

## The ExP Group

# ACCA <br> <br> PMI <br> <br> PMI <br> ExPress Notes 

Performance Management


FA
PM


FM

# Page <br> 2. Decia fr eit Miname to your Ex日ress notes Free complete book at www.theexpgroup.com 



Thank you for downloading a copy of these ExPress notes and I hope you find them useful for your studies.
We provide these ExPress notes free of charge to individual students as part of our CSR initiatives. The notes are designed to help students assimilate and understand the most important areas for the exam as quickly as possible. Preview Min

## Free complete book at

## www.theexpgroup.com

## About The ExP Group

We were born with one passion, with one aim, with one desire. To use technology the way it should be used. To use technology to open up education, and in particular financial education, to whoever needs it regardless of their income, wealth, race, sex, religion or location.

We wanted to use technology to empower individuals to develop themselves through financial expertise, organisations to improve their performance through enhanced human capital and ultimately communities and families to benefit as a result.

We're on target and since our birth we have had the privilege of working with and learning from inspirational individuals and organisations from all 4 corners of the world in countries as varied as the UK in the north, Singapore in the east, South Africa in the south and the Cayman Islands in the west.

We're only part way through our journey but we're doing better than we expected. The best is yet to come though,

Education + Technology=Ethical Empowerment.

Thank you for being part of our story.

## Specialist Cost \& Management Accounting Techniques

## Key Knowledge - Activity Based Costing (ABC)


 becomes possible to charge costs to the agents under ling tnose - ct $i t i e s$.

## Free complete book at <br> A factory clinic with total annual costs of $\$ 500,000$ serves two Workshops A and B.

## wWw theexpgroup.com

Workshop A: $(200 / 500) \times 500,000=200,000$
Workshop B: $(300 / 500) \times 500,000=\frac{300,000}{500,000}$
An ABC approach might look at the number of visits to the clinic by the employees of $A$ and $B$.
Workshop A: 150 visits p.a.
Workshop B: 70 visits p.a.
In this case, the apportionment could be:
Workshop A: $(150 / 220) \times 500,000=340,909$
Workshop B: $(70 / 220) \times 500,000=159,091$ 500,000

The different levels of usage may reflect different degrees of occupational hazard present in the two workshops.

ABC advantages: provides a more precise way to determine costs per unit of output, especially since not all overhead costs are driven by production volumes.

Budgetary planning, pricing decisions and managing performance are all facilitated by $A B C$.
ABC disadvantages: it can be complex and costly to implement. It is not a "plug-in-and-go" system! It is therefore imperative that management carefully weigh the costs against the (expected) benefits from $A B C$ before deciding to implement it.

## Key Knowledge - Target Costing

This is a market-oriented approach to costing that starts by identifying the likely price that a product can fetch in the market, deducts the profit that the product is expected to earn, and arrives at the maximum (target) cost of manufacturing the product.

Such a methoresually requires suncessive iterations in order to close a "cost gap", i.e. where the costs



## Free complete book at <br> A product normally "lives" beyond one a ounting period and the costs connected to its

 development/design, launch and maintenance fall unevenly across time periods. This method takes a
## www.theexpgroup.com Key Knowledge - Throughput Accounting

This method is consistent with a JIT environment and focuses on the bottlenecks in a production process; by eliminating these bottlenecks, it raises the amount of output that can flow through the process (assuming there is demand for the output - the idea is not to produce for inventory!).

The throughput accounting approach itself considers all costs (including direct labour) as fixed and treats only direct materials as being variable in the short term. Throughput means revenue less material costs.

The throughput accounting ratio is calculated as: $\frac{\text { Return per factory hour }}{\text { Cost per factory hour }}$
Where:
Return per factory hour $=\frac{\text { Throughput per unit }}{\text { Time on bottleneck process per unit }}$
Cost per factory hour $=\frac{\text { Total factory costs }}{\text { Total bottleneck resource time avaialable }}$

## 02 <br> Decision Making Techniques

## The Big Picture

One of management's responsibilities involves making decisions affecting the firm in the short-run based
Whatis ref Ferreview pages
A relevant cost is a cash cost which is uniquely incurred (or avoided) as a consequence of taking a ree complete book at Example

## www theexpgroupcom not relevant to the decision.

If, however, there is a difference in the two insurance costs, then one can speak of the difference between the two choices as being "incremental"; this difference (referred to in some places as the "differential") is relevant to the decision under consideration.

