CHAPTER 10 - Multidimensional performance management

Contents

CHAPTER 10 - Multidimensional performance management

10.3 A multidimensional approach to performance management

Traditional performance measurement tended to focus on financial, historical, and internal aspects of the performance. Multidimensional performance measurement systems encourage the inclusion of financial and nonfinancial, internal and external, and quantitative and qualitative measures.

10.3.1 A balanced scorecard

Active reading. Note the four perspectives suggested by Kaplan and Norton and the four elements of each perspective. Also, note the developmental aspect of the balanced scorecard in that targets should encourage improvement and initiatives to invite innovation. Also, note that as with any framework, there are benefits and drawbacks.

Video link Performance management and the concept of the balanced scorecard

https://www.youtube.com/watch?v=CR4oP_TOvqo

A framework known as the balanced scorecard was developed by Kaplan and Norton (1996) that enables organizations to think about performance monitoring from several different perspectives other than just financial. The organization's vision and mission are the heart of the framework, and thus all performance measures stem from what the organization is seeking to do in business terms. It provides a means to translate the vision and mission into a set of performance measures that facilitate the implementation of the organization's strategy. The interlinkages between performance measures can also be highlighted, which aids the understanding of the implications of new or revised strategies.

The four perspectives

The primary framework suggested includes viewing the organization from four main perspectives.

- Customer perspective (how do customers see us?)
- Internal business process perspective (what must we excel at?)

- Learning and growth perspective (how to improve and create value? How will we ensure that we are in business in the future?)
- Financial perspective (how do we look to our shareholders?)

Organizations are encouraged to design perspectives that suit their specific organization and should not feel restricted to the four perspectives noted above. For example, a supermarket may consider performance measures in the form of financial, customers, suppliers, operations (business processes), community, and learning and growth. The focus is to create a scorecard that monitors perspectives that are important to the achievement of strategy, and that includes financial and nonfinancial, internal and external focus, quantitative and qualitative, and short-term and long-term measures. The use of lagging (backward-looking) and leading (forward-looking) performance measures is also encouraged.

Other authors, such as Atkinson et al. (1997), suggest that a stakeholder approach can be taken. If an organization takes into account the stakeholders in making strategic decisions, and each stakeholder has different expectations, it follows that various measures of performance will need to be used to know that an organization is meeting these expectations. Each stakeholder will judge the success of the organization by different criteria.

Objectives and measures

Kaplan and Norton suggest that four elements can be considered under the various perspectives adopted.

- Objective or goal
- Measure
- Target
- Initiative

The objective should be derived from the organization's strategy. The measure is derived from the objectives and should provide the answer to the question — what needs to be measured to know whether the objective has been met? It is sometimes overcomplicated when, in practical terms, using the most straightforward measure is the most appropriate. Deciding the performance measures has implications for the information systems. The information needs to be available to measure the degree to which the objectives have been achieved. Creating a sophisticated form of measurement increases the costs associated with data collection and can result in managers not really understanding how the performance can be improved. The measure needs to aid the understanding of whether the strategy is working.

As a simple example, suppose an objective is to increase sales revenue. It can be measured by comparing sales revenue last year with sales revenue this year. The measure does not, however, indicate why the increase has happened. It could simply be because of price increases. But suppose the intention was to achieve this by increasing the customer base to attract and retain a higher number of customers. A nonfinancial measure of comparing the number of customers last year with the number of customers this year helps to determine this. However, increasing the number of customers does not necessarily mean that sales revenue will increase.

The sales revenue is also influenced by the volume of purchases made by each customer, so this could be linked to an objective and measure to increase the average spend by individual customers over that achieved last year. Sales revenue is also linked to customer satisfaction levels (a qualitative objective) and customer retention rates. The qualitative objectives also need to be quantified, for example, to increase customer satisfaction so that ninety-five percent of customers are happy this year.

