Management Accounting Prof. Anil K. Sharma Department of Management Studies Indian Institute of Technology, Roorkee Module 1: Management Accounting Lecture 5: Fundamentals of Management Accounting – I

Welcome all. So, we are in the process of learning about the fundamentals of Management Accounting. And today we will discuss something say more about the other techniques of the Management Accounting or the other fundamentals of Management Accounting. I am taking it at a at a slow pace because if we are clear about the fundamentals, if we are clear about the say the basic requirements of implementing this technique or the different techniques of Management Accounting in the organization. Then it will be more useful and helpful for us to learn about the say whole thing about the subject, each and every thing about the subject.

So say building the foundation I found or I thought is is necessary. So slowly and steadily we are moving forward. I am not straightaway jumping to the techniques of Management Accounting. I will take you in the coming classes, but initially let us discuss in detail the basics or the fundamentals of the Management Accounting which are really useful and helpful to understand the subject in detail. So, now we will be taking about some of the techniques. Here now we will talk about the relevance of planning and controlling in Management Accounting.

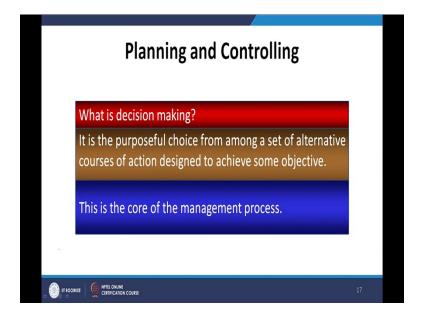
As I told you that it does not have its own technique, it borrows the information from the other subjects or other branches of Accounting, Financial Accounting and the Cost Accounting. But it helps us how to manage the organizations, how to manage the firms and planning and controlling is very-very important are the very-very important components of the overall, say firm Management. Right?

So, Planning means when you think of Planning, because without planning we cannot go ahead. It is about the setting the road or maybe setting the targets or maybe say deciding which way we want to go, where we want to go and how long we want to go. So, planning is the most important thing in any organization in any company in any firm. And Planning has different say horizons. We have the Strategic Planning which is very long, then we have the say Long- range Planning which ranges from 3 to 5 years, then we have the Annual Plans, we have the say 6 Monthly plans we have the Quarterly plans we have Weekly plans.

So plans are really important in any organization and when you think of doing something, achieving any objective, it is always better and effective to plan in advance, right? So Management Accounting also recognizes and see emphasizes upon that we have to really think

about how to plan, how to effectively plan. So means how to take decisions? What to do? That all needs to be planned, so what is the decision making?

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It is the purposeful choice among the set of alternative courses of action designed to achieve some objectives, right? So, it is the purposeful choice among the set of alternatives, right? If you have the set of alternatives here, then you have to now choose that which of the alternative or which of the options is better for us. Which we should opt for? Which should we implement in the firm, in the organization; there we need the planning because we are planning to reach up to a level maybe after 6 months or after 1 year.

Our sales are say 10,000 units up to the point we start planning for the next period. So we want to now achieve 12,000 units' target or 15,000 units' target, so how that can be done. There we need the decision making but where we want to go is the say way we can plan or we can look forward, what to do, how to do and where to go. This is the core of the Management process as I told you earlier that without planning, no controlling is possible.

So first we plan, then we execute our plans and then we try to find out that whatever we had planned, have we been able to achieve our plans or our objectives or our say milestones which were decided at the planning stage. And if the actual performance is more than the planned one, really good for the firm but we have to say have (the) see variances and analyze the variances. And if the actual performance is less than the planned performance, in that case also will we have to be careful because the variance is there, it is a negative variance and we have to find out the reasons for that. So that these variances, deviations do not reoccur, right?

So, planning and the controlling are the two important techniques, tools and which are means efficiently and very nicely, appropriately facilitated by this subject or this branch of accounting, where we will learn about the different techniques of planning maybe the Budgeting, we have the different types of the budgets. We have the Master Budget, we have the flexible budget, we have the cash budget we have the say Operative budget, we have the Sales budget, we have the Sales collection budget, we have the Purchase payment budget.

All these budgets we will be talking about and learning in detail and you have heard about, I am sure you have heard about the budgeting earlier, but when (we) I will discuss with you the budgeting that how quantitatively you prepare the budgets, means every firm should or most of the firms in the today's scenario they are doing that they are preparing the budgeted balance sheets depending upon the different time horizons. Some firms are preparing 6 monthly balance sheets, some firms are preparing quarterly balance sheets, some firms are preparing monthly balance sheets.

