Managerial Accounting
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Module - 8 Lecture - 19 Types of Costs

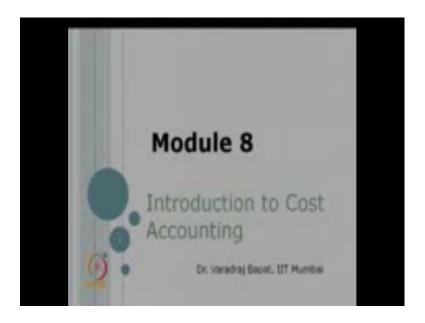
Dear students, so far in this course we have covered financial accounting. So, we have done some discussion on how to record the transactions? How to report them to p n l account balance sheet or cash flow statements? We also discussed a little bit about how to analyze the financial statements. Today, we are going to start with another very interesting branch of accounting that is known as cost accounting. Sometimes it is also known as management accounting. If you remember in our first session we have discussed the distinction between financial cost and management accounting I will try to introduce it in a bit.

So, cost accounting as the name suggests is basically accounting for the cost. It is targeted to the internal users. Financial accounting we have seen is primarily targeted to the external users. So, financial account essentially prepares the reports which are submitted to the government to the share holders to the bankers and so on. Whereas, cost accounting in cost accounting the statements or the reports which are made are sent to the higher level of management. So essentially they are not meant to be for outsiders and then data in cost accounting is considered to be a confidential data. Now, let us see today what exactly cost accounting is its scope and what are the advantages of cost accounting?

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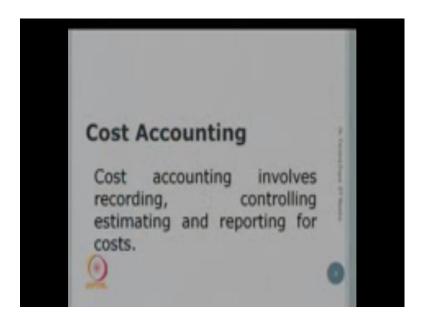


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Followed by we will also discussed on various types of cost. So this is the brief agenda of today's session we will talk about the various cost categories. And then we will discuss about what is cost center and so on.

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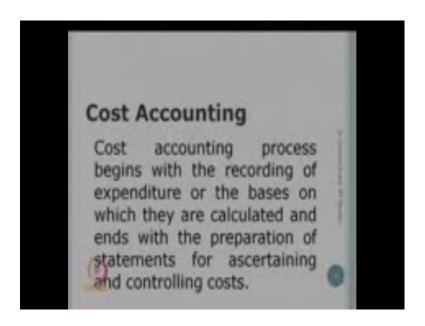


To begin with first of all what is cost accounting? Cost accounting basically has 3 parts. It involves recording, controlling, estimating and reporting for cost. Now, we are yet to discuss what is cost? But I hope you know it we will discuss the cost classification later, but in short can you tell what you understand by cost? For a simple common man cost means some expenditure something which you pay for. So, it is very much important in business that you record it properly. That I think there is no too issues about it so the first aspect of cost accounting is proper recording of cost which is absolutely essential. Next is controlling of the cost, because business always aims to maximize the profit if you want maximize the profit naturally you need minimize your cost. So you need to control your cost. Even for non business NTS's it is necessary that they are able to provide the service as at as low cost as possible. So they are also interested in con controlling the cost. The third aspect is estimation of the cost. This is something unique, because if you remember in financial accounting we have dealt with recording. So, as the transaction immerges you record them, but there is no attempt to estimate.

Because financial accounting is essentially historical in nature whatever has happened is recorded and reported that is what the job of accountant. But in cost accounting apart from recording analyzing and controlling we are also required to estimate the cost. Because many time the cost calculations are required for future period. Say for example, you want court the price to the party so you want to know what is what will be the cost of a product or what will be the cost of service which is intended to be provided?

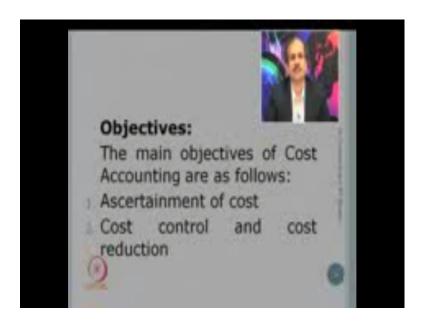
Sometimes you may want to take a decision to buy machine x or buy machine y. So you will need to estimate the cost. That is why one of the aspects of cost accounting apart from recording is also estimation. The fourth part of cost accounting is reporting of cost. So, cost accountant is required to make appropriate statements which are given to various levels of management so that they can take decisions about either cost control or making various choices. So, these are the essential I would say sub areas of cost accounting. So, we were seeing that this 4 are the issues.

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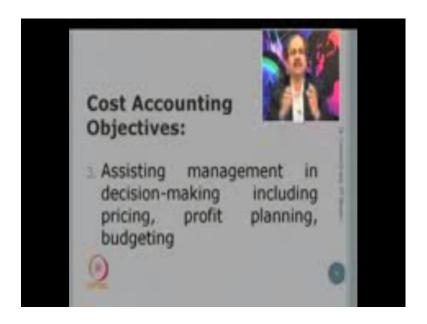
Next is now let us go for the definition of cost accounting. This is the formal definition of cost accounting. That it is process which begins with the recording of expenditure or the bases on which such expenditure is calculated. For example, let us suppose that you are required to pay the labor cost. Now, for paying the labor cost you may want to record the number of hours for which a worker or a particular person has worked. And then you want pay them at fixed rate per hour. So you need to record the number of hours that is also involved in cost accounting. That is why it is a recording of expenditure or the bases on which they are calculated. And naturally it ends with preparation of appropriate statements which are mainly intended for 2 purposes; one is the ascertainment of cost and second is controlling of the cost. Now, the ascertainment of cost may not be necessarily for products. Sometimes it may be for the process sometimes that ascertainment of cost, may be for a particular project or it may be for particular period will see it in detail later.