The design process can be a valuable tool in gaining a thorough understanding of how the business works and actions that impact on more than one perspective. Kaplan and Norton were keen to stress that measures should link together and that the use of redundant measures that do not help the organization achieve its objectives should be avoided. It is, therefore, essential to understand the interlinkages between objectives and measures.

For example, suppose a supermarket has several checkouts that can be opened to service customers. During quiet periods, the supermarket does not want staff members occupying checkouts that are not being used, and conversely, in busy periods, a build-up of queuing customers is undesirable. Therefore, an objective may be to achieve optimum utilization of checkouts. This objective could be monitored by monitoring average queuing time at various times during the day, and the usage of checkouts. This impacts on customer satisfaction levels and possibly customer retention, as well as the utilization of staff. It has implications for the customer perspective and the business processes as well as staff training and employee morale. Hence there is a need to understand the interlinkages between the different perspectives, as shown in Figure 10.1. The process can be expanded to include all performance measures to create what Kaplan and Norton refer to as a strategy map.
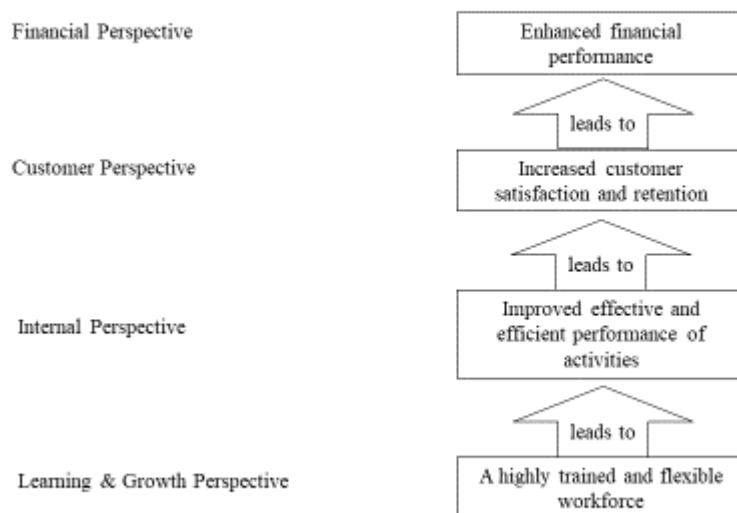

Figure 10.1 Linkages between scorecard perspectives

Targets can be used as a means of improving performance year on year and can form part of a performance management system at an individual level. Everyone in an organization has objectives, for which targets can be established.

The initiative provides the opportunity for the organization to ask, is there anything that can be done differently to aid the achievement of the objectives? It means that the balanced scorecard can be used as a developmental tool. It stops performance targets being rolled over each year without challenging the status quo.

10.3.2 Critical success factors and interlocking scorecards

Another concept that is important in performance measurement is identifying the critical success factors (Figure 10.2).
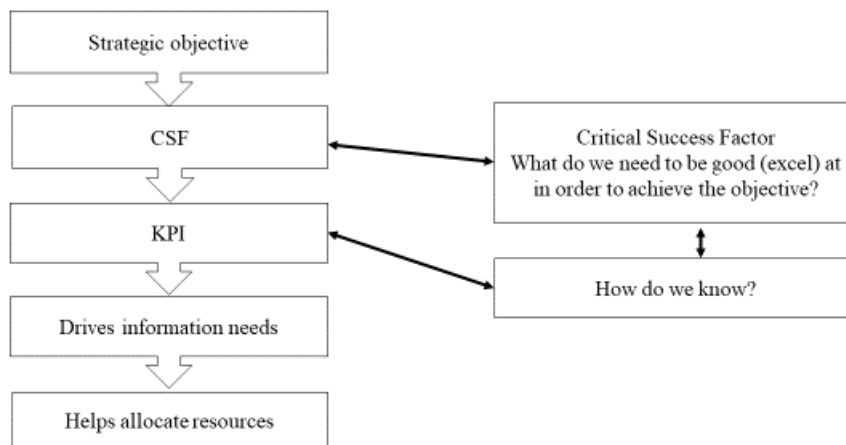

Figure 10.2 Critical success factor

A critical success factor is addressing the question, what does the organization need to be good at to achieve its objectives? The next logical question is, how does the organization know that it is good at what it needs to be good at? This helps to determine the key performance indicator that, in turn, helps to drive the information needs, that is, understanding the information required to monitor the achievement of strategy and, in turn, aids the allocation of resources to the areas of the business-critical for success. This process also ensures that the right aspects of the business are being measured and can stop information overload.

