Management Accounting
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Lecture 25:
Flexible Budget & Variance Analysis-2

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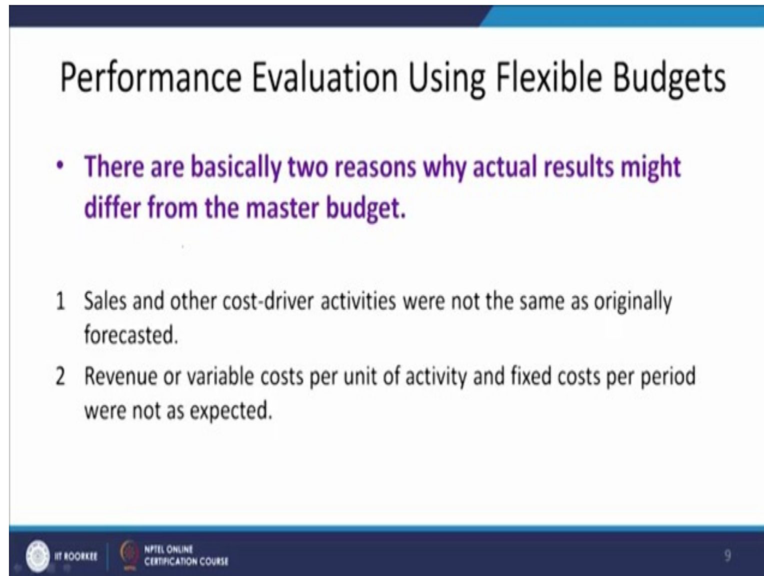

Welcome students, so we are in the process of learning flexible budgets and now I will talk to you about the reasons that, why we go for the performance evaluation of any organization of any firm by using the flexible budgets. So as it is written here, that there are basically two reasons why actually results differ from the master budgets, first reason is sales in the other cost driver activities were not the same as originally forecasted. It is means is a 99.9 percent it is going to happen.

What we are planning that is not going to be same performance is not going to be same, so if there is a marginal difference for example up to 10 percent we plan for, 7 lac worth of rupees shares given a month of quarter and our sales have become a 7.5 then there is no issue, I think than comparison, because otherwise we are not be analyzing the variances. But for example there is a serious difference that we plan for 7 lac and then actual sales have become 6 lacs or 8 lacs then, I think we have to analyze the variances so need the flexible budgets for that.

And number two is, revenue or variable cost per unit of activity and fix cost per period were not same as expected. Variable cost also changes, fixed cost also changes. It may be possible that fixed cost is also increased, say for the plant the cost is same plant you are not going to buy if you are going to increase the production by say 1 lac unit you have to not going to new plant having that total plant capacity of 50 lac of the sales, no but for example you talk about the employees who are the permanent employees, we anticipate that the employees cost will be this is much will be salaries and fringe benefits cost will be some x amount but that is a fixed amount.

Whether you go for production you do not go for production you cannot ask your employees to leave the organizations because they are permanent employees. So because of any reason we have paid them over time, we have paid them some extra fringe benefits or may be because of any reason their cost is increased,

Fixed cost is increased, so we have to look for the variances, so when the actual level of performance may be in terms of revenue or in terms of the cost is not the same, and if it is a beyond the minimum threshold level then certainly you need to review the whole exercise of the budgeting and doing at that time, when actual performance has come up with us and now you again start preparing the budgets it has no use. So the answer is the flexible budget. Performance evaluation using the flexible budgets.

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Performance Evaluation Using Flexible Budgets

The intent of using the flexible budget for performance evaluation is to isolate unexpected effects on actual results that can be corrected if adverse or enhanced if beneficial.

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The intent of using the flexible budget for performance evaluation is to isolate unexpected effects on actual results that can be corrected if the adverse or enhanced, if beneficial. But do we means to say here the intent of using the flexible budget for performance evaluation is to isolate unexpected effects and unexpected budgets On actual results that can be corrected, if adversed or enhanced if beneficial may be whatever the effects have come up they if are positive effects we can enhance that.

If there is a negative effects, we have to correct that. Right now for example we anticipated that the raw material cost should be 3 lacs actual it is 2.5 lacs and we analyze the variance and we found out that it was not even expected to be 3 lacs the budged estimate was on the higher side, actually it was expect to 2.5 lacs so it is beneficial to correct the budgeting information budgeted information we have to correct that.

