

# Week 1 –Process Improvement, (Innovation) & Value Creation

## ACCT2522 Introduction

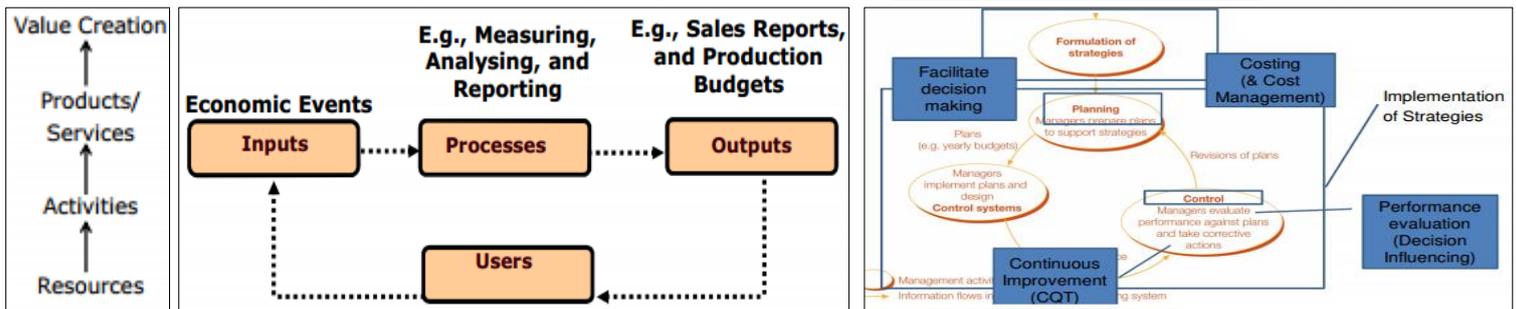
### What Is Management Accounting?

**Management Accounting** is “the processes & techniques that focus on the efficient & effective use of organisational resources, to support managers in their tasks of enhancing both customer value & shareholder value.”

Management Accounting	Financial Accounting
<u>Internal Users (Managers/Employees)</u> → Info. Needs Vary	<u>External User Focus</u>
<u>No Mandatory Rules - Flexibility</u>	<u>Must Follow Externally Imposed Rules (GAAP, AASB)</u>
<u>Financial &amp; Non-Financial Data From A Range of I/E Sources</u> (operation/personnel/customer info systems, competitor costs)	<u>Financial Data Almost Solely from Accounting System</u>
<u>Subjective With A Future, Current &amp; Past Orientation</u>	<u>Objective With A Historical Orientation</u>
<u>Timely &amp; Relevant</u>	<u>Reliable &amp; Verifiable – Not Always Timely/Relevant</u>
<u>For Internal Evaluation</u> → Suit <u>Manager Specific Needs</u>	<u>Highly Aggregated Information</u>

### Management Accounting Systems (MAS) – Processes & Techniques to Enhance Value → Contingency Theory

**MAS's** are an “information system that produces the information required by managers to create value & manage resources”. Cost & cost management systems (cost of G&S or activities/customers), budgeting (expected outcomes) & performance evaluation systems (actual vs. budgeted). A **MAS** should be tailored to firm specific factors size, type of G/S



Management Accounting Supports **Strategy Formulation & Implementation** (*vision, mission, objectives*)

- **Planning** – managers create long & short term plans (budget) to support strategies (*how should we compete?*)
  - Facilitate Decision Making that influences the direction of the organisation
  - ‘Implement Plans & Design Control Systems’ + Costing & Cost Management Systems
  - Continuous Improvement (CQT)
- **Control** – ‘managers evaluate performance against plans (expected outcomes) & take corrective actions’
  - Decision Influencing → Revision of Plans → More effectively manage resources
  - “Ensure that operations proceed according to plan & that objectives are achieved”
  - **Control Systems** – “*systems & procedures that provide regular information to assist in control*”
  - **Budgets**, performance measurement & rewards help align individual goals with the organisations

Because managers make decisions frequently, they need relevant information regularly *e.g. budgets, performance reports.*

