ABM, BPM and continuous improvement

MODULE 6 | PART D.3 | STUDENT COMPANION

Costing activities or managing them?

Activity-based costing	Activity-based management
• Links overheads to activities • Accurate costs for products and other cost objects • Mainly operational decisions	• Manages the activities themselves • Cuts cost and improves customer value • Strategic planning and performance

Same foundation - activity analysis - different purposes

Activity-based management in three steps

1. Analyse activities
Activity map: inputs, drivers, outputs

→

2. Focus on outputs
Remove or reduce activities with no valued output

→

3. Improve
Single activities and the whole map - start strategic

What shapes value chain costs

Factor	Question to ask
Scale	Enough capacity and volume for economies of scale?
Scope	How vertically integrated - how much control over the industry value chain?
Experience	Is learning lifting productivity and cutting waste and rework?
Technology	Does it deliver higher quality at lower cost?
Complexity	Is a broad range worth its extra support cost?
Channels	Which routes to customers cost least and add most?
Operational management	Capacity use, design, continuous learning, supplier and customer links

Business process management redesigns processes radically, from the customer's viewpoint and the strategy, using the best available technology - sometimes restructuring around processes instead of functions.

Business process redesign

Before: matching paperwork

- Purchase order, receiving document and invoice
- Clerks chase mismatches
- 500+ people in North American accounts payable

After: invoiceless processing

- Order details held in a database
- Pay when received goods match the order
- Headcount cut by about three-quarters

Ford, early 1980s (Hammer, Harvard Business Review, 1990) - Mazda's team had about five people

Source: Hammer, M. (1990), 'Reengineering work: don't automate, obliterate', Harvard Business Review.

Is this activity value-adding?

Question	If yes	If no
1. Creates value for external customers?	Value-adding - do it efficiently	Ask question 2
2. Required by corporate rules (governance)?	Keep - required	Ask question 3
3. Required for sound business practice?	Keep - required	Ask question 4
4. Creates value for internal customers?	Keep - adds value internally	Target for elimination
5. Creates waste with little or no value?	Improve the process to cut waste	

Be realistic: non-value-adding costs (set-ups, storage, waiting, moving, inspection, rework) cannot always vanish at once - people and equipment remain until redeployed - and total elimination can cost more than it saves, so partial elimination may be better.

Measuring continuous improvement

Invoices processed	480
Staff hours	40
Productivity: 480 / 40	**12 invoices per hour**
After removing manual exceptions	**15 invoices per hour**

Output over input: a higher ratio is always better

Continuous improvement began with Japanese manufacturers: teamwork, empowerment and incremental change to existing activities, often with **gainsharing** (staff share a portion of savings). Managers can act on inputs, outputs or the cost driver. **Social and environmental analysis** extends the value chain to suppliers' treatment of workers and communities, materials, toxic by-products, recycling and the effects of product use;

fines are lagging indicators.

Practice questions

MODULE 6 | PART D.3 | TRY THESE BEFORE THE WORKED ANSWERS

Question 1 - Dental clinic (imagined): value-adding or not?

Activity	Classification
(a) Treating patients' teeth	
(b) Patients waiting past their appointment time	
(c) Sterilising instruments	
(d) Redoing a filling that failed within a month	
(e) Carrying files between rooms	
(f) Keeping treatment records the regulator requires	
(g) Storing excess consumables	
(h) Explaining treatment options to patients	

Question 2 - Productivity and gainsharing

A warehouse team picked 3,150 orders in 300 hours last month and 3,600 orders in 300 hours this month after a layout change. (a) Calculate both productivity ratios and the improvement. (b) The change saved $9,000 of overtime; under gainsharing staff receive 20% of savings. How much do they share?

Worked answers

MODULE 6 | PART D.3 | WORKED ANSWERS - ATTEMPT THE QUESTIONS FIRST

Question 1 - Value-adding or not?

Activity	Answer
(a)	Value-adding (external customer)
(b)	Non-value-adding - waiting; fix scheduling
(c)	Keep - required for sound practice and safety
(d)	Non-value-adding - rework (internal failure)
(e)	Non-value-adding - movement; go digital
(f)	Keep - required by rules (governance and compliance)
(g)	Non-value-adding - storage; order smaller quantities
(h)	Value-adding (external customer)

Question 2 - Productivity and gainsharing

Item	Answer
Last month	3,150 / 300 = 10.5 orders per hour
This month	3,600 / 300 = 12 orders per hour
Improvement	(12 - 10.5) / 10.5 = about 14%
Gainshare	20% x $9,000 = $1,800