Developing the concept of critical success factors means that the senior management of an organization does not need to monitor every single performance measure but can focus on the critical success factors. This is because they delegate responsibility to lower levels of the organization for more detailed aspects of the business operations. These tiered levels of management can have their own balanced scorecard so, instead of one organizational scorecard that would be difficult to manage, a series of nested scorecards can be created and monitored

at different levels of responsibility. The key is ensuring that employees at all levels are aware of how their role fits into the overall scheme of things. It is suggested that the balanced scorecard, and resultant strategy map indicating the linkages between the perspectives, can be used as a communication tool to ensure employees at all levels understand the organization's strategy and their role in its achievement.

There can be some difficulties with the balanced scorecard in that establishing too many measures can confuse managers, and the strategic focus can be lost. The behavioral implications of introducing a balanced scorecard also need to be considered as employees can become concerned when performance is being monitored closely. However, the process of introducing the approach should be inclusive and, if done with the involvement at all levels, can be positive in that all employees understand the organization's strategy.

10.3.3 Example of objectives and measures in a balanced scorecard

When using a balanced scorecard approach, the perspectives need to be tailored to the organization. The Royal Botanical Gardens Kew, London, is an organization that raises most of its funds from philanthropic donations, commercial ventures, and entry fees. The charity The Foundation and Friends of the Royal Botanic Gardens Kew support the organization from fundraising activities, but RBG Kew also receives government grants to support its work. Located toward the edge of the city, the Gardens are regularly visited throughout the year by many local families and are an internationally well-known tourist attraction.

Despite charging admission, it is one of the top five visitor attractions in the country. Every year it answers many thousands of inquiries from Universities and research establishments, including pharmaceutical companies from all over the world and charges for advice and access to its collection. Inquiries can range from access to the plant collection for horticultural work, seeds for propagation, or samples for chemical analysis to seek novel pharmaceutical compounds for commercial exploitation. There is also a thriving education program that provides a range of educational services promoting horticulture. It is also possible to hire the use of the facilities for occasions, such as weddings and other events, such as conferences and so on.

The Key strategy document for 2020/21 published on the website states (https://www.kew.org/sites/default/files/2019-03/corporate-strategy-0417_0.pdf):

> Royal Botanic Gardens, Kew's mission is to be the global resource for plant and fungal knowledge, building an understanding of the world's plants and fungi upon which all our lives depend. We use the power of our science and the rich diversity of our gardens and collections to provide knowledge, inspiration and understanding of why plants and fungi matter to everyone. We want a world where plants and fungi are understood, valued and conserved – because all our lives depend on them.

> The 2020/21 document includes the following priorities initiatives:

1. Delivering the Science Strategy and curating the collections
2. Maximizing the potential of the gardens
3. Growing commercial income
4. Creating outstanding learning and outreach propositions
5. Engaging the public and key stakeholders in RBG Kew's importance and impact
6. Growing philanthropic support and Friends income
7. Achieving success through our people
8. Improving the built and technological infrastructure

The following objectives and performance measures illustrate how the scorecard can be tailored to the individual organization. Targets are not provided, but the management teams would set sensible, achievable targets. The objectives and target together make the objectives SMART (specific, measurable, agreed, realistic, and time-bound) in that the target would quantify the objective. Initiatives would also be developed that would help the achievement of the objectives.

The illustration uses five perspectives: scientific and conservation community perspective (customer), public amenity and education perspective (a different customer), internal perspective including own research projects, learning and growth, and the financial perspective.

