Management Accounting: Costing and Budgeting

Level 5: Unit 9

Lecturer: Matthew Smith-Barrett

Unit Content: (Syllabus)

Level 5: Unit 9

On successful completion of this unit a leaner will:

- Be able to analyse cost information within a business
- Be able to propose methods to reduce costs and enhance value within a business
- Be able to prepare forecasts and budgets for a business
- Be able to monitor performance against budgets within a business

Learning Outcome 2:

Level 5: Unit 9

Upon completion of this Learning Outcome, students should:

- Be able to propose methods to reduce costs and enhance value within a business

To realize the above objective the leaner should be able to:

2.1 prepare and analyse routine cost reports

2.2 use performance indicators to identify potential improvements

2.3 Suggest improvements to reduce costs, enhance value and quality

Week 5 - Assessment Criteria 2.1:

Level 5: Unit 9

Assessment Criteria 2.1:

Upon completion of this lesson, students will be able to:

- Prepare and Analyze routine cost reports

Week 5 – Prepare and Analyze routine cost reports

Level 5: Unit 9

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Recap: Analyze cost data using appropriate techniques

L.O. 2:
A.C. 2.1

As a Management Accountant or Costing Business Consultant, we need to understand the best basis for analysing costs for the best application of the most relevant technique.

We assess cost on its main attributes, such as:

- Is it a direct or indirect cost?
- Is it a Fixed or Variable Cost?
- Is the cost associated with a specific Job, batch, process, service or contract?
- On what basis should the cost of overheads be allocated**

Introduction: How are the costs reports prepared and analyzed?

L.O. 2:
A.C. 2.1

Cost reports are used by management for making assessments on inventory control, efficiency studies, incentive pay plans and a whole host of company wide analysis based on expenditure versus budget.

They are also used to provide the basis for making entries that are needed to update the ledger accounts for inventory cost allocations.

Preparation and analysis of cost repots

L.O. 2: A.C. 2.1

Costing reports are a vital way for companies to learn which parts of a business create the most value (profit) and which are most expensive and take away from that the value created.

When created before the start of the project, costing reports provide a better estimation of how much a project will cost, allowing you to estimate your profit margins. When costing reports are created after the project has been completed, you can gain better insight into the highest costs and the profit you can expect to make.

Comparison with other data

L.O. 2: A.C. 2.1

Financial accounting and management accounting are closely interrelated since management accounting is to a large extent rearrangement of the data provided by financial accounting. Moreover, all accounting is financial in the sense that all accounting systems are in monetary terms and management is responsible for the contents of the financial accounting statements.

However, despite the close relationship between the financial and management accounting, there are certain fundamental differences.

Comparison with other data

L.O. 2: A.C. 2.1

	Management accounting	Financial accounting
Information mainly produced for	Internal use: e.g. managers and employees	External use: e.g. shareholders, creditors, lenders, banks, government.
Purpose of information	To aid planning, controlling and decision making	To record the financial performance in a period and the financial position at the end of that period.
Legal requirements	None	Limited companies must produce financial accounts.
Formats	Management decide on the information they require and the most useful way of presenting it	Format and content of financial accounts intending to give a true and fair view should follow accounting standards and company law.
Nature of information	Financial and non-financial.	Mostly financial.
Time period	Historical and forward-looking.	Mainly an historical record.

Standard Costing

L.O. 2:
A.C. 2.1

Standard costing is an important subtopic of cost accounting. Standard costs are usually associated with a manufacturing company's costs of direct material, direct labour, and manufacturing overhead.

Rather than assigning the actual costs of direct material, direct labour, and manufacturing overhead to a product, many manufacturers assign the expected or standard cost.

Standard Costing

L.O. 2: A.C. 2.1

Usually there will be two variances computed for each input:

Input for Product	Variance #1	Variance #2
Direct material	Price (or cost)	Usage (or quantity)
Direct labor	Rate (or cost)	Efficiency (or quanity)
Manufacturing overhead-variable	Spending	Efficiency
Manufacturing overhead-fixed	Budget	Volume

Standard Costing

L.O. 2: A.C. 2.1

If we assume that a company uses the perpetual inventory system and that it carries all of its inventory accounts at standard cost (including Direct Materials Inventory or Stores), then the standard cost of a finished product is the sum of the standard costs of the inputs:

1. Direct material
2. Direct labour
3. Manufacturing overhead
   a. Variable manufacturing overhead
   b. Fixed manufacturing overhead

Standard Costing: Sample Standards Table (Example)

L.O. 2: A.C. 2.1

Standards Table for DenimWorks:

		Large Apron	Small Apron
Denim material needed for each apron*		2.0 yd.	1.3 yd.
Time required to cut and sew each apron		0.3 hr.	0.2 hr.
Denim cost per square yard	$3		
Labor cost per hour (includes payroll taxes)	$10		
Electricity and supplies used per hour of labor	$2		
Rent for space per month (includes heat/air)	$600		
Rent for equipment per month	$100		
Planned production for the year 2015		5,000 aprons	3,000 aprons
Planned yards of denim needed for 2015	13,900 yd.	10,000 yd.	3,900 yd.
Planned hours to cut and sew in 2015	2,100 hr.	1,500 hr.	600 hr.

* The denim comes on rolls that are one yard wide, so one yard (yd.) of denim is the same as one square yard of denim

Direct Materials usage variance

L.O. 2: A.C. 2.1

Under a standard costing system, production and inventories are reported at the standard cost—including the standard quantity of direct materials that should have been used to make the products. If the manufacturer actually uses more direct materials than the standard quantity of materials for the products actually manufactured, the company will have an unfavourable direct materials usage variance.

