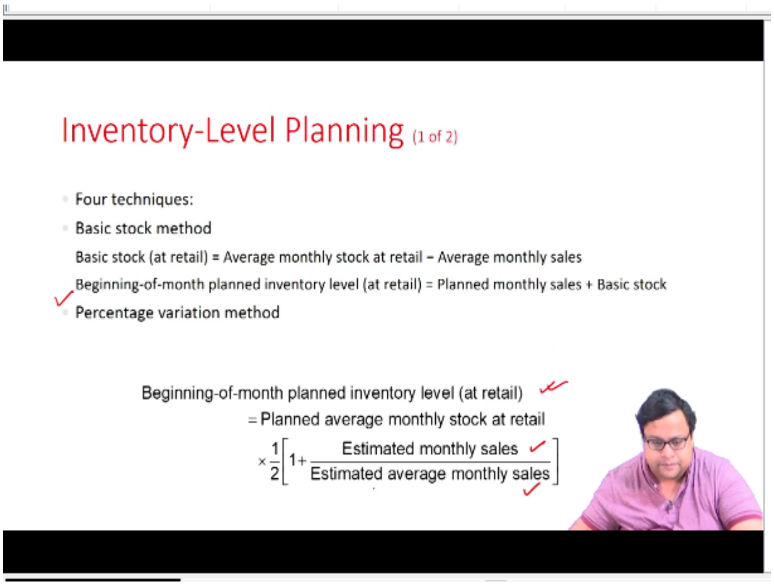

What is inventory planning we talked about? I will jump to the third stage. So, with sales forecasting and how to design and control which you need is a strategic decision and analytics decision but how to do this inventory planning? There are 4 techniques again. You check the basic stock method. So, what is basic stock? It is the average monthly stock at retail minus the average monthly sales.

So, how much is the stock that you have and how much it will go away or beginning of the month inventory level is equal to planned monthly sales plus this basic stock. So, you want to say that I will keep that much inventory in the next year which is the planned monthly sale, how much is the monthly sale that you want to achieve plus the basic stock that you want to keep.

That will be your plan inventory level, so beginning of the month planned inventory level and then there will be the percentage variation method then you will allow certain percentage variation. What is percentage variation method? Begin of the month planned inventory level at retail is plan average monthly stock at retail. So, how much is the monthly stock that you have planned in that particular basic stock into half and multiplied by 1 plus estimated monthly sales by average monthly sales.

$$\text{Beginniing-of-month planned inventory level (at retail)}$$
$$=\text{Planned average monthly stock at retail}$$
$$\times\frac{1}{2}[1+(\frac{\text{Estimated monthly sales}}{\text{Estimated average monthly sales}}]$$

So, how much is the variation, how much this will particular thing is bringing in the variation and how much is the forecasted monthly sales that you are expecting and what is the average monthly sales that you are expecting over the year that ratio is basically the I would say the percentage variation method that is a measurement of variation and that you multiply with this plan average monthly sale at retail to get your and inventory level.

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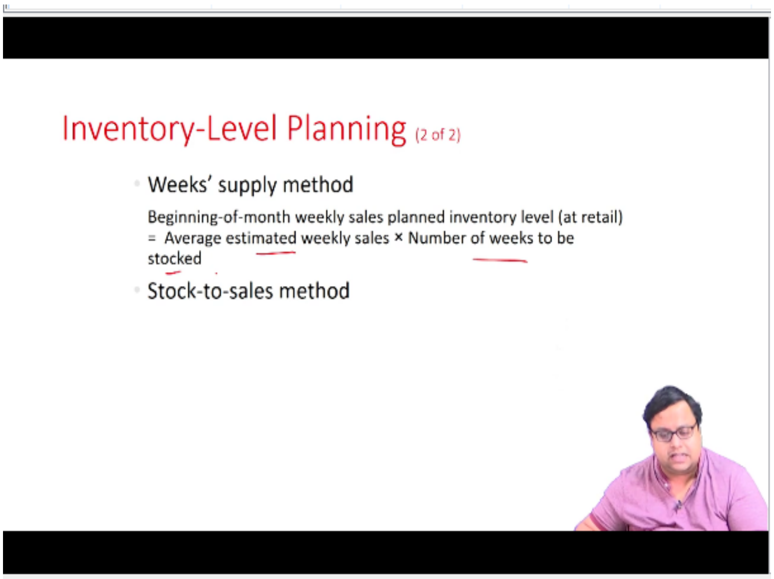