And if it is a negative effect that because of any reason the cost is increased we will have to look for the reasons either you have to revise your budget estimates or you have to look for the reasons and take care of those plug the leakages, so then next time the cost of material is within the control.

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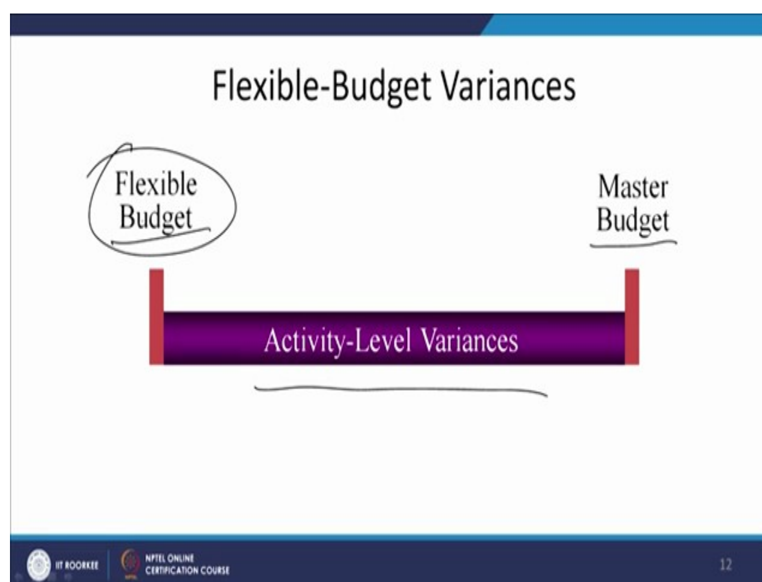

Now how we depict the flexible budget variances. Say the how do we talk about these are the two slides flexible budget variances these are the variances between the actual results and flexible budgets and these variances are called as the flexible budget variances.

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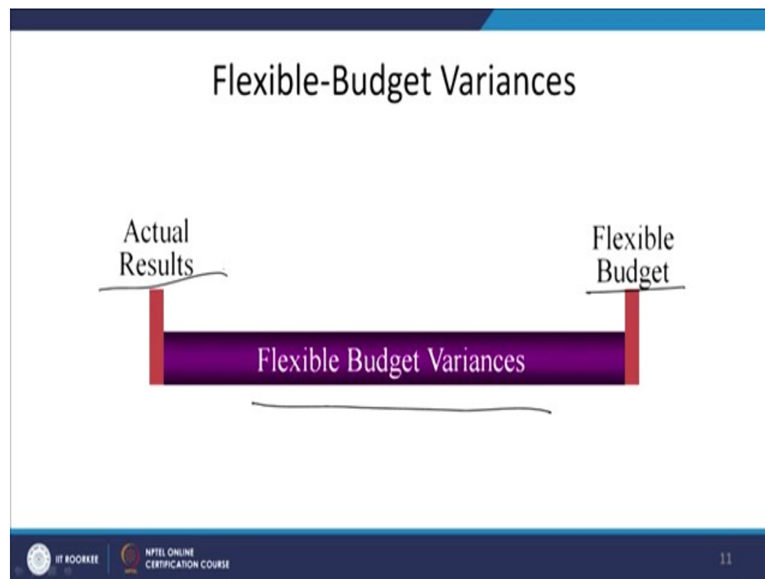

And the next variance I will talk about. the next slide if you look at flexible budget variances but these are the variances you see here it is called as the activity level variances. So in the previous slide what are this variance is called as flexible budget variance and this is a variance between flexible budget and the actual results and in the next slide we look at what is this variance, activity level variance between the master budget and the flexible budget.

Right, now these two variances occur in case of the static budget, only one category of the budget is come up that is variance between the master budget and sales level then it will not be a flexible budget here and the variance will be between the master budget or static budget and the actual performance but we are writing here, master budget and flexible budget. So now how you have to have understand this difference activity level variances and flexible budget variances in two manners in two ways.

