Management Accounting
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Module 1: Management Accounting
Lecture 29: Standard Costing and Variance Analysis

Welcome students. So after completing the two techniques of Management decision making that is the Cost sheet and the budget and budgetary control or the budgetary process, we will move towards now to the third technique of the Management decision making and that third technique is the say Standard Costing and the Variance Analysis. Now we will talk about the certain costing techniques because cost or controlling the cost is such a strategic decision which is very very important for every firm. And now we will learn some costing techniques which are very useful in the management decision making and increasing the overall performance of the firm and the value of the firm, right.

So as I told you that Management Accounting itself is not a subject which has its own techniques like if you talk about the Financial Accounting. Financial Accounting has its own independent area, its own techniques, its own methods. It has full-fledged GAAP-generally accepted accounting principles and we say original independent discipline of accounting. Similarly we talk about the cost accounting, cost accounting is again very independent and very you can call it as its own technique, its own way of doing the things. But Management Accounting as such does not have anything of its own. It borrows the thing from financial accounting and it borrows some of the techniques from the cost accounting.

So in the cost accounting if you look at the techniques, there are plethora of techniques available, number of techniques available but all all are not useful for the management decision making, only those techniques which are useful for the management decision making which help us to generate very relevant and useful information from the point of view of the middle and the top level management. Only those techniques we will refer here, so this is the third technique after the cost sheet and then say the budget and budgetary control process.

Now we will be learning about the third technique, that is the standard costing and the Variance Analysis and we will learn how the standard costing can be used as an important tool, say overall cost analysis and the cost control, because cost control is a very very important requirement of every company. You will agree with me that today we are the global India or in the market, Indian market or the Indian economy is the global market economy, open economy or liberal economy. Many multinational companies have come to India and supply side has improved a lot, tremendously and the benefit of that has directly gone to the customers, right.

Earlier there was a era till 1991 or before 1991 where in many sectors only public sector companies were there and maybe very few companies were say operating in the larger sectors and means entire the market of the country all consumers of the country or customers of the country in this market, in this huge market they were dependent upon those companies, right. For example we talk about the steel sector, in the steel sector large larger market share was with the sale and then were small companies means the second market company in the market was Tisco. So, largely these were the two companies who were manufacturing steel in the entire market of means hundred Crore people, 1 billion people's market that was depended upon the two companies.

Now if you talk today's scenario number of companies are there in the market who are very very competitive, who are very very efficient, who are able to manufacture very good quality of steel at a very competitive prices . So when the supply side has improved, when the many manufacturers have come up to the market, the costing sector is privatized now. Any player in the steel sector can come up and they can start operating, manufacturing the steel and start selling steel to the people, right. So it is not only the sale the people have to be dependent on the SAIL steel only. Sail is only one company now and they have to compete with the market competitions.

Tisco is not the second company, now there are number of companies in the western part of India, Maharashtra and this western region of the India, part of the Gujarat we have two best companies like SR and Lloyd steels. In the southern part we have the Jindal steelworks, so they have created a Jindal Vijaynagar steel plant and that is Asia's highest steel plant, right. So means we have got very many companies and the market share of the SAIL has seriously come down, now the SAIL is reduced either to the eastern market, central India or the northern part of India. Even these markets are not freely available to the SAIL; maybe these private companies are say existing in these markets also.

Similarly we talk about the other sectors like Electronics, earlier we have to buy a color TV or a refrigerator or maybe other electronic products we were only dependent upon the Indian companies who were manufacturing say means garbage, I would use this word because had they been manufacturing and selling the quality products and fulfilling the people's requirements in a very honest manner they must not have gone out of the market. But the influx of multinational companies for example three companies two Korean one is the LG, Samsung, two Korean companies, one is the Japanese company, say Sony. With the say emergence of these companies say entry of these companies in the Indian market the multinational three companies in the Indian market the existing companies have gone out of the market.

I would share with you that Onida and Videocan who had a larger market share about 45 percent market share in the electronics segment was with these two companies till even 1999-2000's, '98-'99, 2000's. Today these companies are surviving for their existence in the market, their market share is somewhere 1 or 2 percent and that too in the rural market not in the urban markets, right.

