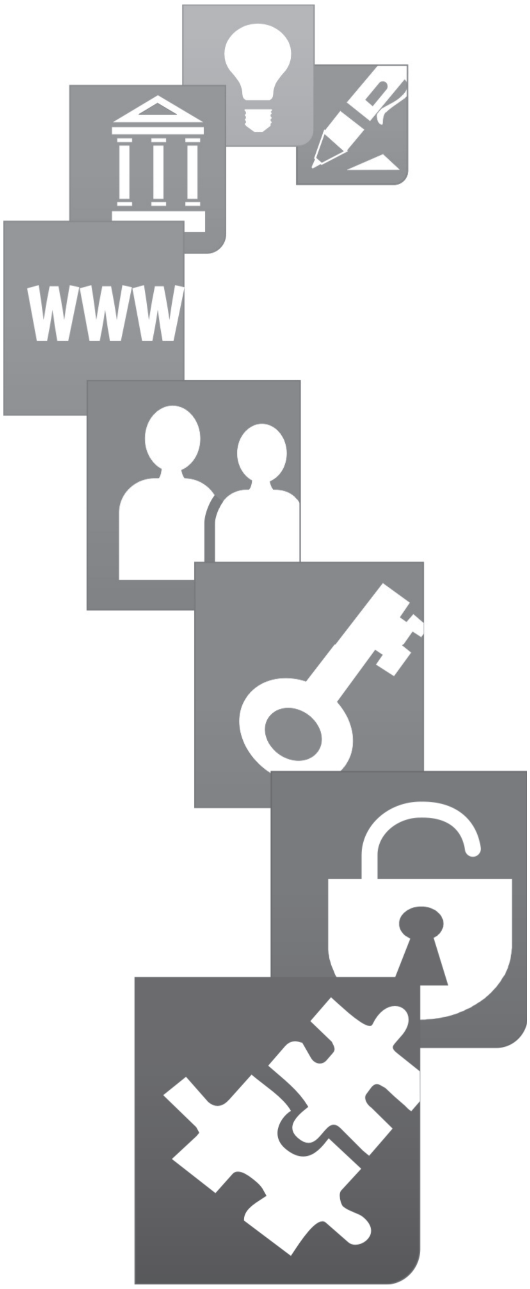
MODULE 3



'What you measure is what you get' (WYMIWYG) and 'What you don't measure you can't control' (WYDMYCC) are traditionally the justification for an organisation to measure the performance of individuals, departments/units and the organisation as a whole in meeting its objectives.

PERFORMANCE MEASUREMENT

Dimensions

- Financial
- Non-financial
- Quantitative
- Qualitative

A course of action over the long term to achieve a specific objective.

Performance measurement covers an organisation's

Short-term performance **operations** → Long-term performance **strategy**

- Individuals
- Divisions/business units
- Organisation as a whole

4 purposes for measuring performance:

1 Implementation and monitoring of strategy

- Part of management control systems.
- Identify problems.

2 Management decision making

- Improve quality of decisions.

3 Motivation of managers/employees

- So that the organisation's objectives are achieved.

4 Signalling to stakeholders

- To gain their support.

Performance:

Discrete event or continuous process of achieving a set of conditions.
Quantitative or qualitative performance.

Performance measurement:

- Monitoring
- Management
- Improvement
- Reporting

Reasons for measurements

5 perspectives: Measured by ratios

- Profitability.
- Liquidity.
- Gearing/leverage.
- Efficiency/activity.
- Shareholder returns.

Traditional financial reporting

- Annual financial statements.
- Consolidated data (even in segmental reports).
- Aggregate data for income/ expenses.
- Comparison with prior year.

MA measurements

- Monthly figures (or weekly/ daily figures).
- Reporting for each business unit or responsibility centre.
- Detailed analysis of income and expenditure.
- Comparison to prior year, budget, and external benchmarks.

Also

- Comparison of budget or standard cost with actual cost.
- Product profitability analysis.
- Customer/distribution channel profitability analysis.
- Multi-period life cycle analysis.
- Value chain analysis.

Performance monitoring not restricted to single periods.

Analysis of whole value chain: strategic performance in comparison with competition.

For example capacity fill (airlines, hotels), monthly sales per square metre (retailers).

Vary between organisations, according to the nature of their business - e.g. measures of capacity utilisation, efficiency.