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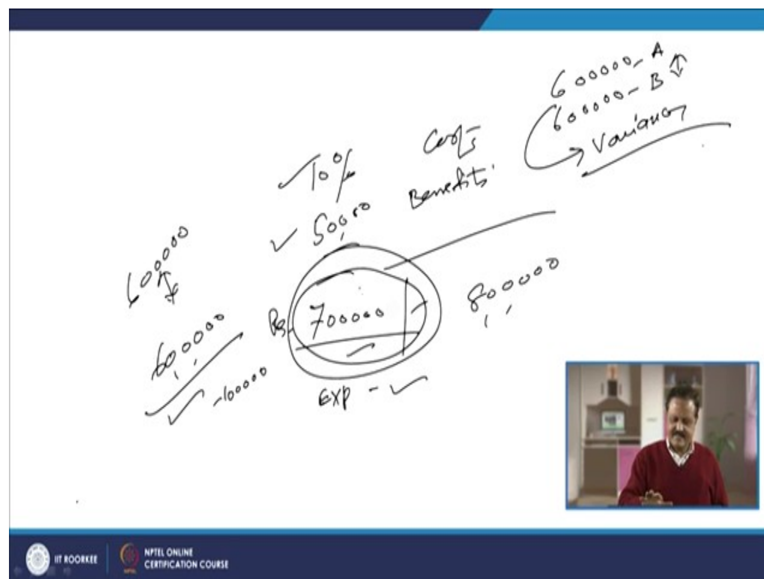

For example, you have talk about the budgeted performance was 7 lac rupees of the sales. This we plan for the given quarter or given month we will manufacture and sale in the market worth rupees 7 lacs of the sales. This is our budget we prepare the budget for that. And at the same time we did not prepare the budget only for one level. This is our main figure, 7 lac is a main figure.

But we thought that means if it is a static budget you will only prepare the budget for this level of sales. But since we are now talking about the flexible budget, so be converted that it may be possible that your actual sales are how much? 8 lacs worth of rupees or it may come down to 6 lac worth of rupees. It may be anything possible so we have done this whole exercise for this level of production and sales but we have converted that into the different formulas proportionately and we have put in place a formula in the system that if it is 7 lacs, fine we will go for the analysis with the actual performance find out the variances.

It may come down to 6 lacs if it the comes on to 6 lacs again we have the formula in the so system either we have budget already prepared for the 6 lac also and 8 lac also and if it is not their already we have put the formula in the system the moment you convert that 7 lacs into 6 lacs or 8 lac all the figures will automatically be converted and with the no time the budget will be ready.

Now we talk this is the budgetary performance the master budget level. What is we are talking about here is that the master budget and the flexible budget right what is a master budget? Now if you talk about the master budget, master budget level is 7 lac worth of the sales in the given quarter of month, now the actual performance is come down to 6 lacs, so what we will do first.

First we will try to find out is, that is your sales level has come down so this is called as the. What various we name it as? This is called as the variances if you look at the flexible budget variance and then second one is the activity level variance. So this variance is called as the activity level variance how? Because your activity level has changed your activity level was master budget was 7 lac, this activity has come down from 7 lac to 6 lacs,

So, activity has come down why? 1 lac worth of the rupees of the sales, now we will try to find out for example when the sales have come down your there is a negative 1 lac rupees of the sales. Same way now the expanses part if the revenue has come down from 7 lacs to 6 lacs, has means all the expenses also have come down in the same proportion or the expenses are same only revenue has come down or may be revenue is same expenses have gone up and if it may be possible.

If the revenue has come down for 7 to 6 and proportionately all other expenses of also come down, then I think we are means nothing to worry about that okay. Sales have come down it is get it 7 lacs our performance is come down to 6 lacs same that our expenses is also come down so it means it not much impact on the profitability. So when you do this comparison between this mater budget and flexible budget. Then you will be making a comparison of the master budget, static budget activity and flexible budget. Which we have the 6 lacs so it means we will compare with the two so that is called as the variance which is called as a master budget and the flexible budget.

And now, before this we have to have the one more analysis and that one more analysis here is that is the flexible budget and the actual result. Then the second analysis you will do is that is the comparison of the performance of 6 lacs with the budget of 6 lacs.

