

Management Accounting
Prof. Anil K. Sharma
Department of Management Studies
Indian Institute of Technology Roorkee
Lecture 02
An Introduction -II

Welcome students. So, in the previous class we were talking about the development of the three branches of accounting. So, I told you very briefly that the financial accounting which you already know and the cost accounting, how the cost accounting has developed. So we discuss a little about the cost accounting that the challenges put forward by the competition all around the globe, both in the manufacturing and services sector.

Compelled, the challenges to look for forward for the new solutions and the say effective solutions for minimizing the cost of the products because cost is the basis of developing the price and further problem aggravated in 1930s because you must (be) be knowing about or you must have read somewhere or heard somewhere that there was a great recession of or deep recession of 1930s, under that recession of 1930s, it affected the purchasing power of the people very badly.

On the one side firms were not able to control the cost of the product because they never had thought of that this type of the recession will be there in market and the purchasing power of the people will be badly affected. So, they never thought of finding out innovative techniques of reducing the prices or minimizing the prices or minimizing the cost and when there was the recession in market, market was passing through the recessionary phase and the purchasing power of the people was affected.

So, it compelled the firms to think about that how to regain the market, bring it back on the normal say level of performance and apart from many techniques it was thought about that we will have as a business to reduce the cost of the product and the services and we have to find out the ways and means for that. So, because of that great depression or recession of 1930s forced academicians, researchers to find out the another discipline of accounting after financial accounting.

The new discipline which was emerged or which was found out was cost accounting. Cost accounting answers all kind of the questions which are to be regard to the costing of the

production services and it certainly becomes the basis of pricing the production services. So, after 30s when we had the financial accounting, we had the cost accounting businesses again started coming back on the wheels. Purchasing power of the people also was regained and firms founded very interesting, very useful that how to minimize the cost of the product.

Then we had management accounting. How the management accounting came into being? Management accounting as such is a branch of accounting, as a discipline of accounting, as a decision of business say discipline of a business decision making developed in 1950s. In the beginning of 50s, because by the beginning of 50s competitions started intensifying, globalization started taking place, company started moving from the one market to the another market.

Services became competitive, product products became competitive and for the domestic players operating in the one local market or the home countries market they found it difficult to sustain and to continue with their business because of the tough competition put forward by the multinational companies moving from the one market to the other market. So, because of intensified competition businesses were compelled to find out that how to fight this competition, how to become different in the market.

How to visualize what is going to happen in the time to come with regard to the production, with regard to the supply, with regard to the pricing, with regard to the customer choices. Because of this challenges, because of this intensified competition a new branch of accounting, a new discipline of accounting was developed, emerged and we knew it, the third branch of accounting called as management accounting. Now, we will discuss and learn about what the management accounting is.

So, since as I told you that it has developed as a branch of accounting third branch of accounting because of intensified competition in the market, because of challenges put forward by the markets, so it means you can understand that management accounting is helping us to learn that how to make best use of the accounting information which is generated under financial accounting, which is generated under the cost accounting and how to make use of that information by using the different decision (making) making techniques which are assembled or which are, say put on the common place or say in one basket called as management accounting.

So, in the management accounting there are different techniques of management decision making. For example, we talk about the planning and forecasting. Planning and forecasting plays a very-very important role in the businesses if you know what is going to happen in future then you can control many of the things or may be the wrong effects or the worst effects of those changes going to take place. So for that we learn in detail in the management accounting about the process of budgeting.

We prepare the different kinds of the budgets; we learn how to prepare the different types of the budgets and how to take decisions by preparing the budgets. We have different techniques like standard costing, marginal costing, we have the activity based costing and we have the basic beginning of the learning of the management decision making technique that is the cost sheet or the cost statement. How to prepare the cost sheet? How to prepare the cost statement?

How to take decisions by looking at the different types of the cost, calculated worked out under the cost sheet or the cost statement. These are now you see as I am telling you that management does not have its own discipline or its own way or set or techniques of developing the information. This information is developed under cost accounting. When you prepare a cost sheet, when you prepare a statement of cost that cost sheet or the statement of cost is prepared under the cost accounting.