And companies who are very-very efficient and who have the very efficient IT Systems in place and who have sufficient resources they are preparing even the weekly balance sheets. And every company is supposed to prepare the annual balance sheet, right? So means we are before moving forward as we start executing anything in the firm, we already have a say budgeted balance sheet, budgeted profit and loss account for the different time horizons and if we have prepared all these things through budgets already it means they serve as a very good guiding map, a road map on which we can walk later on, right? So planning and controlling they are the two important techniques and we will learn about them in detail.

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Planning and Controlling means if you look at the structure, total structure, we have here, we are starting here with the planning right? This is the planning and here it is the controlling. And how we plan? We prepare the budgets, as I just discussed with you, we prepare the budgets and special reports. Then we have the specialized financial accounting system which helps us to say give you the budgeted balance sheets first and then it helps you to give you the actual balance sheets, actual profit and loss accounts when the firms go for the performance, right?

So we prepare then we compare the budgeted with the actual balance sheets or actual profit and loss accounts. So what we are doing here, we are performing the task of the controlling, means we are helped by the financial accounting information, but how to make use of that information that is taught to us by the management accounting. So planning we also did with the help of the budgets, then we went for the actual production and then we had or the actual production and sales and then we have the actual results and then when we compared the budgeted results with the actual results.

Then we had both the things; planning as well as the controlling but in between we were facilitated we were helped by the financial accounting process. Then we prepare the performance report. When the planned and the actual performances are different, we have to prepare the performance reports and find out the variances. And in this entire system of the budgeting and creating the accounting information, here the other different stake holders they help us, they provide us the (im) important information.

First is the Customer Service, they guide us that where we are and where we want to go and how far our say products and services are liked by the customers. We go for the Competitors analysis that how they are planning to move forward, what they have done and what they are doing or what they are planning to do. Accordingly, if the competition is very stiff in the market and we are finding it difficult to achieve the targets we spend some money on the advertising and then we try to find out the reports and the say success and the failure about the new items, products or services if they are introducing in the market.

So these are all sources, customers, competitors, advertising process then new items and then they help us to prepare the budgeted information for the coming periods and on the basis of that we plan, on the basis of the planned we go for the execution and after execution we perform the process of controlling and controlling is finally knowing about where we wanted to go about and where we have reached. So, here in the planning and controlling process we are helped by the budgets, financial accounting, customers, competitors, advertising process, new item success or failure. And here lies the importance of Management Accounting, that you have information you have the customer service you have competitor's analysis, you have the advertising, budgets and actual performance, you have new item's performance, you have financial accounting details, but how to make use of that, how to facilitate decision making or how to take decisions by depending upon this all information. That is the skill required to, required by or attained by the management accountants.

So, on this side we are putting here one thing that is the Management process. Management process is what, that is the planning and controlling. An internal accounting system that helps us in the planning and controlling and then we prepare the performance reports and when we go for the say performance reports, means then we exercise the control and try to find out what were the things which went wrong in the current say performance process and we try to correct our next period's planning by drawing or learning lessons from the current performance or the present performance, so that next time these things do not occur, we do not commit any mistakes and we easily achieve the targets which we wish to achieve. So planning and controlling, its importance is clear to us I think by now.

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So now, here we talk about the budgets, role of the budgets. The budget is a quantitative expression of a plan of action and is an aid to coordinating and implementing the plans. Budgets are the chief devices for compelling and disciplining management planning. When you have the budget, you know what is expected to be done. We can easily communicate to each and every employee at each and every level in the firm that this is expected from you during this period of

time and if your performance is not up to the mark or as per the budgets, it will be evaluated analyzed and appropriate action will be taken.

So, it is a very important tool in the planning and facilitating the effective utilization of the resources during execution and then knowing about whether our planning has been successful or not and if there are any kind of shortcomings, then remove them in the next planning process or if we have overachieved still learn that we can expand now our targets, our planning horizon, our planning say objectives at the planning level and we can achieve bigger things, right?

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Now, we talk about the Performance Reports. It is really very-very interesting component that Performance Report that what is the Performance Report. As I discussed with you during the process of planning and controlling, Performance Report is basically a comparison of the planned results with the actual results, right? Performance reports formalize control and provide feedback by comparing the results with plans and by highlighting the variances.