Performance because actual performance is 6 lacs, so first comparison is between 7 lacs and 6 lacs. And second comparison is in between budget of 6 lacs and the actual performance of 6 lacs. So one variance is activity level variance because activity level has come down from 7 to 6 and then the flexible budget is, that for the. Okay fine 6 lac has come down as a sales.

So have all actual expenses reduced proportionately at least the variable expenses or it is a situation that your variable expenses have not changed. Fixed expenses are not expected to change, so the cost have remains the same sales have come down. And the profit either has become in loss or the profit has proportionately come down.

That is main objective here, so two type of the variances we calculated here and this two variances are called as the when you compare the budget of 6 lacs with the actual result of 6 lacs it is called as the flexible budget variance and second is when you compare the budgeted information for the static level of 7 lacs with the flexible budget for the 6 lac therefor the 7 lacs this is also performance expected for the 6 lacs.

This much was the performance expected then what was the variance expected? Because of the reduced level of activity that will have to check and try to find out that proportionately when the sales are coming down variable cost is also coming down, now we will talk about two more important concepts. Because why we do entire budgeting exercise? Why do we do this? Because we want make our overall management decision making process very very effective.

But we are planning, we are going to achieve, if we are not able to achieve you planning we are not a good organization, we are not good business, we are not a good business form. We will not be able to conquer our competence, we will not be able to reach at a level five years down the line where we want to plan to go.

So for that budgeting, the major benefit of budgeting is the effectiveness of management decision making. But you can call it as fact whether it is effectiveness or efficiency. efficiency moves towards that or takes towards the effectiveness if your entire budgeting exercise is efficient then overall management decision making becomes effective but if the budgeting exercise is not efficient then you cannot say that your management decision making is efficient right.

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Distinguish Between Effectiveness and Efficiency

Effectiveness is the degree to which a goal, objective, or target is met.

Efficiency is the degree to which inputs are used in relation to a given level of outputs.

Now in this case, first we look at the efficiency what is efficiency? Efficiency is a degree to which inputs to which are used in a lesion to given level outputs, output means 7 lac worth of sales, this is the target budget. Actual performance is come down 6 lacs worth of the sales, so what is the input output ratio.

Input required for the 7 lac worth of the sales in terms of raw material is, the cost should be 3 lacs. And when it has come down from 7 lacs to 6 lacs the sales level proportionately to the material level is also come down the material cost has come down. So, if are able to maintain that efficiency level that is the output is going only then input cost is going If the output is coming down, input cost is also coming down then fine.

Your decision making is efficient and you are efficiently utilizing all the resources of the firm may be it is financial, may be it operating, may be it is human. But if it is not that way that when you had the plan for 7 lac worth of rupees sales your cost estimate was this but when the sales came down from the 7 to 6 lacs cost is not proportionately come down at least the variable cost. It means there is some miss match between the input and output and that will not we called as the efficient budgeting or efficient decision making and if it is not efficient then certainly you can't say that overall management decision making is effective.

So, effectiveness is basically the degree to which a goal objective or target met. So if you want to be effective manager you have to become very very efficient person, efficient decision maker so that if all the means the team a members of the team of the budgeting as well as the actual performance or maybe if the top management of any company is very very efficient.

Where able to look forward into the future then whatever the decisions they are going to take. Those decisions are really going to be very very helpful fruitful in achieving the organization goals objective and the targets and overall the management decision making will be called as the effective management decision making. That is why, the budget is the one important tool and the efficiency of the budgeting where the budgetary exercise will be reflected that, what is a difference, what are the variances what are the deviations between the actual and the budgeted results.

Now, isolating the causes of the variances, what we have to is first job in the budgeting is to prepare the budgets then collect the actual information and then calculate the variances. If the variances are within the threshold level of 10 percent or 50,000 for example, then we are well within the range but if the variances are more than 10 percent or 50,000 for example it is the one level which I am saying it can be any level which is called as a Threshold level in that case what will be means the outcome? First the variances will be there.

Variances both positive or negative they need the analysis and whatever the reasons for those variances may be positive and negative are found they have to be isolated they have to be removed. So that in the next budgeting period, in the next quarter in the next 6 months in the next one year those variances do not occur and our performance comes up to what we plan to do what we intend to do.

