

Principles of Management

Unit 5: Controlling

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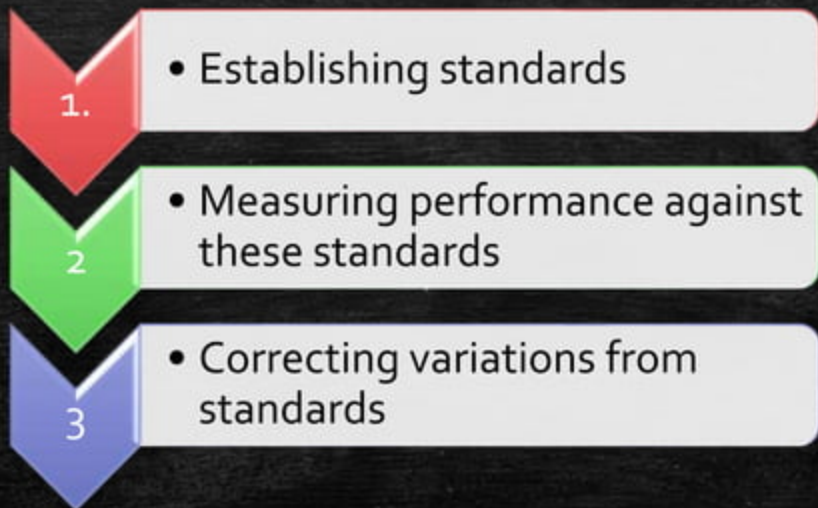
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Controlling - Definition

- The **measurement and correction of performance** in order to make sure that enterprise objectives and the plans devised to attain them are being accomplished

The basic control process



Principle of critical point control

- Effective control **requires attention to factors critical to evaluating performance** against plans
- **Standards are yardsticks** against which actual or expected performance is measured
- A manager – **choose points for special attention** watch proceedings as planned

Types of critical point standards

1. Physical standards
2. Cost standards
3. Capital standards
4. Revenue standards
5. Program standards
6. Intangible standards
7. Goals as standards
8. Strategic plans as control points

1. Physical standards

-are **non monetary**

measurements and common at

the operating levels (e.g.)

materials used, labor employed

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2. Cost standards

- are **monetary measurements** and common at the operating level (e.g.)
 - Labor cost per unit or
 - material cost per unit

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3. Capital standards

- are a **variety of capital standards**, all arising from the application of monetary measurements to physical items

The typical balance sheet will disclose capital standards such as **Ratios of current assets to current liabilities**, debt to net worth and etc.,

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4. Revenue standards

- Revenue standards arise from **attaching monetary values to sales**
- They may include such standards as **revenue per bus passenger mile, average sales per customer and etc.,**

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5. Program standards

- **Standards established** on programs like development of new products or programs for sale force quality improvement and so on

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6. Intangible standards

- More difficult to set are standards **not expressed in either physical or monetary measurement**

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7. Goals as Standards

- Management can be better attain **goals by verifiable and quantitative goals** – set as standards
- Tangible one

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8. Strategic controls

- Systematic monitoring at strategic control points and modifying the organization's strategy based on the evaluation

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Bench Marking

- A approach for setting goals and productivity measures based on best industry practices.
- **Control as feedback system:**

Management control is usually perceived as a feedback system similar to that thermostat works

Real time Information and Control

- Information about **what is happening while it is happening**
- Real time information as a means of getting real time control
- Control effected at the **very time information shows a deviation from plans.**

Feed-forward or Preventive control

- Managers need for effective control, **a system that will inform them potential of problems** while getting them time to take corrective action before those problems occur
- It monitors inputs into **a process to ascertain of the inputs are as planned**; if they are not, the inputs or the process is changed in order to obtain the desired results.

Requirements of feed-forward control

1. Identify the more important input variables
2. Develop a model of the system
3. Take care of the model up to date
4. Collect data on input variables regularly
5. Regularly assess variations –actual from planned inputs
6. Take action.

Balanced scorecard

- Balanced score card – not only control –strategic planning

4 set of perspectives

1. Learning and growth
2. Internal business process
3. Satisfaction of customer
4. Financial perspective

Requirements of effective controls

- Managers want to have an **adequate and effective system of controls** to assist them – ensure conform to plans.

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1. **Tailoring controls to plans and positions** - control should reflect organization structure and plans to follow - plans and positions control – important
2. **Tailoring controls to individual managers control individual managers** – to carry out their function
3. **Designing control to point up exceptions at critical points** - Efficient control requires that managers look for exceptions while effective control – managers pay attention at critical points

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4. **Seeking objectivity of control:** Effective control requires objective, accurate and sustainable standards
5. **Ensuring flexibility of controls:** If controls are to remain effective despite failure or unexpected changes of plans, they must be flexible
6. **Fitting the control system to the organizational culture:** Effective control system or technique must fit the organizational culture

Contd...

7. **Achieving economy of controls:** Controls must be worth their cost
8. **Establishing controls that lead to corrective action :** An adequate control system will disclose where failures are occurring and ensuring take corrective action

Control techniques

- A variety of tools and techniques have been used over the years to help managers control.