Non-financial measures

Some aspects of non-financial performance may be difficult to measure, e.g. reputation, customer loyalty.

Choice of measures for reporting also depends on the business model - what factors are considered crucial for adding value / strategic success?

Also brand image, innovation, some aspects of quality.

Performance measurement

Measuring the creation of value	Sustainability	Signalling to investors
Price customer will pay X Cost to provide product/service Y Value added X - Y Add value by adding to the amount customers will pay or by reducing costs	Two meanings of sustainability: 1. Maintaining standards of performance over time (quality, customer satisfaction, profits) 2. Environmental issues: creating a business that can be sustained for the long-term future Triple bottom line reporting (economic, social and environmental performance measures) can be used to report on sustainability	Influencing external decisions ■ Forward goal. ■ Actual achievement. ■ Cautious because information is commercially sensitive. ■ Indicates risk. ■ Need for accuracy.

Value is added for an organisation by reducing costs and controlling costs.

Value is added for the customer by reducing the price or by providing more benefits with no addition to the price.

Creating or maintaining natural capital means taking action to protect the environment and (renewable and non-renewable) scarce natural resources.

The IIRC Integrated Reporting Framework refers to these 'Capitals' as 'stocks of value that are increased, decreased or transformed through activities and outputs.

Sustainability

Ability of an organisation to continue creating value over the long term.

Sustainability depends on more than short-term profitability.

Forms of capital value

Value is created by adding to capital in various forms:

- Financial capital.
- Manufactured capital.
- Natural capital (environmental resources).
- Human capital.
- Intellectual capital.
- Social capital (supportive social infrastructure).

Corporate social responsibility (CSR)

CSR: View that a company has responsibilities to stakeholders other than shareholders.

Companies have responsibilities, as corporate citizens, to society in general.

CSR concerned mainly with:

- Environmental protection.
- Social welfare provision.
- Employee welfare and protection.
- Consumer protection.

Corporate self-interest in sustainability and CSR interests overlap.

Sustainability reports (CSR reports) published annually by many listed companies

Voluntary reporting, additional to annual financial reporting, mainly dealing with social and environmental issues

Triple bottom line reports: a form of sustainability report presenting performance from three perspectives: economic, environmental and social

Intellectual capital can refer to all forms of intangible asset, but particularly value created through innovation – patents.

Human capital refers to the value built up within the work force and experience of workers.

G4 guidelines

Voluntary code to disclose:

1. strategy and analysis;
2. organisation profile;
3. material aspects and boundaries;
4. stakeholder engagement;
5. report profile;
6. governance; and
7. ethics and integrity.

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Accounting information is one of the main sources used by boards to support the governance function

Reporting on corporate governance

ASX Corporate Governance Council *Corporate Governance Principles and Recommendations effective from July 2014*, for listed companies. Include disclosure requirements about corporate governance.	Listed companies are required to apply the recommendations or explain any non-appliance.

AS/NZS ISO 31000:2009 *Risk management — Principles and guidelines*

Five steps:

1. Establish the goals and context for risk management.
2. Identify risks.
3. Analyse risks in terms of probability and impact.
4. Evaluate and rank the risks.
5. Treat the risks using the most appropriate risk management options.

Performance measurement, governance and risk management

Performance measurement is fundamental to helping the board exercise its function of governance by monitoring performance information in terms of:

- Goal achievement;
- Assessing risks; and
- The effectiveness of management controls.

Risk management: an important element in performance measurement. Sets the boundaries of what is acceptable in terms of the risk appetite decided by the board.

Ethics of external reporting

- Risk of misleading, mis-reporting.
- Reporting can be used to send signals, so may be 'political' rather than reliable.

Enron and WorldCom are still notable examples, but not the only ones.