So what has happen now and if you look at the pricing of the products, if you talk about the color TV's, color TV's are available at say the same price today what we were buying the color TV maybe say how many, twenty years back, right. So we are almost paying the same price and if we are paying the higher price also, the quality of the product has seriously improved or largely improved, right. So it means what these companies were selling to us in the past, simply exploiting the market and exploiting the sentiments of the customers by passing on the very inferior quality products at a very high price, right.

Similarly if you talk about any other sector, say the services sector have become very strong now. It is now biggest contributor in the GDP of India, if we talk about the three sectors; services, industry and the agriculture. So the share of the Agriculture has gone down, now the industry is in between, the services sector has gone up to a larger extent. And after globalization, services sector has got strengthened in a very significant manner. Or any other sector you talk about.

In automobiles today we are driving scooters, we were driving a Bajaj scooter long back and now we are driving a Honda scooter, a Honda activa or the other scooters of the multinational companies' right. So you can understand the difference in the product. If you have driven both the scooters then you can understand the difference in the Bajaj scooter also and the Honda's products also, TVS products also or the other companies products also. So it means there is a sea change, prices are within control and ultimately this all has happened because of the intensified competition in the Indian market after globalization. The multinationals were allowed to come to India, then the overall say the benefit of this globalization, liberalization of this company has reached up to the customers or consumers of this country, right.

Now why I am discussing all this with regard to this technique because this technique is directly linked to the pricing of this product is directly linked to the pricing of the product. Pricing is a very very important strategic decision right, if you want to sustain in the market, if you want to increase your market share, if you want to kill your competitors in the market or if you want to enter into the new markets. You have to adopt one strategy to keep the prices under control because India is a price sensitive market; India is a price sensitive market.

We have say now the different products and our demand for different products have gone up because of the limited income level. The income levels of the people largely of the larger income group are the lower middle income people or the lower income groups or the economically weaker section customers. Upper middle income group or higher income groups are very few in this country, maybe you can say 10,15 people, largely 80-85 percent of the market is lower middle class, lower class and the EWS people who are price sensitive, right.

So if we are getting a product from the company who is selling the product at a very competitive price, so we can understand the quality of the product may not be comparable but the price if it is lesser and we are getting a genuine reasonable quality of a product, we first go for the lesser price and second priority is the quality for the larger section of the people. So if you want to keep the quality of your products or your services under control you have to start from the cost, because cost is the basis of pricing the products. If you have the techniques, the base the means to control the cost or keep the total cost of production under control then adding up the margins, desired amount of the margins to that cost you can price the product.

But if your cost is very high already plus you add up the margins in that, you price will also be very high. And if your price is very high, maybe the quality of the product is also very good, largely it will be rejected by the people. So win over the sentiments of the people or to fulfill the requirements of the people what you have to do here is, you have to reduce the prices or keep the prices under control and if you want to control the prices of the products you will have to control the cost. And how to control the cost, here it is the technique available. There are so many techniques but we will discuss three four techniques in the given time.

And the first we are beginning with the Standard Costing and the Variance Analysis. One interesting story I will discuss with you with regard to the pricing and the cost of the product, rather two stories I will discuss with you so that you can understand what is the power of the cost, what is the power in the cost and if you are able to control the cost of your production then you can means within no time you can emerge as a very very significant player in the market.

I will share with you two stories, one story is of the Nirma. Nirma you must have heard about this is a company which started its business or came into the market with one standard product that was the Nirma washing product. Nirma came up in the market in 1982 and this owner of the company Karsan bhai he was maybe he was he was somehow knowing the process of manufacturing the washing powder. He was knowing the process of manufacturing the washing powder and he tried his this concept at his own level and started manufacturing this product at his home and then started distributing this to people means the people living near the vicinity, his neighbors and then found the results were very good, right.

Then he increased the level and then he started giving it to his relatives, to people free of cost. Initially it was free of cost and that the product was a welcome product by all who used that. And finally then he thought of that I can now commercialize this product and I can start selling this in the market. And when he started manufacturing it he priced the 1 kg of the Nirma washing powder for 10 Rupees in 1982, right. At that time there major competitor was Hindustan lever Limited which now we know the company as Hindustan Unilevers.