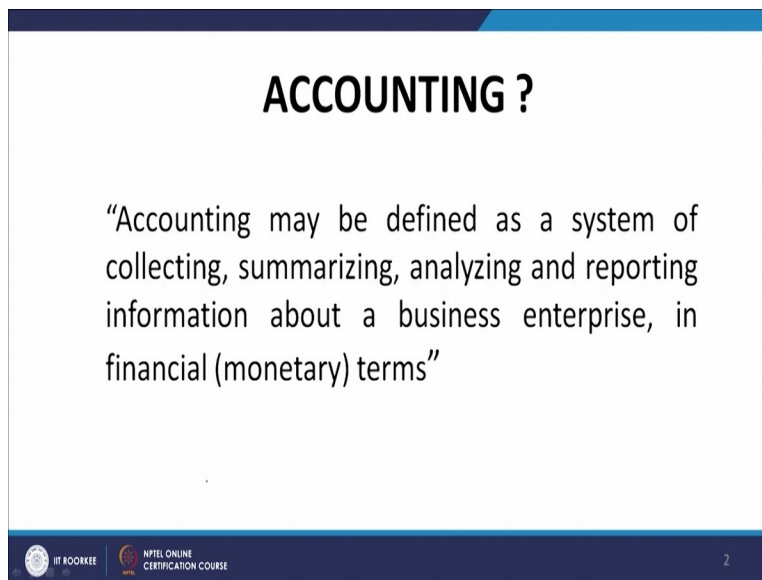
When I talked to you about the standard costing, standard costing is the part of the cost accounting not of the management accounting. Similarly, marginal costing, marginal costing is a part of is a technique of the cost accounting not of the management accounting. Similarly, the activity based costing is a technique of the cost accounting not of the management accounting. But that information which is generated by these different techniques of cost accounting, how to use that information for the management decision making that is the million-dollar question and that is we are going to learn here.

That is the important question that is easy to generate the information today we have the very efficient IT systems you put all the input details that if you are going to manufacture one product you put all the input details into the system and that system will give you the per unit, number of units we are going to manufacture per unit cost can easily be calculated. But how to use that information for the proper costing process, how to find out which component of the cost is

increasing beyond the proportion and it has to be controlled, how to use that costing information to prize a product.

All these techniques and statistics decision making if we talk about, financial and the statistics decision making that is possible with the help of the techniques of the management accounting in that we are going to learn here in the discipline of the accounting third branch or discipline of the accounting.

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ACCOUNTING ?

“Accounting may be defined as a system of collecting, summarizing, analyzing and reporting information about a business enterprise, in financial (monetary) terms”

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So, let us see here when you talk about accounting let us recall what the accounting is, “Accounting may be defined as a system of collecting, summarizing, analyzing and reporting information about a business enterprise, in financial or the monetary terms.” If you look at this definition largely it is linked to the financial accounting because in the financial accounting, we create a system where we collect the information under that system transaction and when the transactions go to the different books of accounts general ledger and trial balance we collect that information and put it to the different books of accounts and by doing that we summarize it.

Summarizing is that when you prepare a journal you prepare a ledger trial and finally the trial balance. Trial balance is what? It is the summery of all the account in transactions. Finally, (even) even the profit and loss account and balance sheet that is summery of all the business transactions. So we summarize these transactions and analyzing and reporting information. We

analyze it also to some extent, we go for certain ratios uh we calculate we go for cash flow statement we go for the fund flow statement and finally we report this information to the different stake holders. Different stake holders are both internal and external of the business.

It is reported to the government, it is reported to the tax authorities, it is reported to the regulatory authorities, it is reported to the foresail institutions, it is reported to the internal stake holders like employees like our shareholders like your lenders or may be the say customers. So, this all is done under the accounting largely under the financial accounting so first of all you have to generate some information, record it, summarize it, analyze it and report it to the different sections or the interest groups or the stake holders who are directly or indirectly related to the business this what we do under the financial accounting. Agreed!

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Users of Accounting Information

Internal managers...

- use information for short-term planning and controlling routine operations.
- use information for making Non-routine decisions and Formulating overall policies and long-range plans.

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Now, uses of accounting information, who uses that information? You can largely divide into two groups, internal users and External users. Means why we are generating that information? Why we are preparing the profit and loss account? Why we are preparing the balance sheet? Without that summarized information decision making will not be possible. But with that balance sheet of profit and loss account you will be able to take the limited non-strategic decisions. It will help us to understand how we have performed in the past 12 month, 6 month or 3 months depending upon the period of reporting.