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Now, these are the major objectives of cost accounting more or less we already discussed. First is ascertainment of cost for which you record analysis the cost systematically. Second is cost control and cost reduction. Now, what is meant by cost control and cost reduction? Cost control as the name suggests you are trying to control the cost we service some target. So, you try to set up some norm or you try to set up some standard and see to it that the actual cost meet with that standard. Or they are below a particular budget or norm that is called as cost control. Cost reduction is more innovative exercise. Here you try to look for various new technologies you may look for alternative raw materials. You may look for alternative ways of production or providing service so that the cost can be permanently reduced. So, these 2 are the prime objects, that is ascertainment cost control cost reduction.

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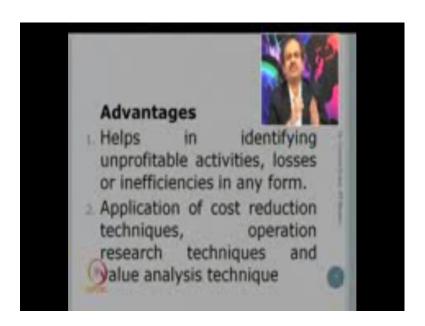
The next third object is assisting the management in decision making. Now, various examples of decision making are given. Very important decision in any business scenario is pricing. So, whenever a company thinks of launching a product first thing they have to decide is what at what price the product can be sold? So, price has a market factor at has to how much price the market will except. Equally important is at what price I can provide considering my cost? That is why cost accounting leads the management to decision on pricing. Many times a management is required to court a price. There tenders might have been floated or there may be a enquiry from customer for a particular product or a service. And a company is required to court a price. Naturally first thing company has to do is to estimate the cost add the profit margin to be charged so that you can arrive at price. The second decision as you can see is about profit planning.

So, company wants to achieve certain pro profit or they may have to achieve a certain rate of return by using a certain factory or using certain resources for which they have to plan the profit. Sometimes they also have to plan at what level of activity the plant is to operate? So, you may have the choice is to run the plant at say 70 percent or 80 percent or 90 percent. So, looking at the profitability at various levels such decisions can be taken that is also covered in profit planning. The third decision which I have mentioned there is budgeting. Budgeting most of you would have heard is an exercise where you estimate certain things. So, you may want to estimate the cost for the next month or for the next year. And that budget will help you in cost control and it will also help you in

taking a call as to how much more money is available or how much more resources are available.

So, these are the important decisions apart from them also there are many decisions which are required to be taken by the management. Can you tell me some of decisions or can you think of some of the decisions. So, one simple decision I think which you can think of is make or buys decision. So many times company has a choice either they can make a certain component or they can get it out source. They can get it from outside where in again the cost calculations are very important. At what cost you can make and what cost the outsider is able to provide? And there of course, there are quality issues there are timing issues. But cost issues are the dominant starting point for taking any of the decisions. So, these are some of the examples of decision making so going back you have 3 important objectives. One is ascertainment second is cost control and cost reduction and third is decision making.

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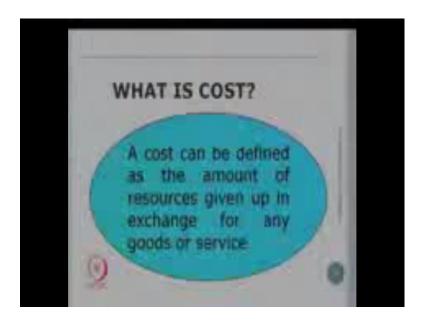


Now, let us look at advantages. Now, from the objectives you would have realized that what type of activities or what type of benefits the cost account gives? In addition to this these are the advantages. One it is helps in identifying unprofitable activities losses or inefficiencies in any form. So, company might have say 10 plants some of them may be loss making. In a traditional p n l accountant or traditional financial statement the losses of a particular unit or particular plant is not captured. Cost accounting tries to go into

detail so that you can identify which activity or which unit or which plant is not making profits. So, that appropriate action can be taken either to close it or to make suitable changes. There may be also in efficiencies at various levels. For example, purchase department is purchasing the raw material at a particular price. Now, managements want to know whether they are paying reasonable price or they are paying higher price. So, they may compare with industry averages or they may compare with their pears to know the efficiency. Then they cost might be involved in storage cost might be involved in processing at each level whether it is production industry or a service industry. At various levels always a business entity tries to improve the efficiency though identify inefficient areas is one of the advantages of costing accounting.

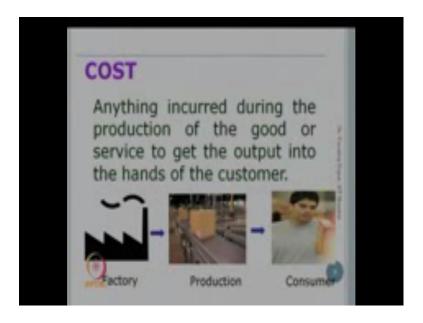
The second advantage as you can see is application of cost reduction techniques, operation research techniques and value analysis techniques. So, earlier I have told that cost control is exercise where you set a norm and you try to see that the actual costs are below that norm. In cost reduction you are trying to challenge the norm itself. So, by doing value analysis or by doing operations research NTT is trying to look for alternate raw material. It may look for alternate process to achieve the same result so that the cost can be reduced. It could be technological changes, it could be managerial changes. But the objective is achieving some permanent reduction in the cost. This is one of the advantages of cost accounting that it helps the management in taking such majors. So these were the advantages I think broadly, now you have understood what is the overall structure of cost accounting? Now, we will try to look at what is really a cost? So, by common sense I think everyone knows that whatever expenditure 1 incurs is a cost. Now, let us looks at a formal definition.

