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15.963 Management Accounting and Control Spring 2007

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15.963 Managerial Accounting and Control

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- Management accounting provides information for a firm's <u>internal</u> users. The information can be customized to meet the user's needs.
- This information is used for <u>decision making</u> and <u>control</u>.
- Control is necessary because of <u>agency problems</u>, whereby the self-interests of individual employees diverge from the interests of the firm.
- Control becomes more important in larger, more decentralized firms.



- Decentralized organizations have to partition <u>decision</u> <u>rights</u>.
- If agency problems were non-existent, decision rights would be based on the locus of knowledge:
 - where the knowledge resides in the organization would entirely determine how decision rights are partitioned.
 - This would increase the quality and timeliness of decision making.
- For control, however, it may be necessary to detach knowledge and decision rights.
- A choice with regard to this matter will depend on the relative importance of decision making vs. control.



- This choice will depend on the context: the user, the time, the internal environment and the external or competitive environment.
- Once decision rights have been partitioned, it becomes important to <u>evaluate</u> performance (for control).
- Performance measures should be determined by desired behavior, which in turn should be determined by the firm's goal.
- <u>Rewards</u> motivate performance. Do not reward "A while hoping for B" (Kerr, case packet).



- Good controls will mitigate, but <u>never eliminate</u>, agency problems.
- Controls are costly. <u>Ensure that their benefits</u> <u>outweigh their costs</u>.
- Different performance measurement systems will distort behaviors under different circumstances. No system is perfect. Remember the cost/benefit tradeoff.
- If subjective information is solicited for decision making, and the provider suspects that it may potentially be used for control, this information will not be unbiased. <u>Beware</u>.



- This problem is pervasive. It arises during budgeting, when determining standards, and in myriad other circumstances.
- The <u>controllability principle</u> suggests that a valid performance measure is one that is sensitive to the employee's effort / actions.
- <u>Non-insulating</u> performance measurement and reward mechanisms introduce uncontrollability, but are useful for <u>risk sharing</u> and <u>mutual monitoring</u>.



- Cost <u>behavior</u> can be variable, fixed or some combination thereof.
- Cost <u>assignment</u> is either direct or indirect.
- The <u>fundamental problem in costing</u> is assignment (or allocation) of indirect or common costs.
- A <u>costing system</u> describes how indirect costs are allocated.
- Since refining costing systems is costly, there is some residual and <u>inescapable arbitrariness</u> in product costing. <u>Beware</u> when using allocated costs in decision making and control.



- ALL costs are variable in the long run. Therefore, fully-allocated costs should be used for long-run decisions.
- Fixed costs are unavoidable in the short run. For short-run decisions such as accepting / rejecting one-time special orders, only variable costs should be considered.
- The contribution margin is the difference between selling price and variable costs. Contribution margin analysis is appropriate for short run decisions.



- Operating leverage is the sensitivity of the bottom line (operating income) to changes in the top line (sales).
- Firms with high fixed costs and low unit variable costs have high operating leverage.
- Firms with high fixed cost structures are more vulnerable during economic downturns.
- Firms with high fixed cost structures can also be more aggressive in short run price wars.



- If fixed indirect costs are allocated based on volume measures that vary with market conditions, changes in the reported unit product cost are not necessarily indicators of changes in efficiency. <u>Beware</u> of unit product costs.
- <u>Be aware</u> of the cost of excess capacity that is discretionary or avoidable. Non-discretionary excess capacity is:
 - inherent in the production process;
 - required by a customer; or
 - optimal in the sense of minimizing total cost (tradeoff between fixed and variable costs).



- Beware of the <u>death spiral</u>, and other costing problems, when excess capacity is charged to products.
- A <u>cost is sunk</u> if it is irrecoverable at a given point regardless of the decision made at that point.
 - Sunk costs are irrelevant, except for the guy who sunk them.
 - <u>i.e., sunk costs are irrelevant for decision making</u>, <u>but not for control</u>.
- Despite some arbitrariness in indirect <u>cost allocation</u>, it is <u>required</u> for a variety of purposes.
- Activity-based costing systems are more refined but more costly.



- A more refined costing system, such as ABC, is likely to be of value:
 - When overhead costs are a large proportion of total costs;
 - When multiple products are produced, and they place asymmetric demand on resources, e.g., when there are
 - commodity and specialized products, or
 - Low volume and high volume products;
 - When competitive and profit pressures are intense;
 - When the product market is mature, with low prospects for innovation or differentiation;



- The theory of constraints (TOC) suggests that, in the presence of binding constraints (bottlenecks), it is optimal to maximize throughput per unit of the constrained resource.
- TOC is a short run decision rule, since all constraints can be relaxed in the long run.
- In decentralized organizations, transfer prices between business units can promote
 - goal congruence,
 - mutual monitoring, and
 - proper resource allocation (i.e., mitigate under- or overconsumption).
- Transfer prices also help preserve subunit autonomy, are useful in measuring subunit performance, and are important for tax purposes in international settings.



- A budget is a formal and quantitative expression of future plans.
- Budgets are important for transferring knowledge both horizontally and vertically throughout the firm.
- Since this knowledge is used to coordinate plans for the future, the budget forms an internal contract or commitment.
- To induce commitment to the plans, budgets are also used for performance evaluation at the end of the period.
- This in turn induces a bias in the transferred knowledge that forms the basis of the budget.



- When deviations from budgets, or variances, are used for control, it becomes important to understand the reasons for the variances.
- Variance analysis decomposes the static budget variance into progressively finer components.
- The controllability principle suggests that it is important to insulate downstream units from variances occurring upstream. This is one control feature of standard costing systems.
- Isolating and separately recording variances as soon as they occur facilitates timely control.



- The balanced scorecard broadens the managerial perspective and links specific actions to goals.
- However, the balanced scorecard can be confusing / distracting if it does not specify the tradeoffs between the various performance measures.
- Not specifying the tradeoffs between the multiple measures could also lead to value-consuming, instead of value-adding, behavior.

Mgmt. Acct and Control

• Best of Luck!