Future
Relevant costs refer to the future, i.e. they can be influenced prospectively by choice. It follows that:
Sunk costs are not relevant: They have already taken place and cannot be reversed.
Committed costs, if they cannot be avoided, are likewise not relevant, even if the timing of their occurrence is in the future. Their "unavoidability" has already been established in the past (making them effectively the equivalent of sunk costs).

In keeping with the above logic, relevant costs therefore involve cash, are incremental and relate to the future.

Relevant costs need to be identified with care, as they may include opportunity costs.

## Example

A company considers building a storage facility on the site of a parking lot. If the parking lot had been generating parking fees that will now be lost, then this foregone revenue is an opportunity cost.

## Key Knowledge - Break Even Analysis

Cost-Volume-Profit (CVP) Analysis
The breakeven formula
Total Costs $=$ Fixed Costs + Unit Variable Cost x Number of Units
Total Revenue = Sales Price x Number of Units
If
«f Praveriew pages

## Free complete book at

www.theexpgroup.com
$C=S P-V=$ Unit Contribution and
CM\% $=$ C/SP $=$ Contribution Margin,
Then the break-even point (the output level at which $T R=T C$ ) is:

- In units sold: $\mathrm{X}=\mathrm{FC} / \mathrm{C}$
- In dollar sales: $\mathrm{TR}=\mathrm{FC} / \mathrm{CM} \%$

- Safety Margin = Budgeted Sales - Break-even point (units/dollars)
- $C$ is an important indicator, as it shows the contribution of each unit sold towards covering fixed costs. Therefore, in the short run, the firm may prefer to produce/sell below break-even in order to recover some of its fixed costs.

Relevant costs, incremental analysis and linear programming

- Relevant costs are costs expected to vary with the action taken
- Past (sunk) costs are irrelevant
- Fixed costs are irrelevant if there is idle capacity
- Variable (marginal) costs are relevant
- Opportunity costs (foregone benefits) are relevant
- Incremental analysis uses relevant costs in order to quantify the short-term effects of business decisions taken.

Applying incremental analysis in business decision-making

- Accept or reject a special order

Accept if selling price exceeds variable production cost and there is spare capacity


## Free ${ }^{\circ}$ incond midelet

- Divest if (marginal revenu generated + cost of resulting idle capacity + severance


# payments + restoration costs) fall below marginal cost of production + salvage value of <br> www.theexpgroup.com 

## Key Knowledge - Limited Factor Decisions

Determining optimal mix of products where there is one limiting factor

1. Calculate contribution per unit generated by each product.
2. Identify the number of units ( $\mathrm{kg} / \mathrm{litres}$ ) of the limited factor used by each product.
3. (1) $\div(2) \Rightarrow$ contribution per unit of limited factor generated by each product.
4. Produce product with highest contribution per unit of limited factor first, up to maximum demand, then produce product with second highest, etc. until all the limited factor is used up.

Determining optimal mix of products where there is more than one limiting factor
Use linear programming:

1. Define variables (Let $X=$ output of product $1, Y=$ output of product 2 )
2. Define objective function: (This expresses total contribution). $\mathrm{Y}=\mathrm{mX}+\mathrm{nY}$ (where $\mathrm{m}=$ contribution per unit for X and $\mathrm{n}=$ contribution per unit for Y ).
3. Define constraints: Shows maximum use of each limited resource - (e.g. $3 X+4 Y \leq 4,000$ would be a constraint where each unit of $X$ uses 3 units of the resource and each unit of $Y$ used 4 units of the resource, and the resource is limited to 4,000 units per period).
4. Draw diagrams of all the constraints and plot the objective function for one value of contribution. Point of maximum contribution is where a line parallel to the contribution line is within the feasible region bounded by all the constraints, e.g. here the point of maximum contribution will be one of the corner points, A, B, C or D.


## kev Preview pages

## ree complete book at <br> External: How much is a customer willing to pay for it? <br> www theexpgroup:com

## Key Knowledge - The Price Elasticity of Demand

This measures the sensitivity of (customer) demand to a change in prices. There is usually an inverse relationship: when price goes up, demand goes down (and vice versa).
$\operatorname{PED}=\frac{\% \text { change in demand }}{\% \text { change in price }}$

## Example

A cinema increases its ticket prices from $\$ 4$ to $\$ 6$; as a result, the number of cinema goers drops from 2,000 to 1,500 .

The PED $=\frac{(500 / 2000)}{(2 / 4)}=\frac{25 \%}{50 \%}=0.5$ (Note: Ignore + or - signs; take the absolute value)