So, when you compare the budgeted performance with the actual performance, right? You find out the difference. If the actual is just equal to the say the budgeted means the variance is 0, but if the actual is more than the budgeted, variance is there but it is positive. And if actual is less than the budgeted, in that case variance is there and it is negative, it is a very serious concern. We have to analyze in detail that why there is a variance, why we could not achieve what we planned and where, what were the shortcomings and how we can remove those variances, variances are basically deviations from the plan.

So, how we can improve our performance in the time to come, everybody plans in their life, sometime people plan actively, some people plan passively. All companies plan in their say business process, some companies plan actively, some people plan passively. Everybody plans, everybody sets the targets and everybody wants to see whether the firm, he or she has been able to achieve the targets. This is what we call as the say Performance Report.

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Perf	Performance Report						
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This is budgeted information, this is the actual information and this is the variance. Right? For example, we have here the plan for revenues, revenues we had planned for to earn maybe sales. Sales we had to plan for selling in the say one next, one week for say 25,000 Rupees. But we could sell only actual is we could sell only for 19,000 rupees in the market, our sales were only 19,000 Rupees in the market. And the variance is 6000 and this is the negative variance. This is called as Adverse Variance. You call it as Negative or you call it as Adverse. This is Adverse, you can call it as Adverse Variance.

Then Expenses, now expenses we thought of that for earning a revenue of 25,000 rupees, earning is sales of 25,000 rupees, we will have to invest or spend 20,000 Rupees. What we have saved here? We have saved, we have spent less. We have not spent 20,000 Rupees; we have been able to manufacture the total production which we sold in the market for 19,000 Rupees, just for 15,000 Rupees. So, we have saved here some amount and that amount is how much? That is the say 5000 Rupees and it is a favorable variance.

So, favorable means F means Favorable Variance, so it means you can say Net Income which was expected to be 5000 Rupees, means net profit which was operating profit, which was expected to be 5000 Rupees that has come down to 4000 Rupees, reason being our sales have

come down by 6000 Rupees means actual sales as against the plan and our expenses have also come down, means expenses. Sales have also come down, so expenses also have been controlled.

About the difference between the say expenses and the sales is of 1000 Rupees and because of that 1000 Rupees we have an ultimate Net Negative Variance of 1000 Rupees, negative variance of the 1000 Rupees. So, now we have to look for the reasons for this variance, why we could not achieve the target, why we could not sell for 25,000 Rupees. Now, we have to find out the reasons for that. There might be a reason for that say when you sell it in the market; they are the two important you can call it as reasons for the variances.

First one is the say Quantity, number of units you want to sell in the market and second is the price at which we want to sell in the market. Now, if you go for the detailed analysis, which we go for the detailed analysis under the Management Accounting process in the firms. We try to find out that, for example, we had decided to sell 25,000 units and one unit's selling price we thought of 1 Rupee, right? So our sales expected were 25,000 Rupees. So here we have to find out whether the number of units has sales have come down or the selling price has come down.

It may be possible that we have sold 25,000 units in the market, but we could not sell it for 1 Rupee. We had to sell it for less than 1 Rupee, so it means we, our total sales amount is 19,000 Rupees. So, because it can be possible either way, right? If that is the thing then nobody will be held responsible because if the quantity is decided to be sold was 25,000 units and we have been able to pass on 25,000 units in the market or sell 25,000 units in the market. But the price was not 1 rupee per unit it has come down from 1 rupee to some lesser amount that is why the total sales have been reduced by 6000 rupees. It means it is an uncontrollable factor.

We will analyze the variances, but we would conclude that market price is controlled by the external factors not by the internal factors. Firm, selling sales force of the firms or the manufacturing department or any other say person inside the firm, they are not responsible for the changes taking place in the market, right? They are not responsible for taking say any kind of the changes taking place in the market. So nobody will be held responsible because price is decided by the external factors.

So, if the price has come down because of competitions, because of the increased supplies, because of the say lowering demand of the people or maybe say substitutes in the market or anything, there could be any reasons any factors. So, we will have to hold nobody responsible for this kind of variance. We could analyze the variance; we could find out the reason for that. For

example, if the price was 1 Rupee what we decided but we could sell only 19,000 units in the market not 25,000 units in the market.

In that case it is a factor to be seen because it was controllable. We could have thought of that how much we are planning to sell in the market, how much we are actually selling in the market and how to push up the sales, so that we can achieve the target of selling 25,000 units for that given time horizon. Similarly, you talk about the expenses, expenses here are 20,000 budgeted and actually we have incurred 15,000. We have saved (4000) 5000 rupees on account of the expenses also but here you can not only feel happy that, yes we have saved 5000 Rupees because the variance is favorable.