So that company was manufacturing two different products at that time one was the surf, which was the for the premium segment of the people and the second was the Sunlight powder or the low segment of the people. But at that time also if you compare the prices of Sunlight and the Nirma there was a huge difference and when this Nirma was introduced in the market 10 rupee a kg then people liked the product because the results of the product were really wonderful remarkable and very very you can call it as eye opening.

So you can understand now how the people have supported the company, how the people have means welcomed the product from the company and today Nirma is a well known name not in the manufacturing sector but in many areas including education, right. How this all has happened, means a large company a giant like Hindustan Lever Limited or Hindustan Unilevers level of the multinational company got a challenge from a one single individual who had that innovation in the mind, the concept in the mind and who could create a product and could win over the hearts of the people and to means make his existence in the market, make the existence of his product in the market because of the one factor that is the that is the cost of the production.

So we understand that the quality do Nirma is not comparable to Surf but the price if you go for is very much far far less than what the company is charging the other company, charging for the Surf. And largely the people of India can afford to pay that much of the price only. So that is the reason means reducing the cost , keeping the cost of production under control was the major reason for the success of the product like Nirma in 1980's right.

Second story I will share with you is of the Akai color TV, Akai color TV was an assembled product in the market and at that time the when Akai was existing in the market it was available, a color TV was available for 8-10,000 rupees. And if you compare that product, the price of that product with other products of other multinational companies that was somewhere for 20-25,000 Rupees. It means 2.5 times more price you have to pay for that product.

So he manufactured, this Kabir Mulchandani he was the head of the company, he brought this concept to India and he started manufacturing and selling those say Akai brand color TV's in the market at a lesser price. He was earning the profits by selling the color TV for 10,000 rupees, he was also earning the profits and a company selling the color TV for 25,000 rupees in the market they were also earning the profits. So how you can sell a color TV for 10,000 rupees in the market which is normally available or 25,000 rupees in the market?

The strength was keeping the cost under control, keeping the cost under control because these were assembled product; he brought in all the inputs like picture tubes, circuits, cabinets of the color TV's. He imported in millions of units from Taiwan. Taiwan is the hub of this production,

production of the electronics say these components, he brought that he bought that product in millions of units, brought it to India, started assembling those and converting that to a Color TV. So the strength of the product was cost which was very much under control, so the product was accepted in the market for the say sufficient period of time.

So it means these two stories tell us that yes, we can go for it and we can say we know the hearts of the people we can change the dynamics of the market, we can say earn a significant market share within no time provided in a price sensitive economy we are able to keep the cost of production under control and with the help of Standard Costing we are going to do that or we normally do that in the business, right.

Now standard costing and variance analysis, the question must be coming in your mind that we did the variance analysis in the budgeting also and now we are going to do the variance analysis in the standard costing also. So what is the basic difference between the two, what is the basic difference between the two? What kind of the Variance analysis did we do till now and what are the kind of the Variance analysis we are going to do now, right.

So now the basic difference I am going to tell you here is that is of say micro and macro nature, then you prepare the budget, you learn about the budget and budgetary control. We talked about the firm as a whole; we talked about the departments, sub departments, units and sub-units of the firm. And ultimately when we prepare the sales budget that is for the firm as a whole including all the products the firm is manufacturing and selling in the market.

When we prepare the purchase budget that was prepared for the firm as a whole, for all categories of the inputs required for the all outputs of the firm. When we prepare the say cash budget that was for the firm as a whole. When you prepare the budgeted income statement then it was for the firm as a whole and when we prepared the balance sheet that was for the whole firm maybe for the period of 3 months or 1 quarter.

Now we are going to go at the micro level, standard costing is a technique which helps us to go for the minute costing analysis and here we learn to go for calculating the standard cost for each and every product we are manufacturing in the firm. If we are manufacturing only one product then we will now go for the minute micro level of the analysis, complete dissection of the cost and trying to understand what contributes the cost the total cost of 1 unit of our product.