If the quantity of direct materials actually used is less than the standard quantity for the products produced, the company will have a favourable usage variance. The amount of a favourable and unfavourable variance is recorded in a general ledger account Direct Materials Usage Variance.

Direct Labour: Standard cost, Rate Variance, Efficiency Variance

L.O. 2: A.C. 2.1

- "Direct labour" refers to the work done by those employees who actually make the product on the production line.

- Unlike direct materials (which are obtained prior to being used) direct labour is obtained *and* used at the same time. This means that for any given good output, we can compute the direct labour rate variance, the direct labour efficiency variance, *and* the standard direct labour cost at the same time.

Variable Mfg Overhead: Standard Cost, Spending Variance, Efficiency Variance

L.O. 2: A.C. 2.1

- "Manufacturing overhead costs" refer to any costs within a manufacturing facility other than direct material and direct labour. Manufacturing overhead includes such things as indirect labour, indirect materials (such as manufacturing supplies), utilities, quality control, material handling, and depreciation on the manufacturing equipment and facilities.

Fixed Mfg Overhead: Standard Cost, Budget Variance, Volume Variance

L.O. 2: A.C. 2.1

- "Fixed" manufacturing overhead costs remain the same in total even though the volume of production may increase by a modest amount. Other examples include the depreciation or rent on production facilities; salaries of production managers and supervisors; and professional memberships and training for personnel in the manufacturing area. Although the fixed manufacturing overhead costs present themselves as large monthly or annual expenses, they are, in reality, a small part of each product's cost.

Relationship between Variances

L.O. 2: A.C. 2.1

Name of Variance	What It Tells You	If Significant, Where It Ends Up
Direct Materials Price - Favorable	Company paid less than its standard cost for the direct materials it purchased.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Direct Materials Price - Unfavorable	Company paid more than its standard c ost for the direct materials it purchased.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Inventory amounts are subject to lower of cost or market.)
Direct Materials Usage - Favorable	Company used less quantity of direct materials than called for by the company's standards.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Direct Materials Usage - Unfavorable	Company used more quantity of direct materials than called for by the company's standards.	If variance results from inefficiencies, expense the entire amount. If variance results from unrealistic standards, allocate the variance to inventories and cost of goods sold.
Direct Labor Rate - Favorable	Company paid less than its standard cost for the direct labor it used.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Direct Labor Rate - Unfavorable	Company paid more than its standard cost for the direct labor it used.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Inventory amounts are subject to lower of cost or market.)

Relationship between Variances

L.O. 2: A.C. 2.1

Name of Variance	What It Tells You	If Significant, Where It Ends Up
Direct Labor Efficiency - Favorable	Company used less hours of direct labor than called for by the company's standards.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Direct Labor Efficiency - Unfavorable	Company used more hours of direct labor than called for by the company's standards.	If variance results from inefficiencies, expense the entire amount. If variance results from unrealistic standards, allocate the variance to inventories and cost of goods sold.
Var. Mfg. O/H Spending - Favorable (assume the overhead is applied on machine hours)	The company's actual variable manufacturing overhead costs were less than the amount expected for the actual machine hours used.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Var. Mfg. O/H Spending - Unfavorable (assume the overhead is applied on machine hours)	The company's actual variable manufacturing overhead costs were more than the amount expected for the actual machine hours used.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Inventory amounts are subject to lower of cost or market.)
Var. Mfg. O/H Efficiency - Favorable (assume the overhead is applied on machine hours)	The company's actual machine hours were less than the standard machine hours for the good output.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)

Relationship between Variances

L.O. 2: A.C. 2.1

Name of Variance	What It Tells You	If Significant, Where It Ends Up
Var. Mfg. O/H Efficiency - Unfavorable (assume the overhead is applied on machine hours)	The company's actual machine hours were more than the standard machine hours for the good output.	If variance results from inefficiencies, expense the entire amount. If variance results from unrealistic standards, allocate the variance to inventories and cost of goods sold.
Fixed Mfg. O/H Budget - Favorable	The company spent less on the actual fixed overhead than the amount budgeted.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Fixed Mfg. O/H Budget - Unfavorable	The company spent more on the actual fixed overhead than the amount budgeted.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing.
Fixed Mfg O/H Volume - Favorable	The company applied more fixed manufacturing overhead to the good output than the budgeted amount of fixed manufacturing overhead.	Allocate to inventories and cost of goods sold based on where the related standard costs are residing. (Will reduce the standard cost amount.)
Fixed Mfg O/H Volume - Unfavorable	The company applied less fixed manufacturing overhead to the good output than the budgeted amount of fixed manufacturing overhead.	Put the entire unfavorable amount on the income statement.

Conclusion: Other Variances

L.O. 2: A.C. 2.1

- If the variance amount is very small (insignificant relative to the company's net income), simply put the entire amount on the income statement. If the variance amount is unfavourable, increase the cost of goods sold—thereby reducing net income. If the variance amount is favourable, decrease the cost of goods sold—thereby increasing net income.
- If the variance is unfavourable, significant in amount, and results from mistakes or inefficiencies, the variance amount can never be added to any inventory or asset account. These unfavourable variance amounts go directly to the income statement and reduce the company's net income.
- If the variance is unfavourable, significant in amount, and results from standard costs not being realistic, allocate the variance to the company's inventory accounts and cost of goods sold. The allocation should follow the standard costs of the inputs from which the variances arose.
- If the variance amount is favourable and significant in amount, allocate the variance to the company's inventories and its cost of goods sold.

Reference List

L.O. 2: A.C. 2.1

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