Here we have to be careful that it may be possible, we have to look it from the other perspective other angle. It may be possible that 20,000 expenses as planned or budgeted, they were not required to be even 20,000. Actual requirement for manufacturing 25,000 units, the cost requirement was or the cost estimates should have been already 15,000. So the performance is not, you cannot say it is very good rather your budgeting was on the higher side, your planning was on the higher side. When you planned for the cost, it was for the on the higher side.

So you have to seriously think about means always the favorable variances, it does not mean especially in terms of the cost that we have been able to save the resources or the lowered down the cost. It may be possible that the budgeted amount was itself very high and actual had to be certainly lesser than that. So there is no special achievement on the part of anybody and we have not achieved anything extra. So, you look it from both the angles, if somebody has worked extra hard, saved the resources and the 20,000 Rupees cost has been brought down to 15,000 Rupees, it certainly needs appreciation.

But if it is not because of this thing and the budgeting was also defective, then we also have to look for this and correct our budgeting estimates. So here one point to be noted which I thought of telling you earlier also, but I am now telling you is worth mentioning, that always it is not worthwhile to analyze the variances. Always, it is not worthwhile to analyze the variances. Our each and every decision under Management Accounting in the firm in the real sense has to be based upon two things and these two things are what? They are Cost and Benefits.

I told you that the cost and benefits has to have to be taken very carefully into account, very seriously into account and we should be not blind fully going for the variance analysis because it has to be done. Cost and Benefits that is the accounting system cost and benefits, for example, if the total variance in this case we have seen here is, how much is the net variance? Net variance

was 1000 Rupees or the 1000 dollars or the 10000 pounds, whatever it is you call it as, right? So Net Variance it means how much we are we selling out in the market? That we are selling out only 1000 Rupees extra.

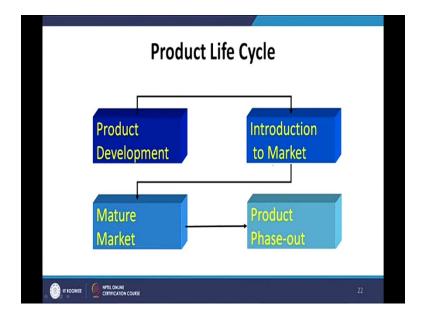


	Performance Report							
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Because our revenue has come down from the by 6000 Rupees but the cost has down from the 5000 Rupees, so we are our profit is come down by 1000 Rupees. So we are going to face this problem. But here we have to see that if we analyze this whole variances, total sales analysis you do, total cost analysis you do, total budget analysis you do. And the total cost of making this analysis is somewhere 2000 Rupees, total time of the experts taken or maybe the, say systems taken or the total process which is involved for the Variance Analysis.

If their total cost works out to be any amount more than 1000 Rupees, then it is not worthwhile to analyze the variances. So everywhere you have to think about, only there the variances will be analyzed where the benefit is expected to be more than the cost. If the cost is expected to be more than the benefit, then we are not going to analyze those variances or we are not going to do any kind of the variance. So every action and reaction in the Management Accounting or under the Management Accounting will be based upon the Cost and the Benefit.

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Now, let us talk about the product life cycle, just quickly. We have the importance of the project life cycle also, because we are talking about the budgets and plans and the controlling of the process. So, when you talk about the management accounting. Management Accounting begins with the product development or maybe when we say conceive the idea in our mind. Any idea when it comes in the mind of anybody that we should introduce a new product in the market, then there Management Accounting starts.

We think start thinking about, there will be minimum four stages the project the product will pass through. Product Development stage, Introduction to Market stage, Maturity of the Market stage and the Phasing-out. During this entire process, you have to do lot of research and development, you have to spend lot of money for researching and developing the product in the market. It may be possible that product or service already exists in the other markets, not in India but in the other countries' markets.

So, we are sure about that if we analyze the market characteristics in India or in the say US market, the same market characteristics are there, customers are same say people using the products there, their income level is same, their all other kind of the say features are almost the same, market characteristics or features are same. In that case we do not need to go for research and development for the product but how it will be brought into India, how it will be introduced in the market, what would be the potential reaction of the say buyers of this product that will be really say very-very important component.