Theories of reporting

Agency theory: separation of owners (shareholders) from control (management, as agents)

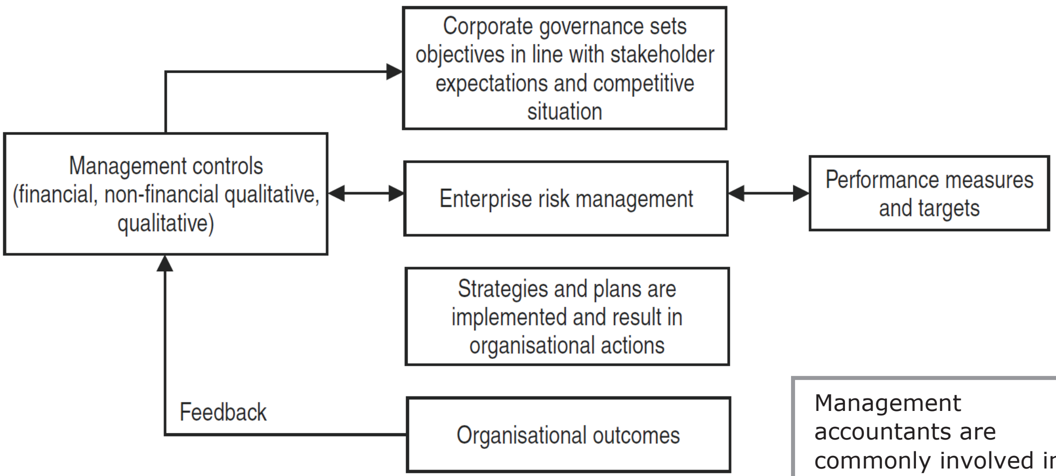
Reporting is a way of making the agents accountable to the owners

Risk of manipulation of reports by management, in self-interest

Contingency theory: There is no universal 'best way' of measuring and reporting performance.

Each organisation should develop a performance measurement system that is best suited to its particular circumstances.

Elements of a managerial control system



Management accountants are commonly involved in risk management processes.

Focus not just on price, because customers will pay for differentiation.

KPIs depend on choice of strategy

Strategy/Porter's generic strategy	Performance measures
Cost leadership	▪ Cost efficiency measures: ▪ Controlling costs, reducing costs, improving efficiency. ▪ Eliminate unprofitable activities.
Differentiation	▪ Quality, uniqueness of product or service. ▪ Customer demand / interest. ▪ Also cost control measures.
Focus	Serving a particular market segment better than competitors
Adding value in the value chain	▪ Keep costs of adding value below the extra price that customers will pay for the value benefit. ▪ Unique distribution channels

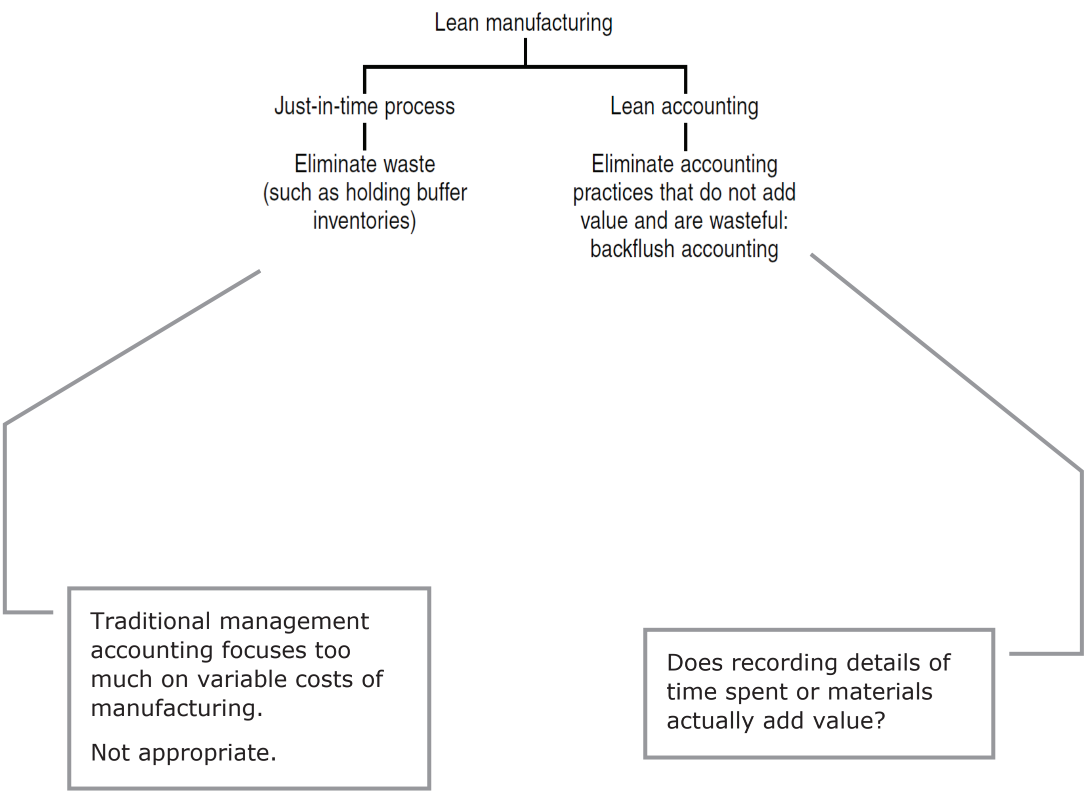
Performance management systems framework 8 elements (Ferreira and Otley, 2009)