So, if you talk about the uses of reporting, their internal uses and internal managers, internal stakeholder's, internal say people who take care of the company and its management they use this information for the short term planning and controlling of the routine operations. Short term planning, because earlier when we were not having the very efficient and useful IT systems in hand we were preparing the financial statements only once in a year. After 12 months we were able to know that what we have ended up with. We had the profit or we have the loss.

If you have the profit with the profit is a sufficient or it could have been increased and if it is a loss then could it have been means was it possible to convert it into the profit but it is only a postmortem analysis, you cannot maximize the minimum profit and you can't convert the loss into the profit that is not possible that has happened but when we had started having the developed IT systems we have now the software we have now the different ways to prepare the say accounting information generate accounting information very efficiently.

And with the minimum amount of time then we started preparing say the financial statements over different short durations. Now, we prepare monthly balance sheets, we prepare 3 monthly balance sheets, we prepare 6 monthly balance sheet and finally we prepare the annual balance sheets. So why that we are doing that if you are preparing for example a monthly balance sheet or a quarterly balance sheet that quarterly balance sheet and profit and loss account is going to tell us how the business is moving ahead. What has happened in the past 3 months?

If that performance is not up to the mark, how it can be improved in the next quarter and further how it can be improved in the next quarter. So, if you have the information you can make use of that and you can use that information for the improved decision making. Second is use information for making non-routine decision and formulating overall policies and the long reach plans. We make lot of strategic decisions.

For example, companies operating into four markets and we come to know that our production capacity is more and this four markets are fully saturated now, we have to enter into the fifth market, sixth market, may be within one country or may be within different countries that is the strategic decision, long-term decision. You need (very) very relevant information, long term information and there you do not need only your account information we need the other

companies accounting information also, for finding out whether we should move from one market to the market or not.

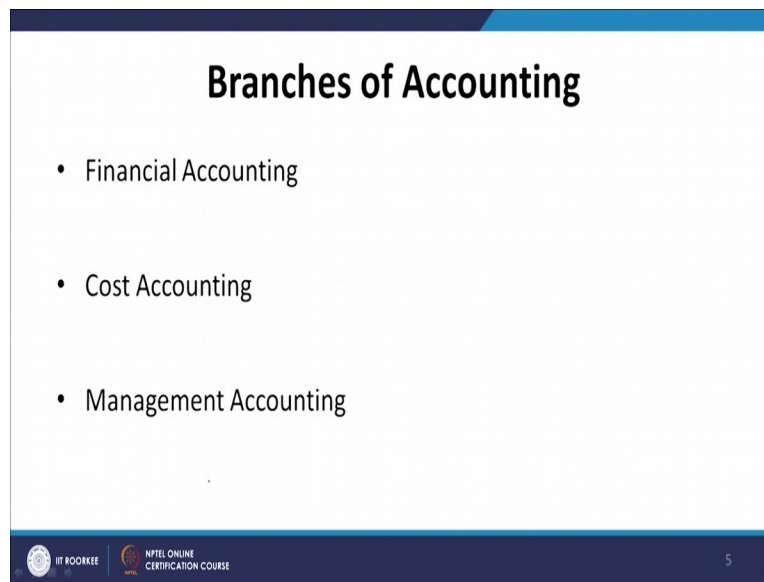
Similarly, we are manufacturing, for example, 4 products. We want to introduce two more products in the market. That is the long term strategic decision. Should we go for that or not, that will depend upon how we have performed in the existing market in the existing four products. Should we be adding two more products? If we have efficiently performed in the market with regard to the first 4 products, then yes, we have the reason to move to the fifth and sixth product so all this requires accounting information, financial information which is available under the financial accounting.

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The slide is titled "Users of Accounting Information". It features a central graphic with three colored boxes on the left and a larger grey box on the right. The top box is red and labeled "External parties:". Below it are two smaller boxes, one brown labeled "Investors" and one blue labeled "Government authorities". To the right of these boxes is a larger grey box containing the text "use information for making decisions about the company." At the bottom of the slide, there are logos for "IIT ROORKEE" and "NPTEL ONLINE CERTIFICATION COURSE", along with a small number "4" in the bottom right corner.

Similarly, you have the external users of accounting, investors use the financial information or accounting information, government authority use, regulatory authority use, tax authority use, financial institutions use because they have to find out the good customers to land their funds. So it is very useful information which is of the use and value for internal and external stakeholders so that is all clear to us this is all with regard to the financial accounting.