Note how simply some of the measures are expressed and that some objectives have more than one measure that helps to assess if the objective has been achieved. There is often a tendency to make the measures too complicated when simple is best. It is also possible, and often desirable, to break the objectives down into smaller objectives targeted at specific areas of the business with managers who have particular responsibilities in the form of nested scorecards.

Table 10.1 illustrates the type of performance measures that could be used for the Royal Botanical Gardens – Kew.

Table 10.1 – Objectives and performance measures suitable for the RBG – Kew.

Potential objectives	Performance measures
Scientific and conservation community perspective (Customer)	
To increase the number of publications in high-quality journals	Number of papers published/presented at conferences
To provide an improved service to the scientific community	• Number of enquires successfully answered • Number of new projects supported • Number of completed projects • Number of new species successfully identified and cataloged. (As this depends on the new species discovered, it

	might be better to use a success rate such as 100% of new species presented for classification successfully cataloged.) • Number of days to update new species into manuals for plant identification
To improve access to collections	• Number of online inquiries, live visits
Public amenity and education perspective (a different customer)	
To increase the number of public visitations	• Number of visitors to gardens and educational events
To increase the number of students undertaking a formal course of study	• Number of new students • Number of successfully completed courses • Number of new courses offered • Number of attendees on training days for teachers and study days for children.
Internal perspective including own research projects	
To undertake scientific research projects that aid plant conservation	• Number of research projects undertaken, successfully completed, written up, and published.
To increase the number of items in the collections	• Number of items added to collections in the year. By collection and by plant type • Number of endangered species saved or reintroduced successfully to natural habitats during the year. (note: definition of "saved" is required to make this measurable, i.e., may be measured over five years). • Number of species transferred to other botanical centers to ensure the preservation
To increase the volume of literature held for use by researchers (internal and external)	• Number of items held in the library.
To improve the level of service from support functions during the year	• Response times to request for support • Activities completed that relied on support activity, e.g., educational program launch. • Number of events catered for / revenue raised from catered events
To increase the accessibility of collections	• Number of collections accessible by scientific community/public

To retain staff employees and volunteers	• Staff and volunteer retention rate
Learning and Growth	
To increase the number of international partnerships	• Number of new partnerships by geographic location, number of lost or dissolved partnerships • Volume of activity between partnerships conducted during the year (exchange visits, or other activities as appropriate)
To improve the effectiveness of communications to attract visitors, donations, etc.	• Number of new media outlets introduced in the year • Number of hits on web sites by page/area • Number of people aware of the work of the RBG – Kew
To achieve 100% capacity utilization of training facilities during the year	• % Capacity usage of the training facility
To increase the number of collections that are available digitally	• Number of collections digitally cataloged.
Improve training of staff	• No of effective training days achieved
To attract new researchers to work with the RBG – Kew	• Number of new researchers /collaborations in year
Financial perspective	
To operate on a financially sustainable basis	• Expenditure report and surplus/deficit in the year
To increase revenue from sources other than the government grant	• Number of successful events held • Number of hiring's • Revenue generated from items sold through retailing • Number of new recruits to the Foundation and Friends RBG - Kew • Number and size of donations from individuals and corporate