So, let us try to do that, you can also do it with weak supply method that is another method and stock to sales method. So, week supply method is beginning of the month weekly sales planned inventory level is equal to average estimated weekly sales multiplied by number of weeks to be stock. So, how many weeks stock you want to keep that is something that depends on the lead time, that depends on how much time will it require to get your product back. That is another thing.

And stock to sales method is how much stocks you keep, so that you sell certain products. So, that will be also stock-to-sales method. That is the 4 methods one first is the basic stock, second is percentage variation, third is weak supply and fourth is stock-to-sales method. These are the 4 methods of invent planning.

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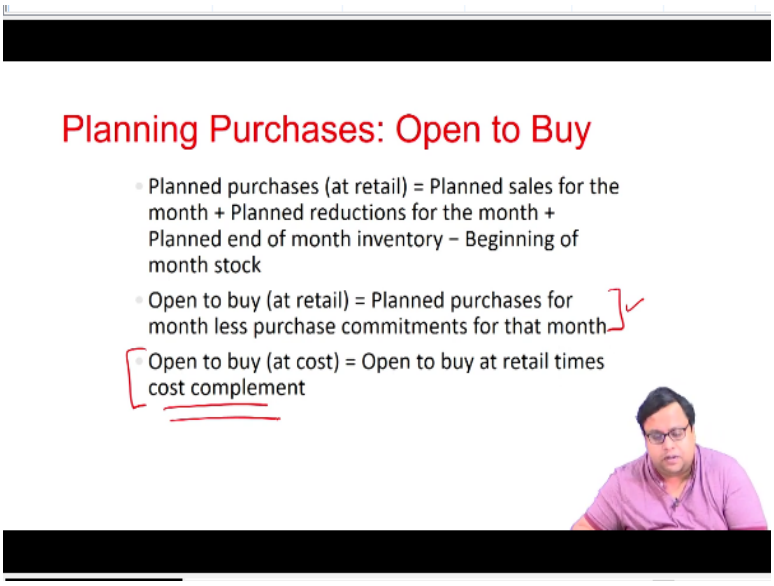

Then to achieve that inventory you have to plan your purchases. So, how much you are open to buy? That is something that we are discussing. Next step is how much you are open to buy? So, your planned purchase at retail is planned sales for the month, so how much will be sold off plus planned reductions for the month how much will be wasted and stock they taken away reductions plus planned end of month inventory.

After all of these things how much you want to have at the end of the inventory minus beginning of the month inventory. So, that will be your planned purchase level. How much you are open to buy plan purchases for month, when your plan purchases for month is less than your purchase commitments for that month then you know that okay this guy is still open to buy and a vendor can probably come and try to sell certain products to you.

And when you are open to buy at cost, when open to buy at retail, so this is the open to buy at retail price, open to buy at retail times the cost complement is the open to buyer cost. So, at what price you are going to buy. If I want to know that as a vendor this is the money that you are still ready to spend to buy your inventory. That is the money that you are ready to that much inventory you are ready to buy at the retail price. That into the cost complement will give you how much you are ready to pay for getting that inventory as we have already discussed the definition of cost complement.