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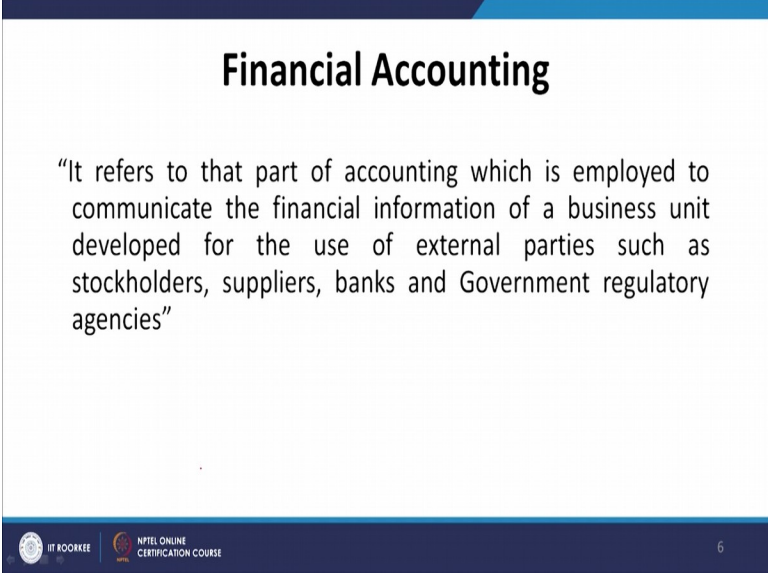
Now, let us talk to about the three branches we have already talked about financial accounting, cost accounting and management accounting. Financial accounting was till nineteen thirty but we didn't have any cost or the Management Accounting. Till that time, you were preparing the financial statements only depending upon the business information transaction and then taking the transaction to the profit and loss account missed to the journal ledger and trial balance and to the profit and loss account and balance sheet.

And that kept on serving our purpose from the seventeenth century till twentieth century till the first you can call as the quarter of the twentieth century. But the great recession or depression of 1930s compelled us to think about how to think innovatively to minimize the cost of the product and for that reason as I told you in detail, we developed a new discipline of accounting which is called as cost accounting. And later on in 50s when the business became more competitive, intensified competition intensified.

It became difficult for the companies to adjust, operate and sustain in one market because of the competition coming from the different quarters so we developed the third branch of accounting management accounting. And here we are going to learn in detail about the different aspects of the management accounting and how to use that information which is generated under financial accounting and cost accounting for the strategic managerial decision making.

Those techniques which will help us to make proper use of this information of financial and cost accounting is called as sets, means all those techniques or set of those technique make the new discipline of accounting which is called as Management Accounting. I will not go much in detail but we will see that what the financial accounting is? We all understand what the financial accounting is?

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Financial Accounting

“It refers to that part of accounting which is employed to communicate the financial information of a business unit developed for the use of external parties such as stockholders, suppliers, banks and Government regulatory agencies”

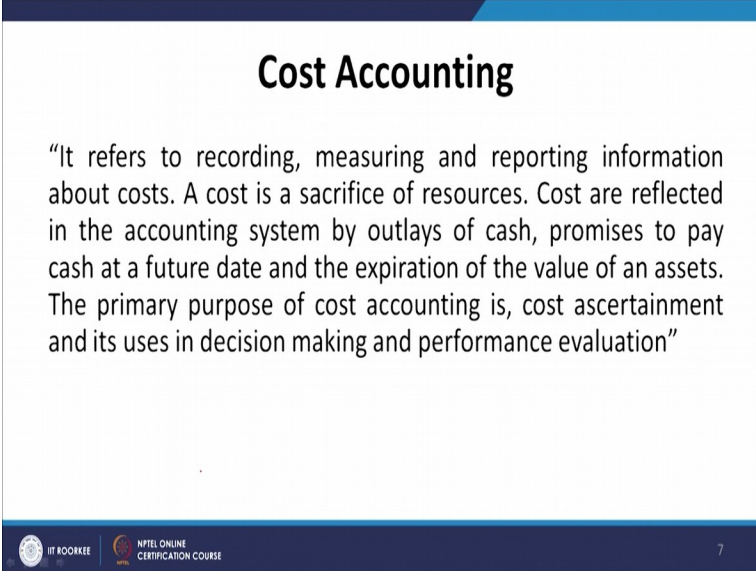
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“It refers to that part accounting which is employed to communicate the financial information of a business unit developed for the use of external parties such as stock holders, suppliers, banks and government and regulatory agencies and say may be the other interest group like landers”. It is only the financial accounting serves only the reporting purpose how the business is doing? How the business is performing? How the business is behaving?

