

Intro to Managerial Accounting



Ratio of Allocation Base Usage in a Department

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Department Allocation Base Usage for Product X

Cost-Volume-Profit Analysis

Variable Cost per Unit = Difference in Total Cost / Difference in Units Produced
Fixed Cost = Total Costs - (Variable Cost per Unit × Units Produced)
Contribution Margin = Sales - Variable Costs
Contribution Margin Ratio = Contribution Margin / Sales
Change in Income from Operations = Change in Sales Unit × Contribution Margin Ratio
Unit Contribution Margin = Sales Price per Unit – Variable Cost per Unit
Change in Income from Operations = Change in Sales (Unit) × Unit Contribution Margin
Break-Even Sales (units) = Fixed Costs / Unit Contribution Margin
Break-Even Sales (dollars) = Fixed Costs / Contribution Margin Ratio
Sales (units) = (Fixed Costs + Target Profit) / Unit Contribution Margin
Sales (dollars) = (Fixed Costs + Target Profit) / Contribution Margin Ratio
Operating Leverage = Contribution Margin / Income from Operations
Percent Change in Income from Oeprations = Percent Change in Sales * Operating Leverage
Margin of Safety (percent of current sales) = (Sales - Sales at Break-Even Point) / Sales
Margin of Safety (dollars) = Sales (dollars) / Break-Even Sales (dollars)
Margin of Safety (units) = Sales (units) / Break-Even Sales (units)

Variable Costing for Management Analysis

Manufacturing Margin = Sales - Variable Cost of Goods Sold
Contributing Margin = Manufacturing Margin - Variable Selling and Administrative Expenses
Income from Operations = Contribution Margin - Fixed Costs
Contribution Margin Ratio = Contribution Margin / Sales
Budgeting
Budgeting Revenue = Expected Sales Volume × Expected Unit Sales Price
Total Units to be Produced=Expected Units to be Sold+Desired Units in Ending Inventory
- Estimated Units in Beginning Inventory
Budgeted Direct Material Required for Production = Budgeted Production Volume ×

 Direct Material Quantity Expected per Unit

 Direct Material Quantity to be Purchased

 =
 Material Required for Production

 +

 Desired Ending Materials Inventory

 Estimated Beginning Materials Inventory



Rate of Return on Investment=Income from Operations/Invested Assets
Rate of Return on Investment=Profit Margin×Investment Turnover
Residual Income = Income from Operations – (Invested Assets x Minimum Rate of Return)
Increase in Supplying Division's Income from Operations = (Transfer Price - Variable Cost per Unit)
× Units Transferred
Increase in Purchasing Division's Income from Operations = (Market Price - Transfer Price)
× Units Transferred
Return on Investment=Profit Margin*Investment Turnover
Differential Analysis & Product Pricing
Differential Revenue = Revenue (Alt. 2) - Revenue (Alt. 1)
Differential Costs (Alt. 2) - Costs (Alt. 1)
Differential Income (loss) = Income (Alt. 2) - Income (Alt. 1)
Normal Selling Price = Cost Amount per Unit + Market per Unit
Product Cost per Unit = Total Product Cost / Estimated Units Produced & Sold
Markup Percentage = (Desired Profit + Total Selling & Administrative Expenses) /
Total Product Cost
Direct Profit = Desired Rate of Return * Total Assets
Target Cost = Expected Selling Price - Desired Profit
Unit Contribution Margin per Production Bottleneck Hour = Unit Contribution Margin /
Production Bottleneck Hours per Unit
Capital Investment Analysis
Average Rate of Return = Estimated Average Annual Income / Average Investment
Average Investment = (Initial Cost + Residual Value) / 2
Cash Payback Period = Initial Cost / Annual Net Cash Inflow
Present Value Index = Total Present Value of Net Cash Flow / Amount to be Invested
Present Value Factor for an Annuity of \$1 = Amount to be Invested /
Equal Annual Net Cash Flows
Lean Manufacturing & Activity Analysis
Value-Added Ratio = Value - Added Lead Time / Total Lead Time
Total Within-Batch Wait Time = (Value - Added Time) × (Batch Size - 1)
Total Within-Batch Wait Time=(Value - Added Time)×(Batch Size - 1)Cell Conversion Cost Rate=Budgeted Conversion Cost/Planned Hours of Production