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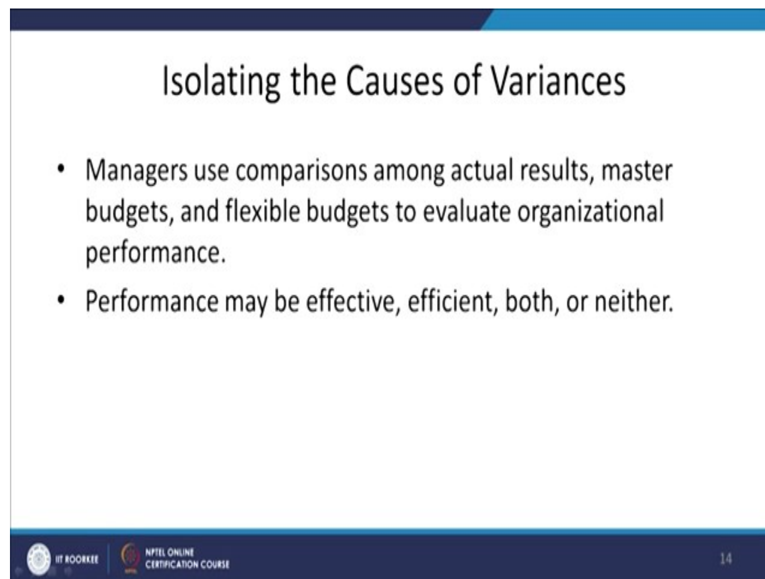

In isolating the causes of variances managers use comparison among the actual results master budgets and flexible budgets evaluate the organization performance. We have the three estimates one is the master budget another is the actual performance of 6 lacs master budget was for the 7 lacs and then flexible budget for the 6 lacs so three comparisons.

Comparison of the master budget with the actual performance of 6 lacs and then the comparison of the flexible budget 6 lacs with the actual performance of 6 lacs and then we able to find out is there any kind of variance and if it is then what are the reasons for that. Second is performance may be effective efficient both or neither.

If you are able to achieve the targets your performance is effective and that effectiveness has been the result of efficiency of the management decision making so both will be there. Once we are effective we are ought to be efficient, once we are efficient we are ought to be effective but if we are not efficient we cannot be effective and neither efficiency is there not effectiveness in the management decisions making it means the whole budgeting exercise has not produced any result for us and this entire exercise have become infertile.

So that, situation has not to come up and that situation should not arise if you are into the budgeting process do it carefully meticulously seriously and then try to achieve what you are budgeted targets or goals or may be the budgeted results are.

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Flexible-Budget Variances

Total flexible-budget variance
= Total actual results
– Total flexible budget for actual sales activity level

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Then now, we go for the flexible budget variances, there some formulas given here very simple formulas. Flexible budget variances you can calculate in two ways one is the total flexible budget variance first we calculate the total flexible budget variance. And total flexible budget variance is equal to the total actual results minus total flexible budget for the actual sales activities level.

Now, flexible budget variances means about as it main here, For example, your actual budget is worth rupees 6 lacs and we will prepare the budget for 6 lac levels of, because we have already put the formulas in place in the system. So whether it is 6 lacs 8 lacs nine lacs or 7 lacs. It is take any time to convert that the results for any level of actual activity.

So, this is 6 lacs is the budgeted, this is the actual and then the comparison between these two. When we make the comparison between these two so the result is going to be variances. Right so when you are going to find out these variances we will have to know the reasons for those variances.

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Sales-Activity Variances

Total sales-activity variance

=

Actual sales unit – Master budgeted sales units

×

Budgeted contribution margin per unit

Then, is the next one sales activity variance and for the sales activity variance how do be calculated the formula is total sales activity variance. Total sales activity variance how we find it out? That in the way of as I discuss with you that a total sales activity variance will be 7 lacs was the master budget.

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Actual performance is 6 lacs so your activity has come down by 1 lac. Right your sales have come down by this is the negative variance is one lac so we have to now find out that when we do the comparison when we do the budgeting statement so prepare it in forms of in two steps we don't calculate the total cost we divide the total cost into two parts, variable cost and the fixed cost.

So, how to prepare the statement. First we will write here, the sales level sale are going to be how much? For example 6 lacs and for this sales the total cost is going to be, I will like here for example four lacs. Total cost I am saying but in this total cost your 3 lacs is the variable cost and 1 lac is the fixed cost. So when you will have to find that the profitability you will put in the budgeting statements first on the top it is 6 lacs sales less variable cost.

