

TOPIC OVERVIEW

- 1. Introducing organisations, strategy and management control system**
- 2. Responsibility accounting, structure and the organisational sub-unit**
- 3. Measuring and evaluation sub-unit performance using diagnostic tools**
- 4. Internal transfer policy**
- 5. The role of non-financial measures in performance measurement;
balanced scorecards**
- 6. Structuring reward systems**
- 7. Strategic capital investments**
- 8. Market variance analysis, budgeting and profit planning**
- 9. Risk management**

7. Calculate ROI, residual income and EVA to reflect sub-unit performance

ROI

$$\begin{aligned}\text{ROI} &= \text{Profit margin} * \text{Asset turnover} \\ &= \frac{\text{Profit}}{\text{Sales}} * \frac{\text{Sales}}{\text{Assets}} \\ &= \frac{\text{Profit}}{\text{Assets}}\end{aligned}$$

Default:

- Profit = Net operating profit before tax
- Assets = Total assets

Residual income (RI)

$$\text{RI} = \text{profit} - \frac{[(\text{required rate of return}) * (\text{assets employed})]}{\text{capital charge}}$$

Description:

- The (required rate of return x assets employed) is commonly referred to as the *imputed cost* or *capital charge*
- Residual income is the profit remaining after charging for the assets employed. This is commonly viewed as a measure of 'added-value' to the firm.
- RI is an **absolute monetary value** rather than a ratio.

Economic value added (EVA)

$$\text{EVA} = \text{Economic profit} - \text{opportunity cost of invested capital}$$

Where:

- Economic profit = NOPAT +/- adjustments
- Opportunity cost of invested capital = WACC x (total assets – current liabilities +/- adjustment)

Examples of adjustments:

- Accounting expenses with long-term value-adding potential are capitalized -e.g. R&D, long-term leases;
- Goodwill amortization is added back
- Inventories are valued at replacement cost rather than written-down historical cost
- etc.

Note: To determine whether EVA is positive or not, look at the ROI and cost of capital/hurdle rate. If ROI > hurdle rate, then EVA will be positive and vice versa.

8. Explain the advantages, limitations of common performance measures at the sub-unit level such as ROI, residual income and EVA

Advantages of ROI

- The metric is a simple ratio of the profit generated to the value of the assets used to generate that profit
- It is intuitive and familiar
- The ratio facilitates a direct comparison of performance across entities and across reporting periods where the asset base may differ significantly
- Its components motivate managers to increase sales, decrease costs and minimize asset investments

Disadvantages of ROI

- Discourages managers from investing in projects that reduce the division's ROI, even though they might improve the ROI for the overall entity or have only a short-term negative effect on a division's ROI, and over the long term would increase divisional ROI.
- Does not incorporate measures of risk (Risky projects tend to have higher returns than less-risky projects, and if ROI is the sole performance measure, managers have an incentive to take risky projects)
- Managers with a short-term orientation may inappropriately cut costs that provide long-term benefits

Possible solutions to ROI problems

- Long-range strategic planning
- Effective use of multiple measures in combination
- Familiarity of central management with divisional operations
- Management service histories – expected length of tenure

Advantages of RI

- RI is an absolute monetary value rather than a ratio
- The RI of an entity is simply the sum of the RI's generated by all the investments held by the entity
- An additional investment that generates a positive (negative) RI, will add (subtract) the same amount to the division's RI and to the organization's RI
- There is no goal displacement

Disadvantages of RI

- Larger sub-units are more likely to have larger residual incomes. It becomes harder to compare performance across units
- Similar to ROI, managers may cut costs such as R&D, maintenance or employee training that likely have long-term benefits for the entity
- If managers estimate their own required rate of return, they might set a required rate of return that is too low

Lecture 7

1. Differentiate between intrinsic and extrinsic rewards

Intrinsic reward: Non-material things (e.g. autonomy, mastery, purpose etc.)

Extrinsic reward: Material things (e.g. cash, equity, car, travel, holiday, low interest loan, accommodation, VIP membership etc.)