If they are manufacturing 4 products, we will prepare the standard costs of the four different products and then we will try to find out that this is the standard cost of four different products and then we will find out that this is the standard cost per unit of the product. How much is going to be now the actual cost and then we will find out the variances and then go for the say finding out the reasons for those variances and if they are controllable reasons we will do everything possible to control those variances so that cost of production remains as per budgeted or very much under control, right.

So this is the reason of the Standard costing and this is the means the relevance of the standard costing that now we are going to do the product level analysis earlier it was the firm level analysis, so that is the basic difference between the budget and the Standard Costing, one part. Now for example if you talk about the different industries in the manufacturing sector like the firms manufacturing pharmaceutical products, drugs, the firms manufacturing chemicals, firms manufacturing paints and other you can call it as your similarly the other materials in the Paint industry and polishing material paints. When you talk about the firms who are manufacturing the petro chemical products, there the inputs are multiple in nature.

For manufacturing one drug converting molecule into the saleable drug in the market, you need to have different types of the materials, right. And sometimes some materials are used in very very say you can call it as a minute quantity, they are very expensive in the price, so if you are even even even are going for the minimum amount of wastage of that input, your overall cost of the production per unit will go up very high that you can call it uncontrollable.

So in those firms in those manufacturing areas where the inputs are so many to manufacturer the one output, there the importance of Standard Costing is very high because controlling the cost is the first thing, if you want to sustain in the market, if you want to stay in the market you only can control the cost, you cannot control the selling price. If you want to keep your margin intact or you want to increase the margin of you company or the profits. The only weapon in your hand is that you can control the cost. You cannot think of complaining the price because price is decided by the external factors, external forces they are the market price; they are the demand and supply forces.

Earlier in the situations when I am talking about the globalized, un-globalized economy or the pre-globalization era or the pre-globalization scenario there what was, demand was very high because we were 1 billion people market and supply was very very poor or you can call it as weak, only one company is manufacturing, selling the entire say production of the market and they are the sole manufacturer and they are selling the same same the product in the market fulfilling the demand of the people in the market.

So you can understand that means ultimately people have to fall prey and they have to accept what garbage is being supplied to them, you talk about the steel, you talk about even you talk about the services sector, the telephone industry, communication industry you talk about. There was one department DOT, Department of telecommunications right and later on it became BSNL also. At that time if you had to have a telephone connection you had to apply three four years in advance, after three four years you were getting the telephone connection and when telephone was being installed at our home we were considering dream come true.

Today you see that after globalization and this revolution in the mobile telephony you see that just over a phone call you get the phone and it is because of the increase in the supply in the mobile telephony sector your prices of the communication have seriously come down. Today internet is available at for few rupees. Today internet is available for not only rupees but paisas. The phone is I think it has no cost and this revolution has gone up, it has intensified this competition is intensified because this communication sector, telephony this mobile telephony flooded with the service providers.

So the direct impact of it is the moment supply side improves which has been the result of globalization of Indian economy , the moment supply side improves the prices get affected, the prices come down because there is a stiff competition. And if the prices come down or prices get controlled by some external forces and if you want to stay in the market keep your margins intact, the only weapon in your hand and is controlling the cost.

So we will be talking about the standard cost and the variance analysis in this coming (no) few classes in detail and then first we will understand it conceptually and then we will learn what are the different type of the variances we can calculate , how to calculate those variances and then once the variances are ready with us, those figures are ready with us, then how to analyze those variances and how to use this Standard Costing related information comparing with the actual performance for the actual management decision making, right.

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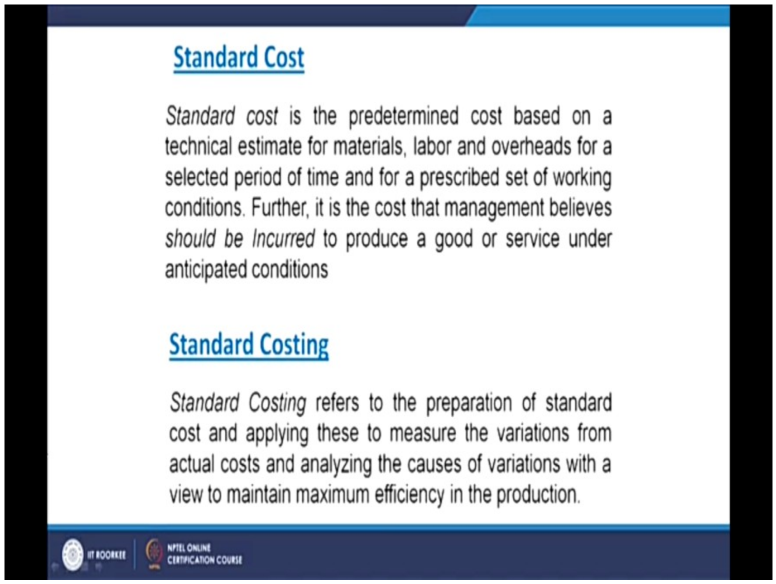