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The formal definition says that a cost can be defined as the amount of resources given up in exchange of any goods or services. So, it could be in the form of cash, sometimes it could be in a form of exchange of some resources. But something is being given up something is being scarifies is naturally considered as a cost.

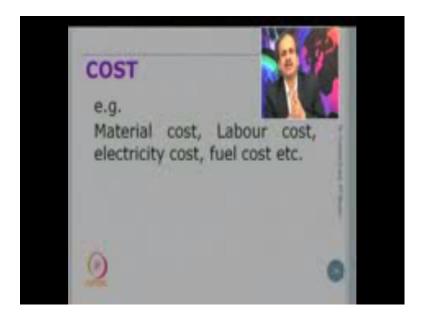
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So, here I am giving some examples that usually in a typical production scenario. You will have factory where in you will incur the production cost the raw materials will enter into production face. Some more cost might be incurred in finishing processing and

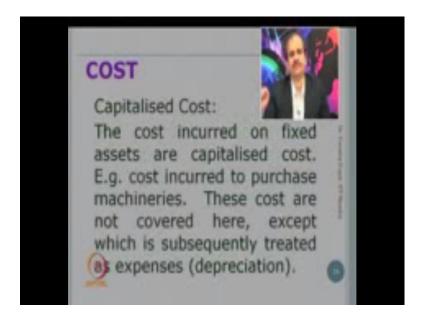
ultimately the goods reach the customer. So, the costs are incurred at various stages of course, though I have given example of product making or manufacturing even for a service industry similar. For example, suppose you are operating in a software industry then development cost will be incurred which are mainly in the nature of human resources. There will be cost for marketing and ultimately a service gets delivered to the customer. So, expenditure incurred at all this stages will be included in the cost.

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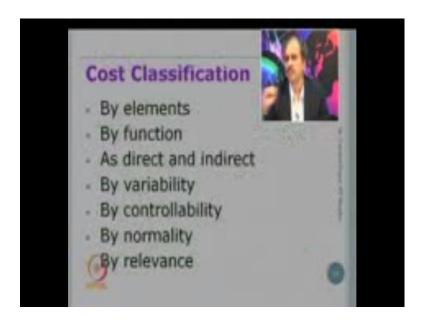
These are the typical examples of the cost which include material labor, electricity, and fuel. I think you can name another ten examples can you think of any other cost? So, what could be the other cost it might be transportation, it might coverage cover something like advertizing for marketing all these will be covered in cost.

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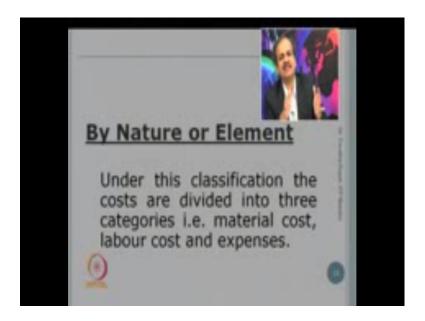
There is 1 type of cost which is re special in nature that is known as capitalized cost. Certain costs are incurred for purchasing acquiring for fix assets they are called as capitalized cost. So, example given here is for purchase of machinery. Now, as you know machinery is not intended only for this period. A machine is about for next say 3 4 5 10 years. So, the entire cost of machinery cannot be charged or cannot be considered as the cost of this period. So, such expenses are taken to balance sheet we have already studied profit and loss accountant balance sheet. So capitalized costs are taken to balance sheet they are considered as assets of entity and they are not considered as day to day cost. So, these costs since they cannot be considered at 1 go. They are required to be return of in the form of depreciation when we have discuss financial accounting we have already discuss depreciation. So, the depreciation charge for a particular period is taken as the cost of this period. The capitalized cost of fix asset is not considered as cost which is accounted for in particular period.

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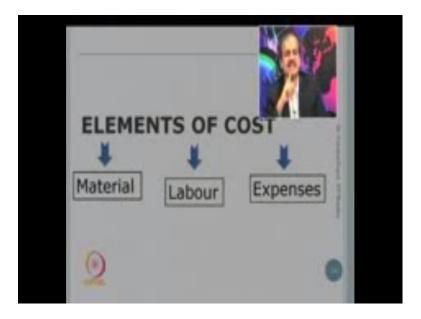
Now, let us come to cost classification. Now, you can think of 100 of types of cost and cost classification also can be done in variety of face. Here I have tried to mention some of the ways of classifying the cost. 1 is by elements, by function, by direct indirect, variability, controllability, normality and relevance will discuss each of them in detail. But before that you can also start thinking as to what could be the various ways cost can be classified? As we have seen in the beginning one of the objectives of cost accounting is to ascertain the cost in detail. In financial accounting just recording of expenditure was enough. But in cost accounting what happens is you want know what the cost pea particular product is if you have 10 plants you want know what is the cost of one plant within labor cost? You want to know what is an overheads, what is overtime and so on. So, here we need to classify and analysis the cost. So, that the cost can be properly controlled that is why so many ways of classification have been evolved.

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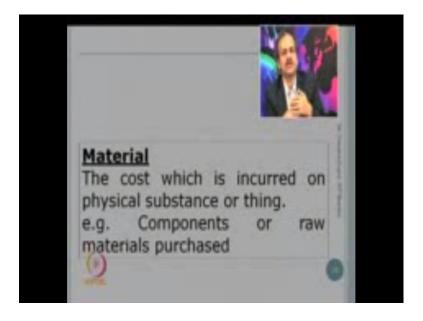
Now, first way is by nature or the element. This is one of the most traditional cost classifications where as all cost are classified into 3 categories. That is material, labor and expenses. Now, what do you understand by material cost? I think it is pretty common sense. So, you can also imagine what is material cost?