1. Vision and mission.
2. Key success factors.
3. Organisation structure.
4. Strategies and plans.
5. Key performance measures.
6. Target setting.
7. Performance evaluation.
8. Reward systems.

All eight elements are needed for an effective system of performance measurement.

Beyond Budgeting movement (Hope and Fraser 2003)

Traditional controls	Beyond Budgeting approach
'Command and control' by head office	Need for flexibility and delegation of responsibility for control
Compare actual against plan	Compare performance against progress towards world class benchmarks
Fixed targets	Use relative goals for continuous improvement
Fixed allocation of resources (set by the budget)	Provide resources as needed
Measure performance as variances from plan	Base controls on relative indicators and trends (non-financial as well as financial measures)



At all levels – business units, products or services, geographical segments.

Both operational and strategic performance measures are needed.

Operational performance	Strategic performance
Need to achieve short-term financial targets to satisfy shareholders Measures may relate to: ▪ Quality. ▪ Dependability. ▪ Speed. ▪ Flexibility. ▪ Cost.	Concerned with sustainable performance over time, taking into consideration: ▪ Strategic goals. ▪ Economic conditions. ▪ Competitive environment. Measures may relate to: ▪ Product life cycles. ▪ Supply chain, value chain. ▪ Market share. ▪ Risk / return trade-off.
Operational performance	**Strategic performance**
▪ Use of **lagging indicators** (historical measures of performance). ▪ Focus is often on short term performance to the exclusion of long term considerations. ▪ Measures may be reported too late for effective control action.	Use of **leading indicators** These provide a better indicator of 'where we are'. For example: ▪ Number of sales calls. ▪ Delivery times. ▪ % faulty items. ▪ Advertising exposures, number of promotion events. ▪ Gross margins (e.g. in national businesses).

These measures can provide a reliable picture of what is happening 'now'.

For example, cutting R&D or advertising spending to improve short-term profits. Cutting capital expenditure.

Determinants are the causes of the end results. Need to measure determinants as well as results.

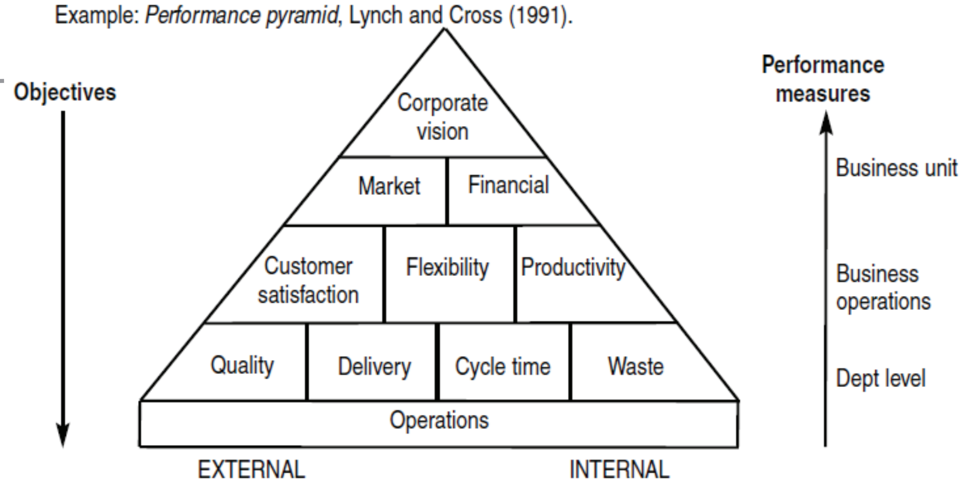
Cause and effect frameworks for reporting performance

Example: *Results and determinants framework,* Fitzgerald et al (1991), Service Industries.