How much is a variable cost? We have already estimated. It should be 3 lacs, Means we are subtracted the total cost of sales so sales minus variable cost is called as Contribution. And contribution is in this case how much 3 lacs. 6 minus 3 is the 3 lacs. Now from this contribution you will come to the next step that you will call it now fixed cost less fixed cost. And this fixed cost is how much? it is 1 lac. Now this will be called as the operating profit.

So, what is the operating profit here 2 lacs you can how find out this profit in one go also. That my total sales are 6 lacs my total cost is 4 lacs and my profit is two lacs we do not do like this, because when the volume of the sales change performance level change. One component of the cost is expected to be change which is variable but the other component of the cost which is fixed that is not expected to change total I am saying per unit fixed cost changes variable cost remains the same but in total fixed cost remains the same variable cost changes. So that relationship is positive and inverse in the case of the two cost.

Now, in this case when you are calculating here sales activity variance but we are doing here total sales activity variance means when the sales have come down the 7 lacs to 6 lacs your actual sales in the units in the rupees may be 6 lac is the 6 thousand units minus master budgeted units in master budgeted sales unit that was 7,000, so it is 7 lac it was the 7,000units actual it is 6 thousand units.

So, it means there is the reduction by the or the production by 1,000 units. In this case now we to calculate the budget in market per unit so we calculated, if you calculate the budgeted contribution margin per unit in this case so contribution for this case is this much and the contribution for the 7,000 units was expected to be more but for the 6,000 units it has come up as 3 lacs so it means what is the change in the activity level from 7,000 to 6,000.

Similarly, the cost, variable cost has come down and fixed cost remaining the same. So contribution means contribution per unit should remain the same, because the movement of the sales level comes down variable has to reduce the same proportion so contribution is basically the sales minus variable cost and the budgeted contribution margin per unit should remain the same, that should not change.

Because both are variable, when the sales are going up variable cost is also going up when the sales is coming down variable cost is also coming down. So contribution margin per unit should remain the same if the contribution margin has remain per unit same in that case there is no problem because sales performance may come down may go up where the contribution should not change and that will happen only if your variable cost have change and changing of the variable cost is serious concern that should not be allowed or that is not expected.

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Performance Report using Mater Budget for the Month Ended January 31,2019

	Actual (1)	Master Budget (2)	Master Budget Variances (3)
Units	7,000	9,000	2,000
Sales	$217,000	$279,000	$62,000 U
Variable expenses			
Variable manufacturing expenses	$151,270	$189,000	$37,730 F
Shipping expenses (selling)	5,000	5,400	400 F
Administrative expenses	2,000	1,800	200 U
Total variable expenses	$158,270	$196,200	$37,930 F
Contribution margin			$24,070 U
Fixed expenses			
Fixed manufacturing expenses	$ 37,300	$ 37,000	$ 300 U
Fixed selling and administrative expenses	33,000	33,000	—
Total fixed expenses			
Operating income (loss)	$(11,570)		$24,370 U

U = Unfavorable expense variances occur when actual expenses are more than budgeted expenses.
F = Favorable expense variances occur when actual expenses are less than budgeted expenses.

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Now, these are some very interesting reports actually the real spread of budgeting of the real corrects of the budgeting, we have report available with us for understanding the concept of the flexible budget in detailed form. Performance report using master budget for the month and did January 31 2019. Now this is the performance report this may be prepared the performance reports means once everything is over your budgets were there. Then went for actual performance and at the end of the month we will make the comparison of the two. So in this case we have for example if it is a static budget.

You have the master budget this information is given for the master budget and this is the actual performance means this column is actual performance. Right now what was the master budget we had plan for sales of how many units? 9,000 units and actual performance is come done by 2,000 units there is no problem this variance is of 2,000 and that can be.

Sales values can come down from this level to this level, So it means there is a negative variance by some amount and that is 2,62,000 worth of the dollars it is come down the performance expected was how much? 279,000 worth of dollars it has come down to 2,17,000 worth of dollars it means there is a negative variance unfavorable variance of 62,000 dollars.