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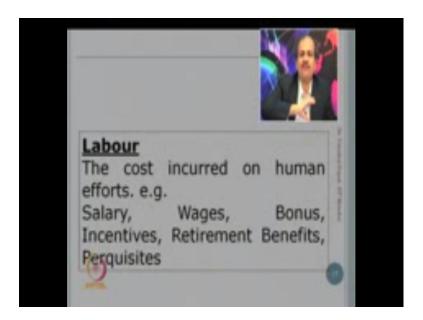
This is the basic classification try to think of examples in all the 3 categories. In fact, all cost can be categorized into any one of these 3 types.

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So, here is definition of material cost. The cost which is incurred on physical substance or a thing something tangible is a material cost. So, the most common example is for components of raw material purchase this is material cost.

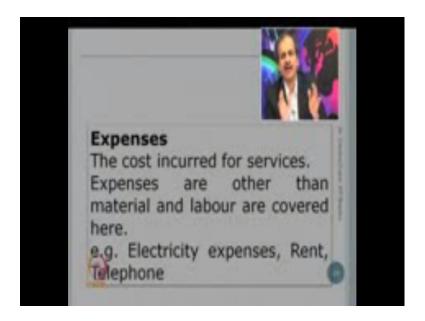
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The next cost is labor cost. So, any amount incurred on human resources is a labor cost. Now, deliberately have put a question mark can you think of some examples of labor cost? Just think over what could be the labor cost. So, these are the examples your salaries wages, bonus, incentives, retirement, benefits, perquisites. As I say anything

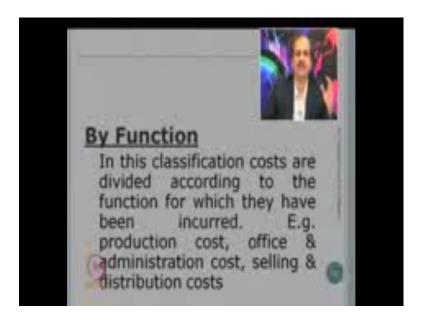
given to any class of human resources right from a temporary laborer to the managing director they may be offered a variety of pay in variety of forms that is all covered in the labor cost.

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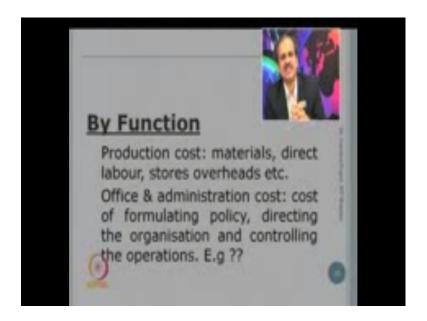
The next is expenses. The cost which is incurred for various types of services and it are also it also acts as residuary head. So, anything not covered in material and labor will be now, classified as expenses. So, what could be the examples? Here again it is a pretty common sense, it will cover electricity, rent, telephone, royalties and so on. Capitals costs are not covered as we discuss in the beginning capital cost are treated as assets of the entity and they will go into assets they in further discussion of cost. Now, we will not cover capital cost that is why in the beginning I told that they are different cost and they will be transfer to balance sheet. So, these are the various expenses. So, all costs can essentially in a traditional way we classified into material, labor and expenses.

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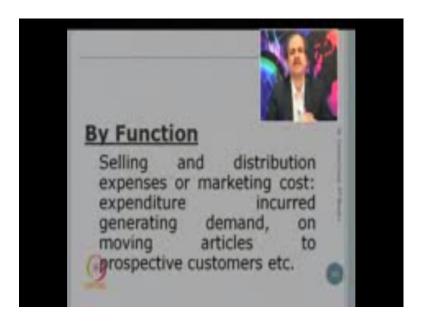
Now, another way of classifying is functions. So, in elements we were seeing the nature of costs. Here we are seeing what the cost as achieved. So, here costs are classified as per the function for which they are incurred. So, what will they include? Can you think of the business functions so any business entity for what does it incur the cost? Marketing is the right example anything else so typically it will start with production. So, here I try to give so this is the most traditional way of classifying that is production cost, office or admin cost and selling or distribution cost. Of course, apart from this also you can think of RND cost. If within production you have some specialized think that you can think of in a industry like software they may call it development cost. So, as per the industry as per the organization they can classify, but essentially the purpose for which it is incurred is a base for functional classification.

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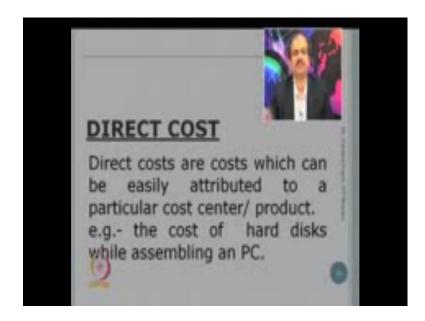
Now, this is the further examples so production cost will cover material, direct labor and stores overheads. So, here you can see now, material labor overheads all can be related to production they are now taken as production cost office and admin cost. So, this is all cost for formulating policy, directing, managing organization. So, what could be the examples of office and admin cost? Just think over what could be what is the cost which is incurred in a office set up? So, it will cover mainly the salaries of people. So, salaries, director fees, auditor fees, consultant fees which are related to management these are all examples of offices cost. And of course, cost like office rent office electricity they have also covered in office and admin cost.

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The next are selling cost. So, selling and distribution is typically incurred as a selling. Basically covers the cost for generating demand. So, you may have to spend on advertising, you may have to give free samples. You may have to approach customers for looking for business that is all for selling. And distribution is for ensuring that the service or the product reaches the customer. So, all the marketing cost are covered within selling and distribution ambit. So, this are the, this is the classification by function.