So now we will proceed further with this part and we will learn about that what is the standard Cost and what is the Standard Costing. It has two components, first is the standard cost than it is the standard costing. Standard cost is basically the cost, it is a pre-determined cost and standard costing is the technique of calculating the standard cost, right. So how to calculate the standard cost? It is a technique and that is called as the Standard Costing or the standard costing process. So what is the standard cost? Standard cost is the pre-determined cost based on a technical estimate for materials, labour and overheads for a selected period of time and for a prescribed set of the working conditions.

It is, what it, pre-determined cost is, further management believes it should be incurred to produce a good means to produce a good or service under anticipated conditions, whether it is in the manufacturing sector or it is in the services sector. Everywhere the cost is important component; it is an important weapon in the hands of the manufacturer who stay in the market, to sustain in the competition to say keep your competitors away and to have the larger market share.

So both the sectors whether it is manufacturing or it is services sector, standard cost plays the role and standard costing is the technique which helps us to calculate the standard cost. Now what is Standard Costing? It refers to the preparation of standard cost and applying these to measure the variations from actual cost and analyzing the causes of variations with a view to maintain maximum efficiency in the production.

We have devised the standard cost and I tell you here calculating the standard cost is not a very very easy task, it is a very very complex job. Only experts are involved in calculating the standard cost. People who know the manufacturing process, people who know the input components of say finished product, only those are involved in manufacturing the product or sorry say devising the standards for the product and this information once developed, the standard cost is developed that is a very confidential information also, that is not shared with anybody and that remains communicated to the different interest groups in the firm who are going to contribute right from the purchase of the material department to the selling pf the product in the market.

So it has two components purchase the three components rather purchase of the inputs, converting the raw material into finished product that is the production department, so purchase procurement department, production department then sales and even after-sales department. So all these three to four departments are involved in this standard costing process, so every process has to be carefully analyzed, taken into account and then we have to calculate the standard cost and this is a complex job.

Once the standards are decided or standard cost is decided, it does not change largely over a period of time until and unless there is a serious change in the market and it remains communicated to the different sections or sub sections, units and sub units which we call in the technical terms as responsibilities centers in the organization. They know it in advance that what is the raw material cost expected and what should we pay as the purchase price. What is the production cost at the different levels of the process is expected and what cost should we incur.

Similarly the distribution cost is known in advance, similarly the your sales cost is also known in advance. So if the cost increases beyond the pre-decided levels then we have to be careful and analyze the variances by comparing the budgeted cost standard cost with the actual cost, find out the variances or the means the deviations in the two and try to find out the reasons for those variances and again same principles applies here. Variances if are coming up because of the reasons which were controllable but were not controlled then I think we should take the necessary actions.

And if the any variances have come up because of the reasons which are beyond the control then I think nobody can do anything, for example the price of the input has gone up in the market, you cannot do much in that, price of the labor has gone up in the market you cannot do much. But wherever the reason is controllable, variances have come up because of the controllable reasons; we should fix up those reasons and try to means eliminate those causes so that overall cost of the production remains under control.

So this is the crux of the standard costing, this is the reason of the standard costing and this is the relevance of the standard costing. And this is how the standard costing is different from the budget and budgetary process. Budget is at the macro level means it is a pre-estimate at the macro level means the at the level of the firm as a whole. And the costing the standard costing is pre-decided cost at the say product level, the firm is manufacturing one product then you will prepare the standard cost for that product. If the firm is manufacturing more than one product then the individual costing estimates for those different products and finally we will have to come up to a conclusion that what should be the Standard Cost.