### Schedule

1. **Introduction** – Activities – **Week 1**
2. **Costing & Cost Management** – Products/Services, Activities & Resources – **Week 2-5**
3. **Information For Value Creation** – Value Creation & Resources – **Week 6-9**
4. **Decision Facilitating** – Value Creation & Resources – **Week 11**
5. **Decision Influencing** – ALL – **Week 12**

## Understanding Value, Resources, Processes & Value Creation

### Value – Management Accounting Enhances the Following Things to Build Competitive Advantage (Porter)

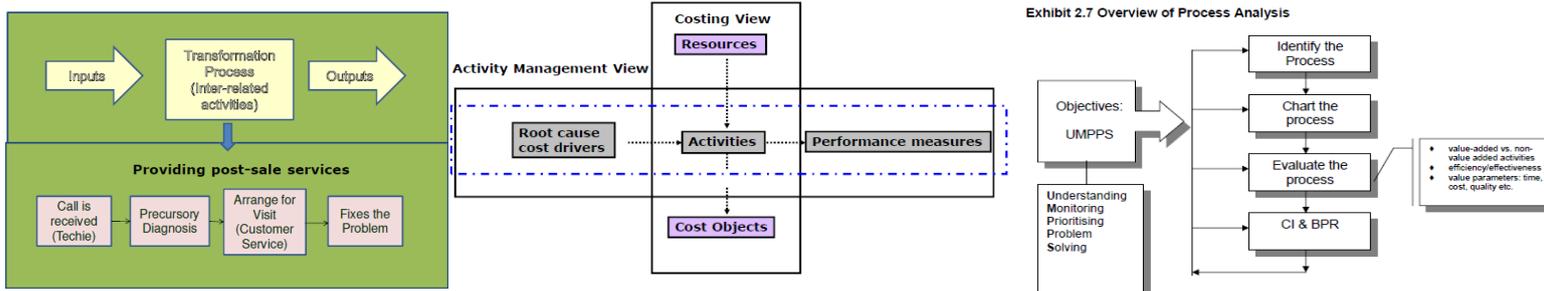
- ✚ **Customer Value** – ‘the value that a customer places on particular features of a G/S’
- ✚ **Shareholder Value** – ‘the value that shareholders place on a business’
- ✚ **Cost** – the cost of the product + its cost of use (e.g. car/petrol)
  - MGMT ACCT may include marketing & other expenses in product costing to decide whether to continue a G/S
- ✚ **Quality** – ‘the degree to which a G/S meets expectations’ must be free from defects/deficiencies
- ✚ **Time** – Duration/Quality vs. Timeliness (if you don't deliver on time, customers will be lost)

### Resources (Factors of Production)

**Resources** are the financial (cash, loans, equity) & non-financial (tangible – high tech machinery or intangible – highly trained employees or excellent processes) means of an organisation. The firm's factors of production determine its ability to provide G&S, its capabilities & core competencies. MGMT ACCT helps manage resources via planning, costing & control.

### Processes

A **Process** is a “group of interdependent activities which, when performed, utilise the resources of a business to produce a definite result” (BDMM) i.e. converting inputs to outputs – transformation process. Hence, **Activities** refer to a unit of work or step in a process. We adopt a **process based view** of the organisation because work is performed in a series of activities (process) that cross functional boundaries → We gain little by focusing on functional departments separately



### Activity Based Management (ABM)

“ABM” involves using information from ABC to analyse activities, cost drivers & performance measure to enhance value”.

### Process Analysis (UMPPS)

**Process Analysis (PA)** is “the link between strategic goals & resourcing to achieve those goals” (BDMM p25). Firms can become more efficient via process analysis as it realigns task performance & resource use which enhances value. There are **4 objectives** (tools) of process analysis,

- **Understanding** (*business process map*) → Understand interrelationships & linkages between resourcing & strategy
- **Monitoring** (*statistical process control chart*) → Control & Benchmarking, what can we improve – corrective action?
- **Prioritising** (*Pareto diagram*) → Prioritising improvement opportunities, ranked on criticalness & VA & NVA activities
- **Problem Solving** → PA shows where & why a problem occurs & provides a range of solutions + what if analysis

These align well with the **4 steps** of process analysis:

1. **Identify the Process of Interest**
2. **Chart the Process**
3. **Evaluate the Process**
4. **Continuously Improve or Re-engineer the Process (Process Improvement) → CI or BPR**

### Steps 1 & 2 – Identify & Chart the Process

To **identify** the process we use value chain analysis or benchmarking. Following this, we break down the process into sequential activities via a **process chart** & identify critical processes & activities. *Which are wasteful/add value/have issues?*

### Dry Cleaning Process Example

Sort clothes into 3 piles → Inspect for stains (diamond, if yes pre-treat, if no just load into machines & start machines) → Once dry clean is completed – Unload → Press Clothes → Combine pressed clothes based on orders & wrap in plastic → random checks to ensure items in order are present.

#### Example: Dry Cleaning Process

Identify a non-value adding activity!

- Write down customer info/instructions (e.g., collection times)
- 🔴 Repeat customer info/instructions
- Sort clothes into 3 piles – dark, beige, white
- Inspect for stains
- Pressed clothes are combined based on orders and wrapped in plastic
- 🔴 Checks at random to make sure all items in the order are present

### Step 3 – Process Evaluation – Are Activities...

#### ❖ Value Added (VA) or Non Value Added (NVA)?

- **VA** – increases customer satisfaction or is critical to remain in business
  - Are customers willing to pay? Or will removal reduce service or product quality potential? Does it bring G/S 1 step closer to completion?
  - E.g. Assembling
- **NVA** – does not add value to a G/S from the customer's or firm's perspective
  - Potential Grey Areas → Storage (theory – NVA because of JIT), car inspection, waiting, handling

#### ❖ Efficient, Effective or Both?

- **Efficiency** – ability of activities to use fewest possible resources, maximising output for a given amount of input
  - # Calls / Hr. (^Resource Usage)
- **Effectiveness** – ability of activities to meet customer/business needs or achieve desired goals (goal attainment)
  - Quality of Calls & Problem Resolution
- Often there are **Trade-offs** – higher effectiveness may require more resources
- What makes a **good measure** of Efficiency or Effectiveness? Measures are part of the **feedback system**
  - Measure not action! Understandable, Comparable (Objective – e.g. # of complaints), Specificity

#### ❖ Customer Value Parameters – Valuable in Terms of Time, Cost or Quality?

- **Cost** – amount of resources consumed in process, ABC technique, pressure to reduce costs of G&S 4 customers
- **Quality** – defect rate & variability e.g. 500ml in a 700ml bottle
- **Time** – duration (production time) vs. timeliness (delivery on time)

### USEFUL EVALUATION TOOLS

#### ➤ Root Cause / Driver Analysis – Why did something happen? Identifies root cause cost drivers of activities”

- Choose 1 Main reason/cause of an activity to be performed & its costs to be incurred
- E.g. burnt toast – insufficient staff or timer malfunction
- E.g. a forklift may need to move materials around – Plant Layout Issue

#### ➤ Fishbone Diagrams (Cause (of poor performance) & Effect)

- **Spine** – ‘the primary problem to be solved’
- **Ribs** – ‘major potential causes’ – machinery, method, material, labour
- **Bones** – ‘identify possible causes of the main causes’

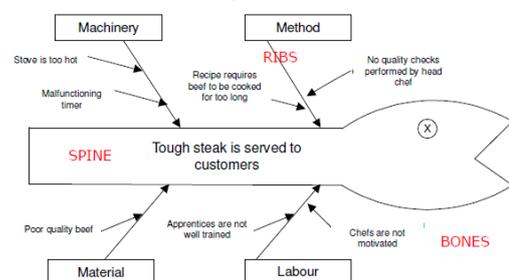
#### ➤ Statistical Process Control Chart – ‘Used to understand, monitor & reduce variability in a process’

- Assess variations in processes & address causes of large variations → non-random disturbances
- Concerned if we go beyond the UCL or LCL (uncommon variation)

#### ➤ Pareto Diagrams

- Shows a graphical representation of the causes of a problem, showing the frequency of each cause
- Easy to prioritise improvements