Distinguish between:	
Results	**Determinants of results**
Measures: ▪ Competitiveness. ▪ Financial performance.	**Measures:** ▪ Quality. ▪ Flexibility. ▪ Resource utilisation. ▪ Innovation.

Cascading effect reporting frameworks

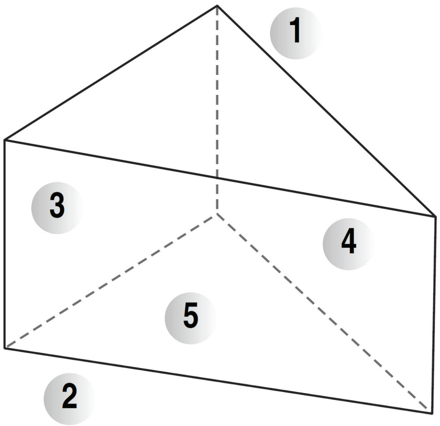
Example: *Performance pyramid*, Lynch and Cross (1991).



Objectives cascade down through the organisation. Performance is measured from operational level up to organisation level.

Each of the five facets has its own measures but the overall focus of the performance prism is on stakeholder satisfaction

The Performance Prism (Cranfield)



1. Stakeholder satisfaction (what stakeholders **want**).
2. Stakeholder contribution (what the organisation **needs** from its stakeholders).
3. The strategies.
4. Processes.
5. Capabilities that an organisation needs to satisfy the wants and needs.

The balanced scorecard (BSC) looks at both internal and external aspects of the organisation. Explicitly links financial and non-financial measures.

It presents a hierarchy: good financial results, caused by happy customers, caused by the organisation doing well what it sets out to do, which constantly improves.

Scorecard emphasises processes rather than departments; supports a competence-based approach to strategy.

Measures need to be mutually consistent and reinforcing. Scorecard must be seen as a whole.

Customer perspective

'How should we appear to customers?' This perspective concentrates on customers' concern with time, quality, performance and service. Example measures would be percentage of on-time deliveries and customer rejection rates.

Business process perspective

'What must we excel at?' This perspective focuses on what the company must be internally to meet its customers' expectations. Control measures will focus on core competences, skills, productivity and cost.

Innovation and learning

'Can we continue to improve and create value?' This perspective is forward looking and concentrates on what the company must do to satisfy future needs. Performance measures include time-to-market for new products and percentage of revenue from them.

Financial perspective

'How do we create value for shareholders?' This is the traditional reporting perspective, but must not be overlooked. Market share and sales growth are included here. Modern measures like value-added and shareholder value analysis should be included.

Possible indicators for balanced scorecard categories:

Customer perspective

- Market share.
- Number of new customers attracted.
- Number of recommendations or referrals.
- Customer satisfaction ratings.
- Customer retention rates.
- Levels of refunds/returns.
- % of deliveries on time.

Business process perspective

- Reduced inventory levels.
- Reduced lead times.
- Delivery dates of new products in line with plan.
- Minimise wastage/errors.
- Reliability and usability (of websites).
- Security of transactions and credit card handling.

Innovation and learning

- New products/processes developed.
- Time to market for new products.
- % of sales from new products.
- Number of new products developed (vs competitors).
- Ideas from employees.
- Reward and recognition structure for staff.

Financial perspective

- Revenue or operating profit.
- Asset utilisation.
- Market share.
- ROI; EVA.
- Cashflow.

Strategic perspective

The other 4 perspectives are articulated to meet the strategic needs of the business, which may be explicitly stated in a 5th category 'strategic perspective'

Also called Learning and Growth perspective.

Any measures must be specifically relevant to the organisation.

Broader template for control.

Strategy mapping and performance measurement

Strategy map
(Kaplan and Norton 2001)

Map of cause: effect relationships

Map of how aspects of performance affect higher levels of performance

Example:

Objective of financial return depends partly on higher market share.

Higher market share depends partly on quality/meeting customer needs and higher revenue per customer.

For each aspect of performance:

- Decide performance measure.
- Set target.
- Allocate budget for achievement.

Monitor. If performance needs to be improved, identify aspect of performance that is the cause and **re-allocate budgets** mid-year.

Differs from traditional approach of fixed annual budgets.

Benefits of balanced scorecard

- Complex information summarised.
- Focus management on most important issues.
- Enables management of under-performance.
- Balances short-term v sustainable performance.
- Limits number of performance measures.