Because in many a times, some external funds are also invested in the business so government as of public faith they should be informed about that all funds invested in the business are being properly, judicially used and there is nothing to worry about. So, government needs the information, tax authorities need the information, financial institutions we have provided funds to the business or are planning to provide funds to the business they need the information, so this only serves the reporting purpose no strategic decision making is possible only by using the techniques of financial accounting.

Financial accounting can help us to generate very relevant information, but how to make use of that information is learnt under the management accounting. Cost accounting second thing, as I told you, same thing like financial accounting, cost accounting also generates very useful and relevant information but how to make use of that information for the management decision making that is also known by or can be learnt with the help of the techniques of management accounting which we will discuss here. What is now the cost accounting?

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Cost Accounting

“It refers to recording, measuring and reporting information about costs. A cost is a sacrifice of resources. Cost are reflected in the accounting system by outlays of cash, promises to pay cash at a future date and the expiration of the value of an assets. The primary purpose of cost accounting is, cost ascertainment and its uses in decision making and performance evaluation”

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It refers to recording, measuring and reporting information about cost, only cost. Cost of the product or the cost of services. Cost is a sacrifice of resources. Cost are reflected in the accounting systems by outlay of cash, then the cash moves out means cash is the resource and when you sacrifice a cash it moves out so it becomes the part of the cost, promises to pay cash at future date and expiration of the value of an asset.

When you have the raw material its asset to you but when you converted or you process that material or you semi-process that material it took another shape so that material is gone that has become one part of the total cost of the finished product. The primary purpose of the cost accounting is cost ascertainment and its uses in decision making and performance evaluation. To some extent you can facilitate performance evaluation also, for example, if you are manufacturing four products.

So, we can calculate the cost of the four products, then we can see that how much input is required by these four products and, for example, input is limited, we do not have the sufficient input, for example, we talk about the power you do not have sufficient power, power is coming eighteen hours a day not a twenty-four hours a day, power is a limiting factor.

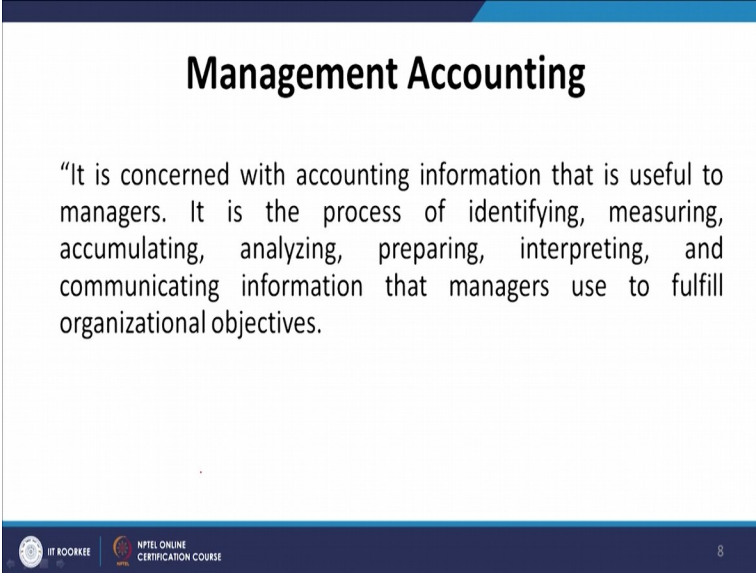
Now you would like to learn which of the four products out of the four total product we are manufacturing to maximize the profitability of the firm if we concentrate upon the first three products any three products which are giving us the maximum profits in the minimum cost, the available power should be used first of all for the 3 products only and if any power is left after that we should use for the fourth product which is least productive or the profit making.

So, this can be to some extent can be learnt with the help of the cost accounting that out of the 4 which one is the best product, which one is the second best, which is the third and which one is the least productive of the least profit making subject that is the fourth one, so we can find out with the help of the cost, with the help of the prices we are going to fetch from the market and with the help of the inputs required for manufacturing all the four products.

That is possible but further beyond that further analyzing and processing and then analysis of the that product or maybe the further any kind of analysis is not possible under the cost accounting that only largely gives you the costing information and pricing is available from the market. Management accounting, yes, now it is a point where we are only say concerned about and going to be there talking about the techniques of Management Accounting for the next how much 29 more hours.