•Example: Fishbone Diagram

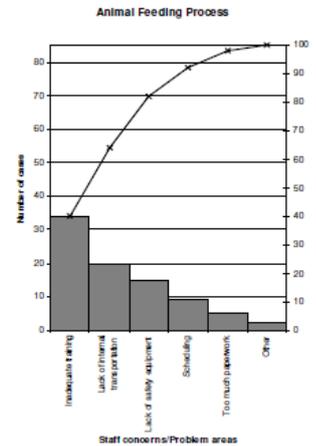


### Step 4 - Process Improvement

- ✚ **Activity Elimination** – eliminate activities to lower resource usage *e.g. eliminate storage and use JIT (NVA activities)*
- ✚ **Activity Selection** – choose a lower cost activity *e.g. auto instead of manual*
- ✚ **Activity Reduction** – reduce resources consumed by an activity *e.g. reduce setup time via employee training*
  - Reduce employee numbers if excess capacity (*e.g. free time*) is achieved via process improvement
- ✚ **Activity Sharing** – economies of scale *e.g. design products with similar components*

**BPR** involves a radical redesign of a firm's processes to achieve large gains in cost, quality or time/delivery (*improvement*). The business attempted to reorganise its processes to eliminate NVA activities & enhance VA activities. *E.g. automation of customer service. Continuous improvement* is the other option. *E.g. finding a more efficient way for labour to assemble PC's*. CI & BPR are not mutually exclusive.

	<b>Business process re-engineering (BPR)</b>	<b>Continuous improvement (CI)</b>
1. Scale of change	Radical	Incremental
2. Personnel Involvement	Cross-functional teams	Everyone
3. Timing	One-off	Ongoing



## Week 2 – Cost Basics

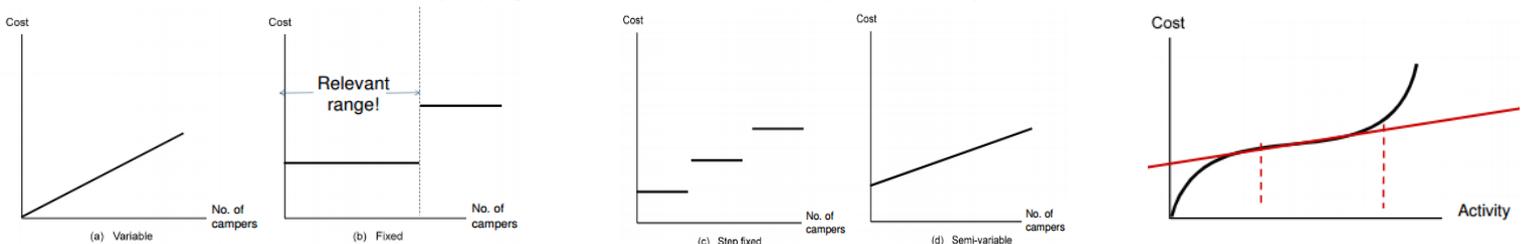
### 1. Why Study Cost?

“Costs are resources given up to achieve a particular objective” they are either capitalised as assets or expensed. Financial Accounting uses it *e.g. inventory valuation* & so does management accounting *e.g. planning, decision making, cost control & cost management*.

### 2. Cost Behaviour Patterns

**Cost behaviour** is the relationship between cost & level of activity (or cost driver). Cost behaviour is described over a relevant range. Different costs (classification) for different purposes = different information → impacts managers decisions

- ✚ **Variable Costs** – costs that change in direct proportion to a change in the level of activity *e.g. catering*
- ✚ **Fixed Costs** – costs that remain unchanged, even if activity levels change *e.g. overseas expansion 'jump' more rent/staff*
- ✚ **Step Costs** – a cost that remains fixed over a wide range of activity levels but 'jumps' to a different amount for levels outside the range *e.g. boat*
- ✚ **Semi-Variable or Mixed Costs** – a costs consisting of both fixed & variable components *e.g. cost of farm*
- ✚ **Curvilinear Costs** – costs displaying behaviour that can be represented by a curved line



Understanding cost behaviour (accurate costing) leads to better cost prediction (better planning (resources), control, decision making). Other considerations include;