Mapping helps manage balance scorecard KPIs by establishing which ones drive others.

Mapping prioritises scorecard elements and provides focus for management.

Aim of scorecard is to translate mission and strategy into objectives and measures (using the four perspectives).

Note. Kaplan & Norton never intended scorecard to be the only performance measurement system an organisation should use.

Designing a balanced scorecard

1. Consider stakeholders.
2. Express organisation's vision, mission and strategy in a way that has clear operational meaning for each employee.
3. Link mission to departmental or individual objectives (not confined to short-term financial goals).
4. Use scorecard to prioritise objectives and allocate resources to make best progress towards strategic goals.
5. Use feedback on performance to promote progress against the four perspectives.
6. Measures can be **leading** (learning and growth/material process) or **lagging** (customer, financial).
7. Usually has a long-term (3-5 yr) timescale and detailed short-term one (1 yr).
8. Need a balance of:
   – Financial/non-financial measures.
   – Leading/lagging measures.
   – Quantitative and possibly qualitative measures.

Public/not-for-profit sector scorecards

- Multiple stakeholders.
- Multiple objectives.

Enact improvement programs.

Words of warning

Possible problems when applying the scorecard:

- Some measures may conflict – how do you determine the balance which achieves the best results?
- Have to select measures which add value, not just those that are easy to measure.
- Measures have to be developed by someone who understands the business processes involved.
- Will management be able to interpret the figures, or will they just be swamped in a mass of figures? To be useful, measurement needs to initiate action to improve performance.
- There will be a cost involved in measuring the performance of additional processes to those that are currently measured.
- Too much data is available

Levels of balanced scorecard

1. Cascade down from vision, mission, objective at top level to all lower levels. Logical linking.
2. Cascade from innovation and learning
   ↓
   business process
   ↓
   customers
   ↓
   financial

Is there a danger that the measures chosen could be arbitrary?

In practice, do you need more than four perspectives? E.g. scorecard doesn't look at CSR or staff morale (though these perspectives can be added in).

The problem is that the finance department continues to measure and report performance in terms of an out-of-date strategy.

Problems with establishing performance measurements that reflect current strategy objectives
Problem 1 Using out-of-date measurements. The finance department may not learn about changes in strategies or operational plans for a long time after the changes have been made.
Problem 2 Lack of stability in the business environment – economic change, technological change, product innovations, changing customer demand, increasing competition, increasing regulation. These changes affect strategic plans, which must be continually changed.

	Six keys to successful integration of performance measurement with strategy
1	Top management commitment to a unified strategic vision
2	Development of performance measures consistent with this vision: balance short-term/long-term aims; and operational/strategic issues
3	Ensure that allocation of resources is consistent with strategic priorities
4	Ensure that performance measures for teams and individuals are consistent with performance measures for the organisation
5	Integrating all available sources of information into a single suite of cascaded performance measures
6	Using performance measurements as a learning tool as well as a means of control.

	Kaplan and Norton identified **four barriers to the use of performance measurement systems in relation to strategy:**
1	Lack of consensus: different groups pursue different agendas not linked to strategy.
2	Strategy that is not linked to department, team and individual goals.
3	Strategy that is not linked to resource allocation decisions (i.e. where budgetary allocations are historical and not linked to strategy).
4	Feedback to managers that focuses on short-term financial performance rather than on indicators of strategy implementation and success.

A problem is that whereas it is relatively easy to measure performance in relation to short term objectives, it is much more difficult to report on performance in terms of strategy.

Many performance measures can be adopted	
But which are the Key Performance Indicators that link to the Critical Success Factors for achieving strategic goals?	
CSFs (at each level in the organisation)	
	Examples
Input measures	Resources used, money spent
Activity measures	Time worked, deliveries made
Output measures	Goods / services produced Sales revenue
Efficiency measures	Doing things right Doing more with less Labour efficiency, wastage rates
Effectiveness measures	Doing the right thing Doing what was intended Meeting targets
Impact measures	Customer satisfaction
Investment measures	Spending on R&D, capital expenditure

There may have to be a trade-off between efficiency and effectiveness.

Also **equity**: should all customers be treated equally?

Possible equity issue: should all customers be treated equally?

Performance targets should be:

- **S**pecific.
- **M**easurable.
- **A**chievable and agreed.
- **R**elevant.
- **T**ime based.