Budget as a Control device

- Budgeting – **the formulation of plans** for a given future period in numerical terms
- Budgets – **statements of anticipated results**
- **Financial terms** – as in revenue and expenses and capital budget.
- **Non – financial terms** – direct labor hours, materials and so on.

Zero-Base Budgeting

- Dividing enterprise programs into packages composed of goals , activities and needed resources and calculating costs for each package from base zero
- The principal advantage of this technique – plan each program package afresh

Types of Budgeting

- **Top down Budgeting:** Managers prepare the budget and send it to subordinates
- **Bottom up Budgeting:** Figures (quantitative) come from the lower levels and are adjusted, coordinated as they move up the hierarchy

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- **Flexible Budgeting:** Any Budget exercise can incorporate flexibility
- **"Meet' or "beat" standards** that can be compared to expenditures

Financial Audits – or formal investigations – are regularly conducted to ensure that financial management practices follow generally accepted procedures, policies, laws, and ethical guidelines.

Financial ratio analysis

- Examines the relationship between actual plan and financial statements (performance)
 1. **Liquidity ratios:** measure an organization's ability to generate cash
 2. **Profitability ratios:** measure and organization's ability to generate profits
 3. **Debt ratios:** measure an organization's ability to pay its debt
 4. **Activity ratios:** measure an organization's efficiency in operations and the use of assets

Budgetary control techniques

1. Revenue and Expense budgets
2. Time, space, materials and product budgets
3. Capital expenditure budgets
4. Cash budgets
5. Variable budgets
6. Zero based Budgets

Non Budgetary Control techniques

1. Statistical data
2. Break even point analysis
3. Operational audit
4. Personal observation

Productivity

- Refers to the ratio between the output from production process to its input.
- 1. **Physical Productivity** : Ratio of the amount of product to resources consumed.
 - The Physical size – used to estimate software performance factors

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2. Functional Productivity:

- ratio of the amount of the functionality delivered to the resources consumed.

- measured in terms of staff hours, requirements, features or function points

3. Economic Productivity:

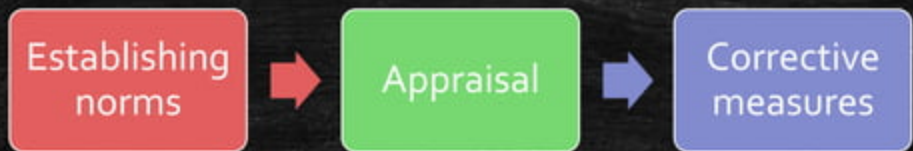
- ratio of the value of the product produced to the cost of resources used to produce it

- measured in terms of sales volume, inflation, interest rates and so on.

Cost Control

- Measure taken by management to assure that the cost objectives set down in the planning stage are attained

Steps in designing process of cost control



Purchase control

- Element of material control
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- Success of a business is to a large extent influenced by the efficiency of its purchase organization
 - Purchase control through:
 1. Continuous Availability of materials
 2. Purchasing of right quantity
 3. Purchasing of right quality
 4. Economy in Purchasing
 5. Works as an information centre
 6. Development of business relationship
 7. Finding of alternative source of supply

Maintenance control

- **Maintenance department** – has to exercise effective cost control
- Carry out the maintenance functions in a pre specified budgets
- Overhauling of equipment has **to be carried out due to unforeseen breakdowns** – to meet out unforeseen exigencies

Quality control

- Refers to the **technical process that gathers, examine, analyze, and report the progress of the project** and conformance with the performance requirements

Quality Control process

1. Establish a specification
2. Produce plans for control
3. Organize resources to implement the plans
4. Install a sensor at an appropriate point
5. Collect and transmit data to a place for analysis
6. Verify the results and diagnose the cause of variance
7. Propose remedies and decide on the action needed to restore
8. Take the agreed action

Planning operations

- An operational planning – **subset of strategic work plan**
- An operational plan draws directly from agency and program strategic plans to describe agency and program mission and goals, program objectives and activities.

Inventory control

- Economic Order Quantity (EOQ) approach for determining inventory levels
- EOQ model predicts the refilling of inventory and to determine optimum inventory

Just in Time (JIT) inventory system

- The supplier delivers the components and parts to the production line only when needed and "Just In Time" to be assembled
- "Zero Inventory or stock less production"

Outsourcing

- The contracting of production and operations to outside that have expertise in specific area.
- To reduce costs by saving on personnel benefits, to reduce personnel, or to be able to re-assign employees to other tasks

Total Quality Management (TQM)

- Long term commitment to continuous quality management, through out the organization and with the active participation of all members at all levels, to meet and exceed customer expectations

Lean manufacturing

- **Gained a competitive advantage**

from the use of fewer workers, a short development time, lower inventories, fewer suppliers, less production space and less investment to produce more models

Computer aided techniques

- Product design and manufacturing have been changing greatly.
- CAD/CAM help engineers **design products much more quickly than traditional method**

Supply Chain Management

- It focuses on the sequence of getting raw materials and sub assemblies through the manufacturing process economically

The End