Now the variable expenses see here variable expenses are for example the expected level was this and actual level is this. So now we have seen the variance here this is coming up is the variance of how much? 37,730 which is favorable, because master budget it was this much actual is 151,270. So now there is favorable variance because variable manufacturing expenses have been reduced.

But this nothing to feel this good about because your this level of 189,000 was the level of at the performance level of the 9,000 units at the 7,000 it was expected to come down so it has come down there is nothing special about it shipping expenses they have come down from the 5,400 to 5,000 and the favorable variance of 400 expected.

Administrative expenses, now this was 1,800 expected and your now the administrative expenses have increased your performance is coming down, sales are coming down but the actual is going up, so it means now we will say unfavorable variance of much? 200 dollars or 200 rupees which is a serious concern total variable expenses.

Now, we have tom see hare that there is favorable variance is by some amount. And we will see this favorable variance by this amount which is 37,930 so in this case. Now whether this should have in the variance when the sales level are coming down by 2,000 units the reduction in the variable cost was expected to be by 2,000 by the same amount or actually business we have achieved there is that reduction in the cost whether is it in proportional to this or not this is a first question that play arise so contribution margin is finally has become unfavorable.

One reason is that is has become unfavorable because at the we plan at the 9,000 actually is 7,000 but and that is why a contribution margin has seriously declined by 24,070 which is unfavorable but that had to be, because you are expecting 9,000 units to sale in the market we are sold 7,000 units in the market so it is not a big deal.

And then is the fix expenses, now fix expenses are not expected to change may be you are selling 9,000 units you are manufacturing or selling 7,000 of units to a certain level of production and sales fix expenses do not change and in this case fix manufacturing expenses were expected to 37,000 but you see very alarming change has happened.

Your sales level has come down from the 9,000 to 7,000 where the fix manufacturing expenses have gone up by 300 it means negative variance of 300 is very serious thing. Fixed selling or administrative expenses which were expected to be 33,000 actually it is 33,000. Performance of the 9,000 6 thousand 7,000, fixed expenses are not going to change.

So we will not expecting that the fixed expense will come down but we cannot expect also that is the fixed expense will go up which has happen in this case and ultimately operating income or the lost is here that you can say that at 7,000 units because of the increased variable cost or not the reduction of the variable cost in the same proportion your operating income has become a loss and loss you are saying here is that is the total expenses.

And the operating income has become a loss when the level of sales has come down from the 9,000 to 7,000 which is 11,570 and overall variance if we look here has become un favorable that is because of the change in the activity level to that tune of 24,370.

Now, this loss has is come up or it is being seen here there the two reasons for that one reason is that when you planned for 9,000 units your performance came down to 7,000 units fix expenses remain the same and in one case they did not remain the same rather they went up. So that is the one reason of the loss because naturally when the level of performance goes down fix expense is never reduced proportionately. Your profit is expected to go down or the profit expected to be converted into the loss.

One cleared no issues, it can be done. But second alarming fact here is that your variable cost has also not proportionately come down, the variable cost has also not proportionately come down that is the cause of concern here. As I told you to keep the contribution per unit same if the level of sales is coming down cost should also proportionately come down into cases if it has come down variances are favorable but still not in the same proportion. And if the one case that is total administrative expenses if we talk about, they have increased rather than going down so this is the negative variance of the 200 dollars has been seen here. So, then the level of performance is coming down sales are coming down.

Your fixed expenses remaining the same and very well expenses not coming down in the same proportion that has been the cause of concern and they have cause the variances. This is the simple means the analysis between the master budget and the actual performance which you can call it as this is the static budget or this is the main limitation of the static budget you can find out that you are comparing the oranges with the apple. This is the orange this is apple, so it means or this is apple this is orange.

So you cannot compare 9,000 with 7,000. For this you need something which should be again the level of 7,000. Means it means if you have 9,000 budget actual performance 7,000. Either you should have budget also for the 7,000 if you have find. You do not have be prepare.

So if you have then we are following a flexible budget system but is you do not have then you have to prepare. And preparing at time of comparison will create so many problems. So this is a basic limitation which I have been explain to you, that this is the main limitation of the static budget master budget which can be done by preparing the flexible budgets.

So, what are the flexible budgets? And, how they help us to remove all this problem? And, the short comings of the static budgets that I will discuss with you in the next class thank you very much.