It is concerned with accounting information that is useful to managers; every information is not useful to managers. You are preparing a profit and loss account, you preparing a balance sheet, you preparing cash flow statement, everything in the profit and loss accounting is not useful, everything in the balance sheet is not useful but what is useful we have to segregate that, we have to identify that and if you have that art of segregating or identifying the strategic information we can use it also.

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Management Accounting

“It is concerned with accounting information that is useful to managers. It is the process of identifying, measuring, accumulating, analyzing, preparing, interpreting, and communicating information that managers use to fulfill organizational objectives.

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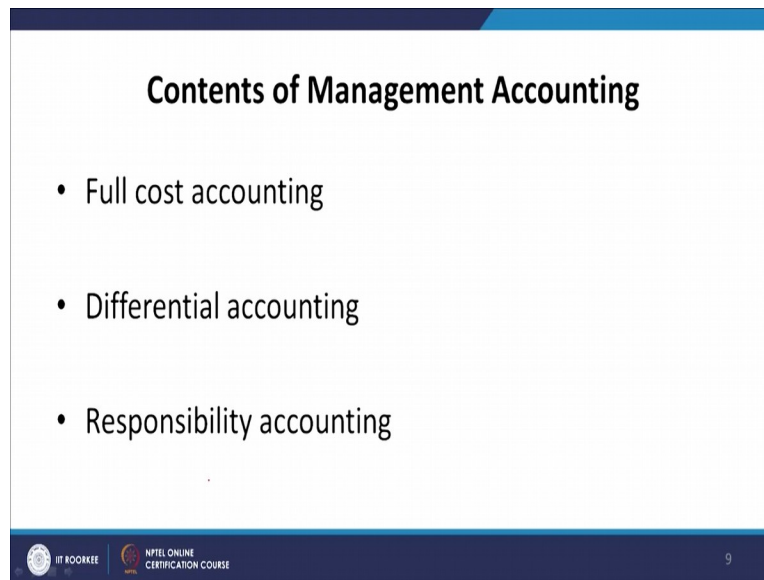
So, it is concerned with accounting information that is useful to managers, not everything. It is the process of identifying, measuring, accumulating, analyzing, preparing, interpreting and communicating information that managers use to fulfill or that manager need to fulfill organizational objectives. So, which one is that information out of the total information generated by the financial accounting, cost accounting and the other techniques of say finance and accounting.

We have to segregate it, we have to identify it, we have to put it on a different basket and then make use of that information so one thing is taking out the relevant information putting it in the different basket and second thing is second skill here is to make use of that information, so how to identify that relevant information how to make use of it these are the two different things and we learn both the things under management accounting.

Now, earlier when we had the cost accounting only, we started working out the cost of the product and we worked out only the total cost of the product. For example, we want to manufacture this pen, right! For manufacturing this pen how much material is required? How much labor is required? How much other overheads are required? How much finance is required? How much distribution cost is required? How much marketing cost required?

All these cost were listed jotted down and when put together we came to know that manufacturing this pen, one pen cost are say 50 rupees, total cost and if we are manufacturing this pen at a cost of 50 rupees, so at what cost we can sale or at what price we can sale it in the market. So cost became the basis of pricing but cost accounting only help us to calculate that figure of 50 rupees and that is all. Now, under management accounting we have further taken into the next level. Now we do not calculate only one cost full cost.

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We use another technique of costing which is called as differential accounting and then responsibility accounting. These two techniques are of the management accounting, not of the cost accounting. They have been developed. Even you say these are the techniques of cost accounting they have been developed when the management accounting came into being after 1950s and there we started learning about that if you are calculating the full cost of manufacturing these pens and this pen if manufacture 1000 pieces of this pen.

What is the cost? Based upon the different inputs we are going to use to manufacture this pen and accordingly we are going to price it but how to minimize the cost of this product and how to look at the cost from different angles that we learnt under the management accounting. For example, we want to minimize this cost. The cost of this pen from 50 rupees to 40 rupees, we have to look for that what are the input factors and which input factor is we are using more than required and which we are using optimally and which we are using less than.