- They should be **consistent** across the organisation so that all pull together.

They should balance:

- Long term considerations.
- Short term imperatives.
- Conflicting objectives.

Costs and benefits
Costs of producing performance measures should be less than the benefits of having them.

Characteristics of effective performance measures are:

- Valid (accuracy).
- Reliable (consistency).
- Easy to understand (clarity).
- Timely (received in time to take suitable action).
- Accessible (by all authorised individuals).
- Controllable (measure aspects of performance that management can control).

These are criteria for assessing whether performance measures are appropriate.

Performance measurements used by an organisation are influenced by:

Culture

(for example, culture of accounting controls, culture of short-term profits).

Performance measurement systems also reflect the culture of the organisation and its senior management.

Power centre in the organisation

- Accounting and finance?
- Engineering?
- Sales and marketing?

Common areas:

- sales revenue and profitability
- products and services
- pricing structures, fees and overheads
- KPIs
- quality control processes
- customers
- staff turnover.

Types of benchmarking

Internal – Comparing one operating unit or function with another in the same industry.

Industry – Comparing with average or industry best practice.

Advantages	Disadvantages
☑ Provides basis for establishing targets of performance	☒ Implies one best way of doing things
☑ Sets targets that are achievable	☒ Yesterday's solution for tomorrow's problem
☑ Can be a spur to innovation	☒ Catching-up exercise
☑ Undertakes processes better	☒ Depends on accurate information about comparator companies – can be difficult
☑ Avoids others' mistakes	☒ Requires internal/external participation
☑ Instills culture of continuous improvement	☒ Difficult to determine reasons for differences
	☒ Comparing apples and pears?

Benchmarking

The establishment, through data gathering, of targets and comparators through whose use relative levels of performance (and particularly areas of underperformance) can be measured. By the adoption of identified best practices, it is hoped that performance will improve.

Control cycle with benchmarking

1. Decide what to benchmark
2. Identify benchmarking partners and sources
3. Study the processes in your own organisation and gather information
4. Obtain benchmarking data
5. Analyse the information and understand it relative to the benchmark
6. Learn and implement changes where necessary

A process that can and needs to be changed or a measure that needs to be achieved.

Data can be obtained via third party organisations or secondary sources.

Performance measures should be used to improve performance	
Targets	Target set for each performance measure. But how easy is the target to achieve? Consider the costs of having higher performance targets with the incremental benefits. Need to balance different targets (often in conflict)
Trends	Monitoring performance over a period of time
Benchmarks	Compare performance against a benchmark

Three approaches to measuring performance.

Organisational learning and knowledge management

- Continuous improvement.
- Increase competitive advantage.
- Organisational success.
- Organisational learning processes:
  - Of knowledge at individual levels
  - Within organisation.
- Knowledge management:
  - Of knowledge at the organisation level
  - By the organisation at a risk level.

Dysfunctional consequences of performance measures	
Tunnel vision	Focus on the measure to the exclusion of all else
Sub-optimal behaviour	Not doing more than needed to meet the target
Substitution	Not putting effort into activities that are not measured
Fixation on measure	Focusing on the measure itself, not the underlying performance it is intended to measure
Gaming and bias	Making performance seem better than it is
Smoothing reported performance	Removing fluctuations between reporting periods

Performance measurement systems can have unintended and adverse consequences for management behaviour.

'What you measure is what you get': WYMIWYG.

Issues in performance measurement

Ideally **performance measures** should reward behaviour that maximises the corporate good. But:

- Management/staff will concentrate only on what they know is being measured.
- Good performance that satisfies management's/staff's own sense of what is important will not necessarily work towards the corporate good (problem of **goal congruence**).

Problems in measuring managerial performance

- Segregating managerial performance from the economic performance of the department/division/team.
- Including in performance measures only those items directly controllable by the manager in question.
- Timing:
  - Not too long after performance (that is no automatic annual bonus).
  - Not so soon after performance that risk-taking is encouraged.
- Cultural differences:
  - Power distance, so manager-led, not a team effort.
  - Individualism vs collectivism.
  - National cultures.

It is easy to assess a manager as an employee (eg days absent) but ability as a manager requires assessment in relation to area of responsibility.

But:

- There are different degrees of controllability.
- There are reasons for holding managers accountable for factors beyond their control.

So a matter of judgment by top management.