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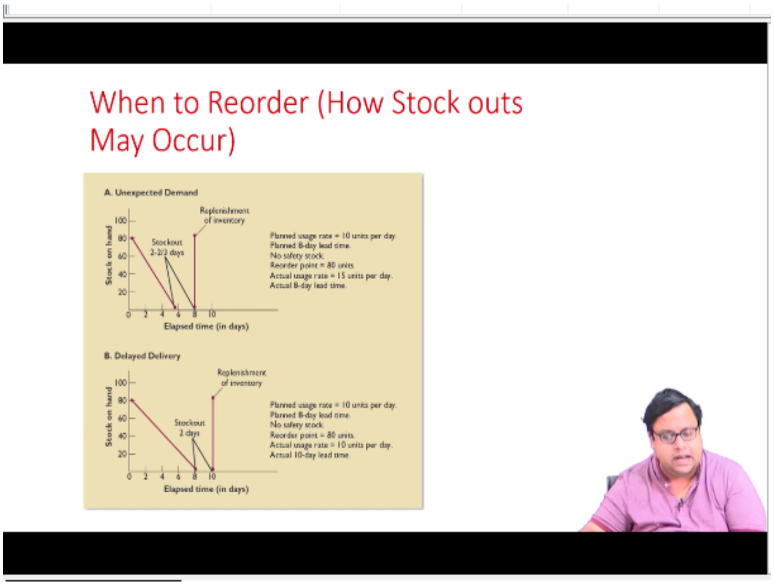

And when do you reorder how stock outs may occur? So, the reordering point is that you have a up a lower limit and you generally try to order the moment you read this safety stock limit. So, you decide that safety stock limit and whenever your order is coming down to that particular safety stock you go and replenish your inventory you again buy your inventory.

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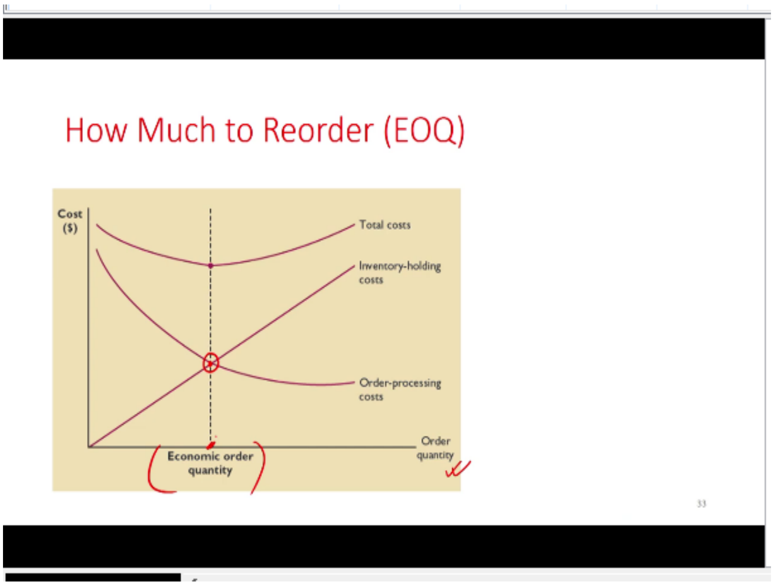

What is your, how much to order this is very important. So, this is a question that I have seen also in my live session how much to order. So, see the order amount will also depend on 2 thing, one is the inventory holding cost the more you hold, the more is the cost to manage the inventory and there is an order processing cost, it includes time, waiting etcetera, etcetera. So, these 2 together creates the total cost of an inventory.

And your economic order quantity is when this total cost gets minimized and when does it minimize basically the point where these 2 lines gets connected. So, the order quantity the amount that you will going to order will be that particular point where order processing cost and inventory holding cost batches are probably your total cost minimizes. So, that is what you should keep in mind when you are going for order quantity, how much to order in the context of inventory management or retail management.

Will stop here in this particular video and the overall what we discussed in the whole retail sector is about various things we talked about finance, we talked about management, we talked about how to manage the insider retail store, how to manage the employees, how to do marketing, how to do understand consumers or what kind of products to purchase, we have discussed a way lot of thing over and above overall in the context of retail management.

So, probably a very significant part around 60, 70 part of that will be all still in marketing side, but there can be other kind of aspects which will come into the picture of retail business also and retail when you are talking about a sector specific course, when you are trying to focus on only one sector you should have a broad overview of all kind of knowledge's that is what was the focus of this particular video on this particular course.

Thank you very much for being with me. For any suggestions you can directly write to me, you can search my name in Google and you will find out corresponding email ids and we will also meet you in the live sessions where you can give your suggestions, if you want any particular topic should be discussed you can still tell to me I can add that, add those kind of topics in our syllabus at a later point of time as well. So, thank you very much for being with me and I will see you in a different course in some different platform, thank you very much.