So, there you have to go for the Product Development process and you have to think about that how the product can be developed for a market like India which is not already there in the market. If we bring this product in the market, so what will happen? I share you a with you a story here that say, you must have heard about the name company Anchor, who are into the Electrical segment, Electrical Equipment segment which is now taken over by Panasonic. Long back they were in 99 or 2000, they were thinking of diversifying from the Electrical segment to the Consumer segment.

They are into Consumer segment in some consumer products. One product that they thought of introducing in the Indian market or India's market was Fruit Beer, right. Fruit beer they wanted to introduce and they did, because Fruit Beer is a very established product in the other countries' market. Many people used it, it is a non-alcoholic drink, anybody can use it and it really is means it is good for the health also. So, they thought Fruit beer is not existing in this market, it is not very prevalent in the Indian market, so why not introduce this product?

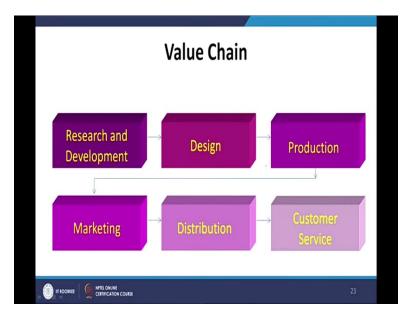
So, how to manufacture fruit beer, how to create this product, that was not difficult for the Anchor, they could to do it, but how to bring this product in this market, how to introduce this product in this market. They did some research and development and then they developed the product for the Indian market, this packaging and distribution system also and finally when they brought the product to the market; they started distributing it free of cost initially.

And they thought that the sales will pick up, people will start buying it and they will start recovering their investment and all that, because they had invested a huge amount of more than 350 Crores in Indian markets in 99-2000. You think about, at that time it was a big money. About 20 years back if we talk about, it was a big money 350 Crores. They had created a plant at Gurgaon and they started manufacturing the product, the products started coming into the market and they started distributing it free of cost to the people. But finally people or the market rejected the product.

So, it means they budgeted, they planned, they did some basic say activities required but finally the product was rejected by the people. So here means ultimately the firm had to incur the loss, big loss in that project and their entire 350 Crores went down in the drain. So management accounting, when you think of budgeting, you have to plan for the product or the service on the one side, that is called as Planning. But when you go for the Financial Planning, there you talk about the budgets and budgets when you talk about, we always say that budgets will become the basis of execution and execution will be the basis of controlling.

So, it means we need the Management Accounting. Introducing the product to market, maturity in the market, we say for example luckily if we are successful in the market. We will keep on growing, growing and growing, but one day saturation will come. And slowly and steadily the product will go out of the market, it will be phased-out.

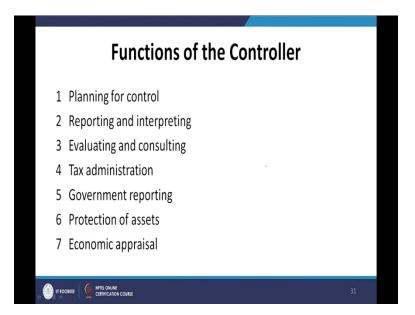
So everywhere at every step we need these techniques of Management Accounting. Then we talk about certain things like Value Chain. Here also we need the Management Accounting in the research and development, design, production, marketing, distribution and customer service. Right? Because you these all have no meaning in any Business Organization until and unless you develop the financials for them. (Refer Slide Time: 26:55)



Research and Development, Design, Production, Marketing, Distribution and Customer Service, this is a Value Chain. Everywhere you need the funds. And whether it is worthwhile to spend the funds on any value chain or any product's value chain or not, how it will be say responding back, what will be the end result? Everywhere we will have to involve the figures, involve to the budgeting, we will have to involve the say we will have to prepare the Sales budget. We have to prepare the Purchase budgets; we will have to prepare the Cash budgets. We will have to prepare the budgeted Profit and Loss account and Balance sheets.

So it means when we are talking of Quantitative Budgeting, Financial Budgeting, Operating Budgets, and Financial Budgets we are talking about Management Accounting. So here are different Value Chain Functions, that is the Research and Development, Design, Production, and then Marketing and then is the Distribution of the product and finally the After Sales Service or you call it as the Customer Service. So these are some of the Functions, right?

So these are some of the functionaries say who are important in the Management Accounting. We have Controller, so General accounting is the one section, Internal Audit is one section and Taxes is other Section. Everything has to be taken into account when we are talking about Planning. We have to think about our general input, output, cost and revenues. We have to think about the say which expense is permissible to what extent and what will be the say implication in terms of taxes say for selling the product in the market and how they would affect our financials, again is a very-very important component and we will be learning about.