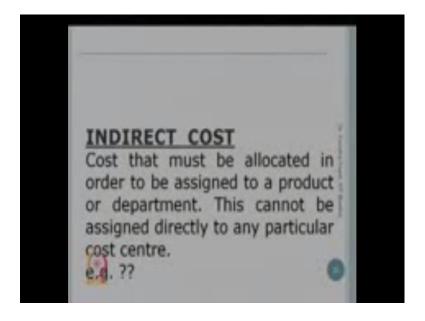
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Next classification which is very interesting and also very important for cost accounting purposes is classification by direct and indirect be attentive, because here many times there is a confusion. So, by commonsense you can say that those cost which are easily attributable to a cost center or product can be called as direct cost. Now, naturally I think everyone will understand a product cost center we are yet to define will come to it later. But generally we can say that something which can be directly attributable. So, one example I have given that cost of hard disk while assembling the PC.

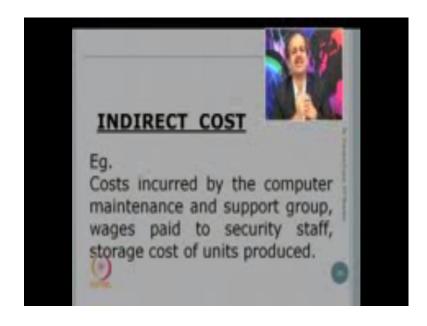
So here hard disk as component is entering PC. So, you can know that disk particular hard disk is exclusively used for this PC, so definitely it can be considered as a direct cost. Any other examples of direct cost can you think of can something say in labor will go into direct cost. So, suppose operators are working on machines to make something. So, the wages paid to those operators can essentially be considered as a direct cost. Suppose you are paying director fees and commission to managing director will it be a direct or indirect cost. It has to be indirect cost because it is for the management of the whole company it is not for any particular product or division or a cost center etcetera. So, those cost which are common will essentially be considered as indirect cost.

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So, here is a definition of indirect cost those cost must be allocated in order to be assigned to a product. So, they cannot be assigned directly so you do not know that x cost is exclusively for a particular product it is common in nature hence it is called indirect. So, one example I have already given that managing director's remuneration is a good example of indirect cost. Can you have some any other example can you think of some more examples of indirect cost? Let us say in a factory you are making 10 types of products. But factory rent is common for the whole factory so factory rent is a good example of indirect cost company does some advertising for specific products. So, let us say they have products x y z advertisement which is released for product x you can say is a direct cost for x. But there are common advertisements where in company is trying to build a corporate image. It is not for one product it is more to market the company or to project the company that is essentially an indirect cost.

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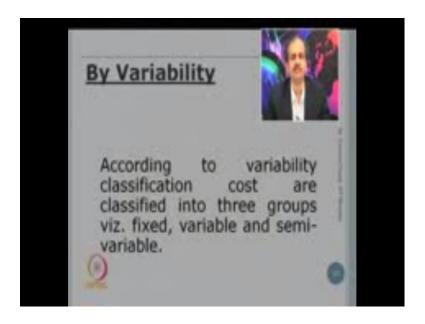


So, here are some examples. So, in any product or a service setup you will incur cost for computer maintenance and support group that is not for making anything. It is to ensure the, that the operations run properly so it is a indirect cost, wages paid to security. It is a indirect cost; storage cost for units produced is a indirect cost. So, broadly I think it would be clear now to you what is a direct cost and indirect cost? Now, this is not a water type compartment certain examples which are clear case we have dealt with. But let us see you are making particular product wages for the operator is definitely direct. But what about wages to the supervisor is it directs cost or an indirect cost? Wages to supervisor, because supervisor is not actually doing some production is supervising is inspecting so will you cover it as direct or indirect. Now, here slightly depends on the definition. If you look from cost center angle, that a particular supervisor is looking after a particular department which is producing that product then the supervisors cost or the supervisor salary also becomes direct cost.

If you apply a very narrow definition that people actually producing only direct then it will be become indirect cost. So that it is left to the company, but generally it is looked at from a cost center angle. So, from a cost center angle the cost of that is the wages paid to the operator's salary paid to the supervisor both will be treated as direct. But salary paid to factory manager will be looked at as indirect, because it is not for 1 cost center it is for the whole factory. So, like this company will have some cost manual where they will define how they are categorizing direct and indirect. But this categorization is very

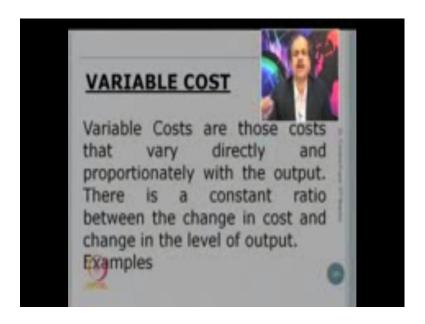
important, because as you can see the definition of indirect cost they require to be apportion or allocated. Whereas, direct cost is easy I know that this cost is for this product I will directly charge indirect costs are common in nature. So, they have to be divided or apportion on some bases and then charge to the product that is why more accounting gets involved for indirect cost will see on that accounting part later. In the beginning let us understand the various types of cost.

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Next categorization which is again very important is as per the variability. So, again all cost can be categorized as fixed variable or semi variable. So, every cost wills there will be an attempt to make it fall into this categories. Just as direct and indirect categorization was important for accounting. Variability type of classification is important for decision making. So, for taking any decision like pricing make or buy it is very important that you are able to classify your cost properly into fixed variable and semi variable.

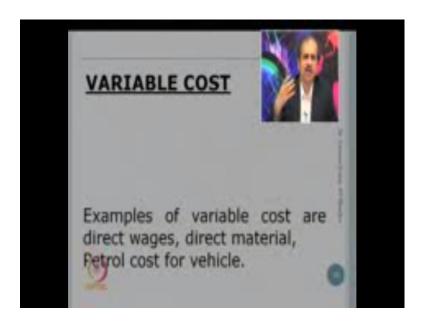
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Now, what is a variable cost? As you can see the definition these are those cost which vary in the direct proportion to the output. So, there is always a relationship between number of units produced and this cost. In case of service industry there will be a direct relation with the service provided and this cost. So, these are called as variable cost can you think of some examples of variable cost what costs are variable? In production scenario raw material cost is usually variable, because as you produce more in the same proportion you will consume more raw material any other example?