So, we will optimize the uses of these inputs and resources we are using to manufacture this pen. So to some extent we learn under cost accounting that cost reduction process but largely we learn under management accounting. Now, when we moved from the full cost accounting to the differential accounting, what we do in the differential accounting, in a differential accounting we learn about for example if you manufacture this pen and manufacture the first 1000 units what will be the cost that is 50 rupees.

Or may be when you manufacture first 500 units the cost is 50 rupees, but if you are able to expand the market if you are not only selling 500 units in the market but if you are able to sale say 5000 units in the market then what will be the cost? Cost for the initial 500 units is very high because your all fixed overheads are added into the total cost of the 500 pens but when you are able to expand the market and you are able to take the production level from the 500 to 5000 or not even 5000 may be 1000 so that cost which will be from 0 to 500 will be the full cost, initially because we were manufacturing only 500.

But if we want to enter into the new market and take up the sale from 500 to 1000 pens then that cost will be called as a differential cost from 500 to 1000 because that cost will not be same as the cost was from 0 to 500 because up to 500 when you are calculating the cost you have met all the cost associated with the manufacturing a pen whether it is a variable cost or it is a fixed cost, distribution cost, marketing cost everything is included and when you calculate the cost or you learn about the cost, cost has two kinds of may be three kinds of. First is the fixed cost, variable cost and third is the semi variable cost.

So, fixed cost is the one which happens once which is called as Sunk cost which does not happen time and again and that remains fixed and same up to the certain level of production. So, you are manufacturing 500 pens but the capacity of the plant which we have say installed put in place that is up to two thousand pens and that was minimum capacity available. So, it means now when you increase the production of 500 to 1000, your plant depreciation is already added into 500 that will not be further added back.

So, it means the cost of the additional 500 units will come down by the cost of the plant by way of not adding the depreciation to the next 500 units. So fixed cost remains fixed which can be fully recovered at the initial level of production and after that if you increase the production, only

variable cost has to be incurred that is on the variable expense, direct expense on account of the material, labor and other overheads.

Whereas fixed cost is indirect cost is already included it is fully met and now for the additional production you have to incur only variable cost and because of that the total cost of the product will come down and you would be able to reduce a price also and if others are not able to do that it means your product will become highly competitive. So, when you calculate the cost of the total 1000 pens now and you divide now, the fixed cost initially we dividing in to 500 units.

Now, you are dividing into 1000 units so your fixed cost will also come down your variable cost can be kept under control and finally the total cost will be under the control and if you price a product on the basis of that cost that price will be (very) very competitive. So, differential accounting has been developed after fifties under the management accounting there we started learning about first set of the production we are doing this is our full cost but if you increase the production from the 500 to 1000, 1000 to 1500, 1500 to 2000 units then what is going to be the additional cost that cost is called the differential cost.

So, it is a very strategic way of looking at the total cost Calculation and then costing the products being manufactured at the different levels of the different brackets. Then we developed a new discipline which is purely a discipline technique of the management accounting which is called as responsibility accounting. Earlier, initially when we had only the financial accounting and cost accounting we had only one firm, one organization and one from different departments.

But when you were calculating the cost of the products where different departments were contributing in manufacturing that products, we were calculating the total cost of the product but we were not able to find out which department has contributed how much into the production how much is the cost because of the which department of the firm but under responsibility accounting different departments different units and sub units of the firm contributing in to the production of the product.

We started calling them independent responsibility centers and those independent responsibility centers were given the clear-cut responsibility that this part of the product you will manufacture, next part of the product you will manufacture, your job will be (())(31:20) of the material, your

job will be of issuance of the material, your job will be of taking the material from the place of production the place of market.

So, when you divided the whole firm according to the cost of the product and their contribution to the total cost of the product, so these different centers, these units-subunits and departments called as the responsibility accounting. Now, what we do today that why we have done it? Because we can easily find out that in the total cost of the product what is the contribution of the different responsibility centers, unit-subunits or departments.

So, if any units cost has gone beyond the budget budgeted predetermined cost that unit held responsible for that increase in the cost so they can be alarmed that it should not happen in future. So, you can easily fix up the responsibility and we can come to know which part, which unit-subunit causing the additional cost and how it can be control so that the total cost of the product can be kept under control.

So, more about the responsibility accounting and how the responsibility accounting works? What are the different responsibility centers or we create the different responsibility centers and other techniques of Management Accounting, I will discuss with you in the next class. I stop here for today for this class and further more discussion with regard to the techniques of Management Accounting we will have in the next class. Thank you very much!