If you think about the functions of the Controller, planning for the control means who will, what we will control. First we will plan, execute and only then we will control. Reporting and Interpreting, Evaluating and Consulting, Tax Administration is very important thing. You have to plan for taxation system also. How much sales we are expecting, how much profit we are expecting, and how much taxes we have to pay.

We have to pay the taxes at the before selling in the market that is before earning the profits. Earlier we had the excise duties but today we call it as GST, we have to pay the GST also. What is the impact of GST and how it would increase the cost and how we have to recover that tax and pay it to the government. Government reporting, Protection of Assets, Economic Appraisals. Right? So quickly we can just rush through these factors.

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Functions of the treasurer, provision of the capital. This is the function of the finance department, treasury department in the firm. Where the funds will come from, how much funds are required? Where the funds will come from, that is an important function. Invest relations will be how, short-term financing will be from where, banking and say custody of the different documents will be how. Credits and collection, Investments, and the Risk Management, that is the Insurance etc. We will have to think about all these costs in terms of the Financial Inputs.

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Current Management Accounting Trend	s
Factors causing changes in management accounting:	
Shift from a manufacturing-based to a service-based economy	
Increased global competition	
Advances in technology	
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Then is the, if you talk about the current Management Accounting trends, then we can see here that some two three things are important here. First thing is, factors causing changes in Management Accounting. They are like shift from a Manufacturing-based to a Service-based economy, this is the first change. Second thing is the increased Global Competition. Means in India earlier we had shares like, if we talk about the India's economy and the contribution of the three sectors in the GDP of India; Agriculture sector, Industries and then the Services sector.

So, the ratio was like, the Agriculture was contributing the maximum, then Industry was contributing and Service sector's share was very-very low, right? So today, the Services sector is the highest contributor in the GDP or GNP of this country. Right. Second important factor I am talking to you is the increased Global Competition. Because after 1991 on 24th July 1991, India became a Global Economy and once it became a global economy means all Multinationals can come to us and we can go out.

So it has intensified the competition and intensified competition has one major impact upon the Industrial or Industry's performance in this country or firm's performance in this country that the cost part is very-very say you can call it as competitive. People have got a choice, customers have got a choice. And if the firm is not able to reduce the cost of production, certainly they will be able to lose the price. And if the competitors are selling the product at a very very low price in the market or at a lesser price in the market, why should buyers depend on us?

Gone are the days before 1991 that 1991 that only one company was serving the entire this big market of India, for example I talked to you about the SAIL, is providing or serving the Steel Market of this entire country, big country (hundred) it's one billion people and only one company manufacturing steel. Gone are the days that when we had only say one Air India who was serving the total air traffic of this country, now we have the multiple choices with us.

Talk about the Telecom Sector, in the telecom sector we have seen that earlier it was DOT Department of Telecommunications, it was converted to BSNL. But today you see how many companies and new schemes are coming every day in the market and ultimately the customer is the king. Where you want to go, with whom you want to work, who whom you are allowing, who whom you want to allow to serve your needs and to fulfill your needs is the customer's choice.

So because of the Service-based Industry, today if you see the contributions of these three sectors, Services Sector is, is contributing maximum which is more 55 percent, then is the Manufacturing sector and the contribution of the say the Agricultural has become lowest. So, there is a reverse contribution as compared to the contribution we had before. And competition is another important factor which has totally changed the budgeting and budgeting horizons in the country.

And now we have to carefully think about our customers and every, means now and then we have to take strategic decisions to continue to stay in the market and we continue to serve the needs of the people. So the current Management Accounting trends include the Importance of Services sector and Increased Global Competitions and the third one is the Advances in Technology. Technology has become very advanced which has helped us reduce the cost of production and second thing is because we now are a global economy so technology can be hired from anywhere, any part for the world.

If it is not available in India, you can borrow it; you can bring it from other economies. So it means because of these changes now every now and then we will have to take very-very strategic decisions regularly, continuously we have to take decisions and implement the decisions and if anything goes wrong we have to take the corrective actions. So you can think about the importance of this subject Management Accounting, that how your financials or accounting information if used in the right perspective, then how to what extent it can help the firms to improve its overall operating and the financial position.

I will stop here in this class and remaining some of the further discussions and fundamentals of this subject, we will discuss in the next class. Thank you very much!