Wages will it be a variable cost depends if the wages are being paid on number of units produce which is rarely the case. If they are on number of units then it becomes variable. If they are being paid for time that is for a month or day it may or may not be variable, because our definition is strict. If it is directly proportionate than only you call it variable any other example of a variable cost? Power consumed or electricity usually in a production setup will vary in the direct proportion. So, it is a variable cost any for a service industry, what could be a variable cost? Let us say in transportation what is variable cost? So, fuel consumed as you run for more kilometers the fuel will increase in the direct proportion so it is a variable cost.

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So, these are the examples we already discussed. Direct wages, direct material, petrol and then you can also think of more examples.

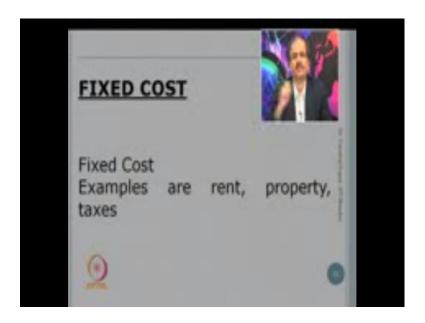
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Next is fixed. So, fixed as the name suggest it does not change in total for a given time period despite a wide fluctuation in output or volume. So, these costs are irrespective of how much you are producing you produce 0 units you produce 1000 units. This cost will not change they will be fixed what could be the example of fixed cost? Rent is a good example; usually rent it charge for space. So, you take rent say you take a shop on rent

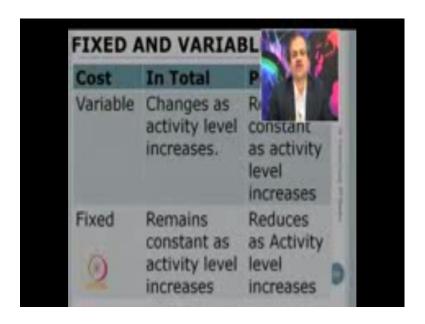
you have to pay rent whether you sale or no rent becomes fixed cost any other? If you hire somebody on fixed salary that is the salary has nothing to do with the output then it becomes a fixed cost any other? Again say in a transport industry you own a motor car what will be the fixed cost to you? So, depreciation driver salary these become fixed cost annual r t o taxes car vehicle insurance these are all examples of fixed cost.

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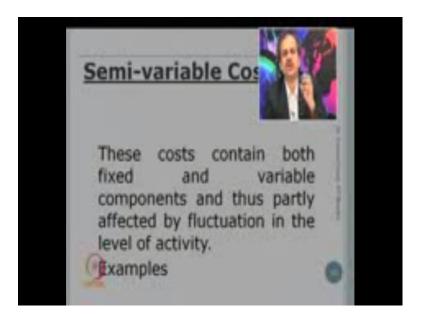
So, here I have mentioned few examples like rent, property and taxes.

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So here in summary this is the position. Variable cost these are the once we change with the number of units, so the per unit cost remains the same. In case of fixed cost the total remains the same the per unit cost will reduce. Because you have same numerator number of units increase the fixed cost per unit will fall.

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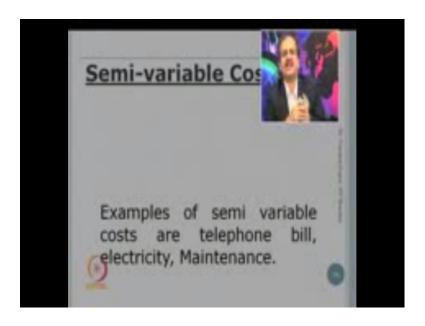


The third category is known as semi variable. As the name suggests it is the mixture of 2 so it has fixed component, it has variable component. It is somewhat changes with the level of activity, but does not change in the direct proportion. So, what could be the

examples of semi variable cost? Let us say you have fixed line telephone you pay some rent plus you pay for call charges. So, the total telephone bill will be semi variable cost. In case of marketing cost you may have component of marketing which has to be incurred. The additional marketing is based on the unit sold that is you may be paying some commission per unit in addition to salary to your sales months.

So, the sales month's remuneration becomes a semi variable cost anything else. It is a semi variable cost say in a production scenario what is a semi variable cost. In a production scenario maintenance is a good example of semi variable cost so raw material will be completely variable something like rent will be fixed. But maintenance will vary as per the output, but it will have a fixed component. If you have to keep the machine running you have to maintain it irrespective of production. But as you produce more the maintenance will increase same thing even for vehicles. You have to do some maintenance, but if you use vehicle more they will be more wear and tear so there will be more maintenance.

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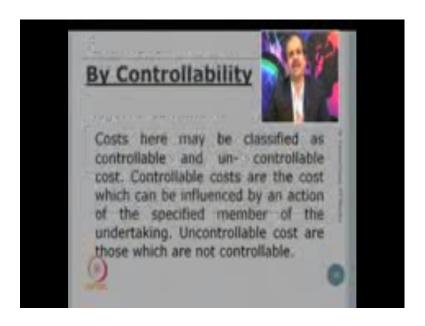
So these are the examples we already had seen telephone bill even I have kept electricity, because as electricity rent component and you have to pay per unit also. So, total electricity bill is generally semi variable so this was the overall classification.