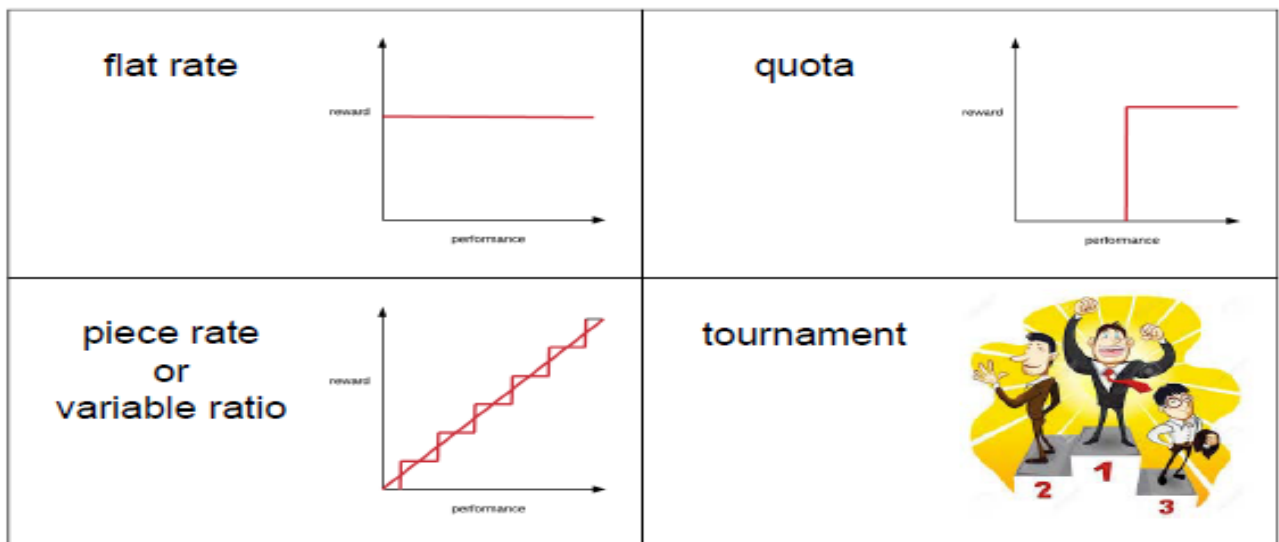
2. Incentives

To improve performance we need to ask, what is hindering performance?

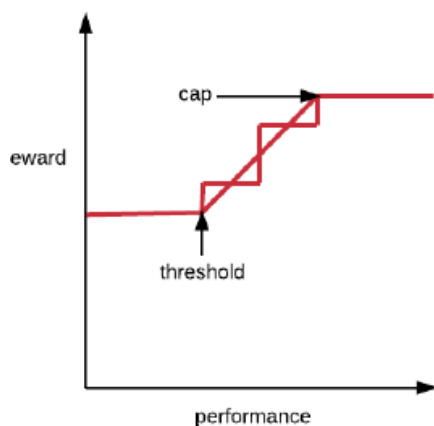
- Inadequate technology, shirking, insecurity, low morale, poor ethics, poor health etc.

An organisation needs to motivate its managers and employees to identify and remove the factors that are hindering performance.

Types of incentives:



Combination of incentive types



As the gap between required skill and the subject's skill increases, more effort is less likely to translate into better performance. **i.e. incentives become less effective as task complexity increases.**

Quota schemes have the highest probability of producing positive effects because they link pay to performance and typically provide a specific and challenging, but achievable goal.

Piece-rate schemes will be next because of the direct link with performance, but don't have the motivational effect of a goal.

Tournament schemes may be better than flat rate schemes, since pay is contingent, but competition may be de-motivating and may promote dysfunctional behaviour (overall, not much different than flat rate).

5. Identify the key strategic issues which may be relevant strategic investments (important)

Factors that may be relevant in a strategic investment decision		
1.	Market factors	<ul style="list-style-type: none"> • Alignment with distinctive capabilities and intended strategy • Strength of competitive advantage arising from the investment (uniqueness) • Impact on the firm's reputation • Corporate Social Responsibility (environmental, social; ethical)
2.	Firm's internal capabilities	<ul style="list-style-type: none"> • Alignment with existing core competences and capabilities • Track record and ability of the people involved • Impact on the structural cost drivers (e.g. scale, scope, complexity, experience and learning)
3.	Risk of not investing	<ul style="list-style-type: none"> • Impact of deciding not to acquire the asset (moving-baseline concept) <ul style="list-style-type: none"> ○ e.g. If Microsoft did not acquire skype, might be adversely impacted by Apple's facetime.
4.	Risk of investing	<ul style="list-style-type: none"> • Ability to manage the risks relating to the investment (strategic, operational, regulatory and financial) • Feasibility of reversing the decision

How might these factors be measured?

- Likert-type scale
- Develop into a weighted-index
- Don't quantify??
 - Give qualitative reasoning