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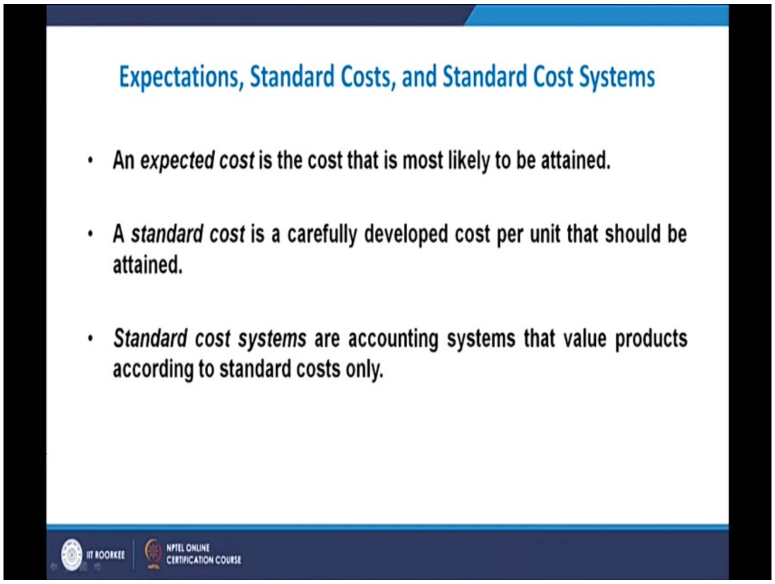

Now we talk about the different types of the Standards, right. So we will, we can use different type of the terminologies here expectations, standard cost and the standard cost systems. And we have the clear cut definitions and differences for these different points; an expected cost is the cost that is most likely to be attained. So this is expectation, most likely to be attained cost should be the normal cost of production. This is the expected cost and you can say that it is related to the expectations. Number two a standard cost is a carefully developed cost per unit that should be attained. One is the expectation without doing anything and second thing is the carefully worked out cost which you call it as the Standard Cost.

And the standard cost systems are the accounting systems that value products according to the standard costs only, right. So it means the costing technique is the standard costing, standard cost is the carefully developed pre-manufacturing cost and expected cost is the one when we have not yet started the production, we are expecting that if we know the input cost largely then what should be the cost of the product, right.

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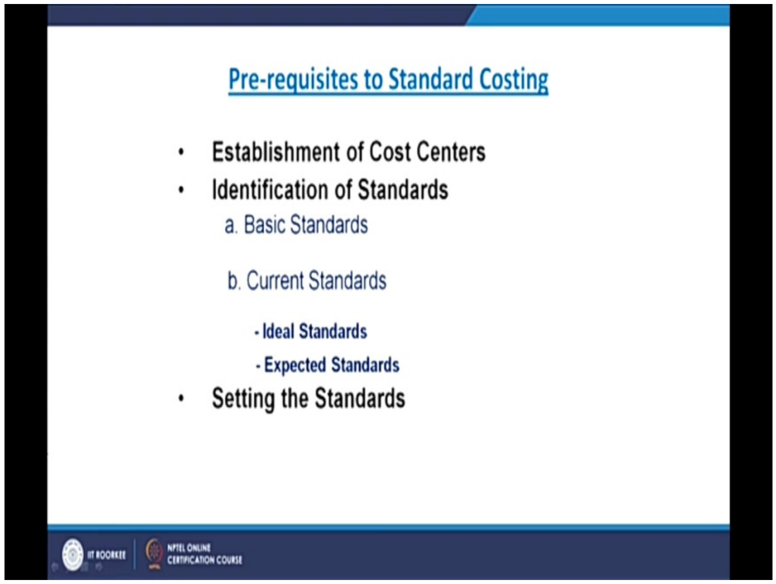

So in this case you can understand that the difference between the expectations, standard cost and the standard cost system right and now we go further and try to know something about the say Standards and then the different types of standards we will try to know about and then we will see that what is the first the difference between these standards and second important thing is how to develop these standards. So what are the standards, what are the pre-requisites of the standards and how we can develop these standards, this all I will discuss with you in the next class. Thank you very much!