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company has prepared udget for July and Aug 2013.		
Direct Material	50000	100000
Direct Labour	28000	56000
Rent of the factory	75000	75000
Power	35000	50000
Martenance	17000	26000

Here is a small example so 2 months budgets are given for July and august. And in July you plan 1000 units in august you are planning for 2000 units these are the cost. Now, can you tell which cost are variable which are fixed which are semi variable? So, direct material as you can see is a variable cost, because it has exactly double direct labor also is doubled so it is a variable cost. Rent is unchanged our definition that in even if the output changes now, the output as doubled rent is not has not change. So, it is a fixed cost power is a semi variable cost, because you can see it is it has not doubled. But at the same time it is not constant. Because it must have fixed component plus you are paying on per units bases that is why it is a semi variable cost maintenance again as we have discussed is a semi variable cost. Now, this classification becomes very important when you are taking decisions or pricing when you want to know whether I should produce or I should out source. For any decisions or even for making a budget the classification as per variability plays a very important role.

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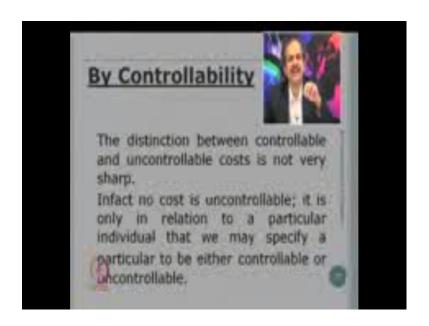


Now, let us look at the next classification that is as per the controllability. Now, what is a controllable cost? It is very common sense when can say what can be controlled is controllable, but actually identifying a cost as controllable is very difficult. Because nothing in life is controllable so that way all cost will be uncontrollable. At the same time you may put effort to control. So, it is not in overall sense here the controllability is looked from the angle of specific position. So, for a particular position what cost is within the influence within the dominance is called as controllable cost. And what cost is not within the domino of a person it is taken by some higher authority such costs are called as non controllable. Now, can you think of an example of controllable cost what is a controllable cost?

First of all you should know for who you are looking at. Let us say you have a small department which has 5 employs and there is one supervisor who is the in charge of that department. Now, this supervisor for that supervisor which costs are controllable and which are non controllable? Of course, difficult to tell, but you can imagine what could be within the domain of that person and what could be outside. Suppose you assume that supervisor has full power to increase or decrease the number of people under him. We can say that wages paid to those 5 operators becomes controllable. Because if there is more work supervisor can hire more people if there is less work he can remove. So, in such a scenario the wages to operators will become controllable.

Salary of the supervisor is it controllable not for him, because management would not allow him to decide about his own salary. So, for the supervisors level wages of the staff are controllable, but his own salary or wages are non controllable. Electricity bill is it controllable for that supervisor wills it be controllable difficult to tell. But generally we can say yes rate comes from outside, but how much power to consume I assume that supervisor as full autonomy. So how much power to consume is within supervisor's domino. Rent is it within supervisor domino is it controllable rent usually no because rent will be for the whole factory then the whole factory rent they will divide for is department. So, the decision being taken by the higher levels it becomes uncontrollable.

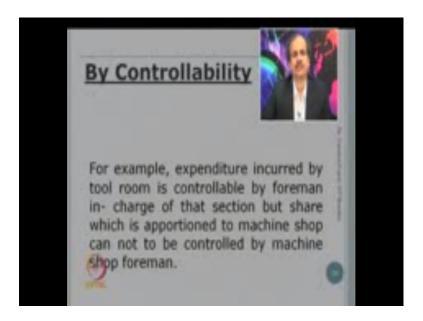
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So, you have to look it from a particular manager's level. So, here I have try to say that it is not very sharp no cost is uncontrollable, but we are looking from particular individual's angle. Now, this classification is important for cost control, because if you hold supervisor responsible for all cost of the department say including the part of the rent he will say that I do not have control. So, it is a good practice to hold a supervisor responsible for the cost which he or she can control. That is why in cost control this classification becomes quite useful. At little senior level say for a factory manager many more cost will become controllable and he or she will be held responsible for the entire cost of the factory. So, like that the controllability can be defined. But here again within an organization generally there is flexibility it is not necessary that all decisions within a

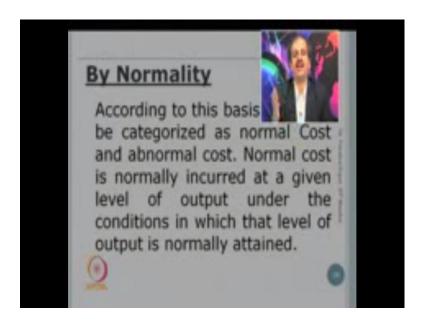
factory also a factory manager can take. So, we have to look at from a particular organization point of you for a particular person's controllability.

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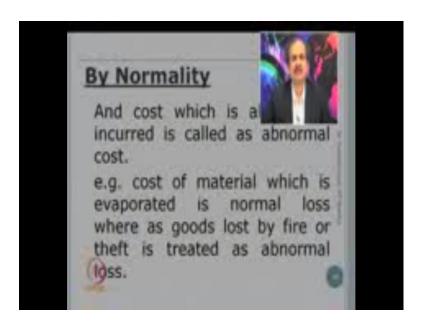
So, here I have try to given example that expenditure by a tool rule is controllable by foreman. But what is a apportioned to a machine shop is not controlled by a machine shop foreman. Because typically what happens is tool rule foreman will be in responsible for his expenditures, but those cost will be shared or will be charged to other machines shops so they do not have control on that cost.

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Next type of categorization, as per normality. So, here by common sense you will know that the cost which is generally incurred which is normally incurred for a particular level of output in a normal condition will be considered as a normal cost.

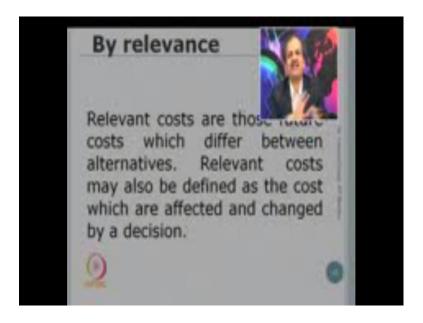
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Any cost which is beyond this normal will be an abnormal cost so here is an example. Now what happens is certain materials evaporate. Let us say you are dealing with some chemicals or say petroleum products. It will be technically establish that 2 percent of the raw material let us say evaporates. So, the laws up to the level of 2 percent will be

considered as normal loss. If 5 percent of the material gets wasted on a particular day then 2 percent is for a normal evaporation extra 3 percent will be treated as abnormal. It is, because of the mishandling or, because of some accident or, because of some mistake by the workers or in the machine. And then the examples of say goods lost by fire or by theft are always abnormal. So, this classification of normality is also useful, because the normal expenses or the losses are assumed. But for abnormal you can hold management responsible that is why this classification is also useful.

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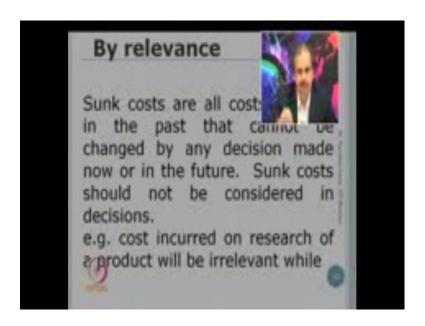
Next cost classification is as per the relevance so what is the relevance? This is more from a decision making angle so these are the cost which are effected or changed by a particular decision then it is called as relevant cost. Now, can you give an example of a relevant cost? So, for any decisions certain costs are relevant certain cost are irrelevant. So, what could be there example just think of some decision then maybe you can think as to what could be the relevant cost for the decision. Let us say I want to decide on whether to make a component or to sources from outside.

So, for my product I need a component 1 choice is I make it myself or it is readily available from the market I can buy it from outside. This popularly known as make or buy decision now, this particular for this decision which cost is relevant? Is the direct production cost relevant? Is the rent of the factory relevant? Is the say salary to factory manager relevant? If you think the direct production cost like raw material cost are

relevant. But rent or factory managers wage a salaries are not relevant, because they are not going to change by your decision you already have setup.

So, you are already paying rent so you are not going to pay extra rent for only for this component that is why rent or the managers salary are generally non relevant or they are also known as sunk. Whereas, the raw material for making that component is relevant, because if you decide to buy it from outside you will save on that raw material cost is the transportation cost relevant. I mean the transportation for that component is it relevant? Yes, because if you make you do not have to pay for transport, but if you buy from outside you are paying for transport. So, you will have to essentially way between how much is your raw material and direct production cost verses how much is a purchasing plus transport cost? And then depending on this you will take a decision. So, for any decision you should only look for the relevant cost.

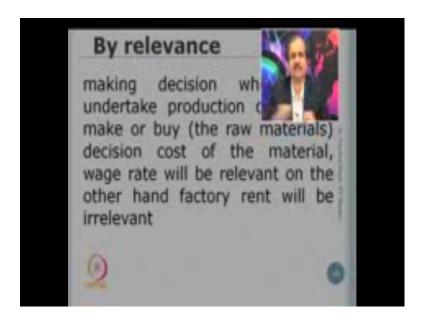
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As against relevant there are opposite of relevant are the sunk cost. So, these are made, because of some decision some other decision which has already been made. It has nothing to do for this particular decision. So, example is cost of research which is done on a product. So, you have done some research let us say you have spend 2 crores on research of a particular product you have developed a new product. Now for launching of that product is this RND cost relevant? No, sometimes you may feel now, that I have spend 5 crores let us launch it actually it is a wrong decision; for launching of product

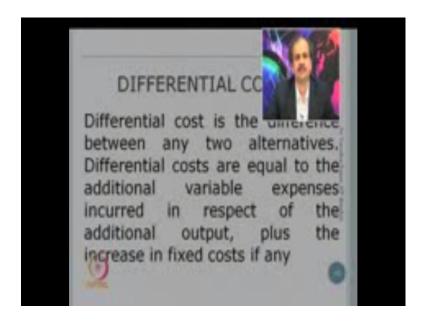
which is a relevant cost? Let us say you want to decide now, whether to launch or not to launch what are the relevant costs? Now you have to think what will be the direct production cost what will be the marketing cost and what is going to realized from that product? So, what is relevant to you is now selling price minus your direct cost. The RND cost though it may be very important is irrelevant for the decision making whether to launch or not to launch a product.

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This is what I was trying to say are you getting can you think of some other example. Let us say you already own a car. Now, you want to decide whether to use the car to go to the office or whether to go by the bus to the office you have 2 choices. So, what is relevant cost? So, if you go by car what is relevant cost? Perhaps the cost of fuel if you go by bus the cost of ticket these are the only relevant cost. The cost of car deprecation maintenance all these things are irrelevant because you have already incurred them. So, for a decision making it becomes very important to be able to properly classify between relevant and irrelevant cost.

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Next type of classification which is also similar is differential cost. So, for a particular decision we see that, because of that decision what difference is happening? So, I am already using say 1 lakh rupees of raw material for going for some extra production I am going to buy some more raw material. Then that extra cost will be considered as differential cost. Usually variable costs are differential, because they change with the output. But sometimes even fixed cost can increase then that becomes differential can you give an example of some differential cost?

So, typically what happens is let us say you are travelling by a car you have driver. So, differential cost is only the cost of petrol, but if you have to pay overtime to the driver then the overtime to the driver also becomes differential cost. So, like that for each decision, because of that decision if extra cost is incurred it will be considered as a differential cost. So, in today's session we have seen some primary classifications so we have seen how you classify by elements? Then we have seen how you classify by variability, how you classify as to direct and indirect, how you classify by function and so on. In the next session, we will see some more classifications of cost and after that we will go in to actual recording and cost control aspects.

Thank you so much.