A draft strategy map is shown in Figure 10.3. The map would be refined via discussion and testing to make sure that all the measures aided the achievement of the strategy.
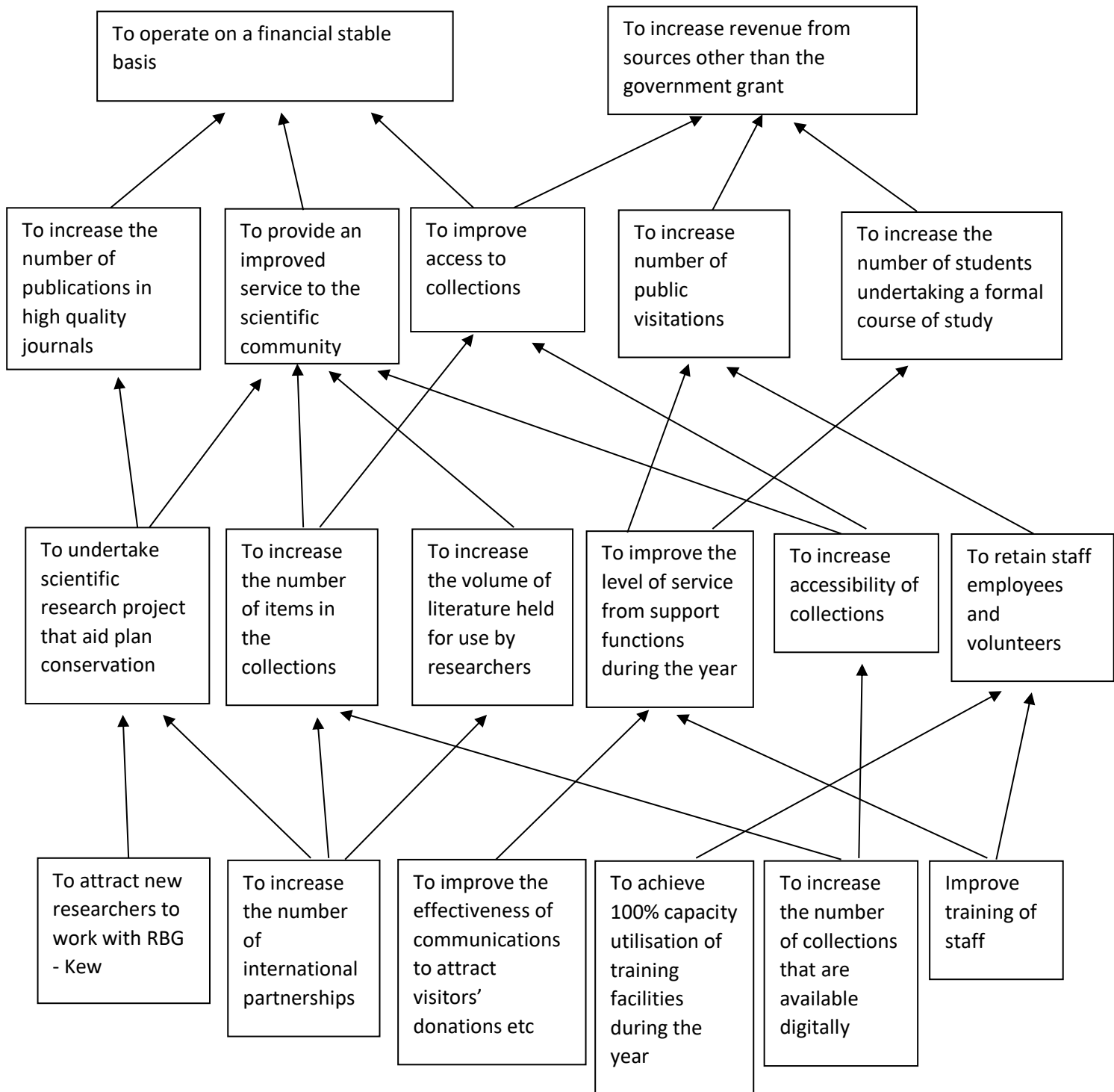
Figure 10.3 Draft strategy map for RBG Kew

Learning activity. Think of an organization with which you are familiar and construct a balanced scorecard with at least two objectives in each perspective, and associated performance measures. Do not feel obliged only to use the four perspectives suggested by Kaplan and Norton if you think that different perspectives are important.

10.4 Performance management in service organizations

> **Active reading.** Note that financial performance is the result of the strategy. It is the determinants where action is required.

An approach for performance measurement in service sector organizations was put forward by Fitzgerald et al. (1991) and highlights that the traditional approach of monitoring only the financial perspective is in danger of focusing on the results and ignoring the determinants. The multidimensional approach to avoid this is shown in Figure 10.4.
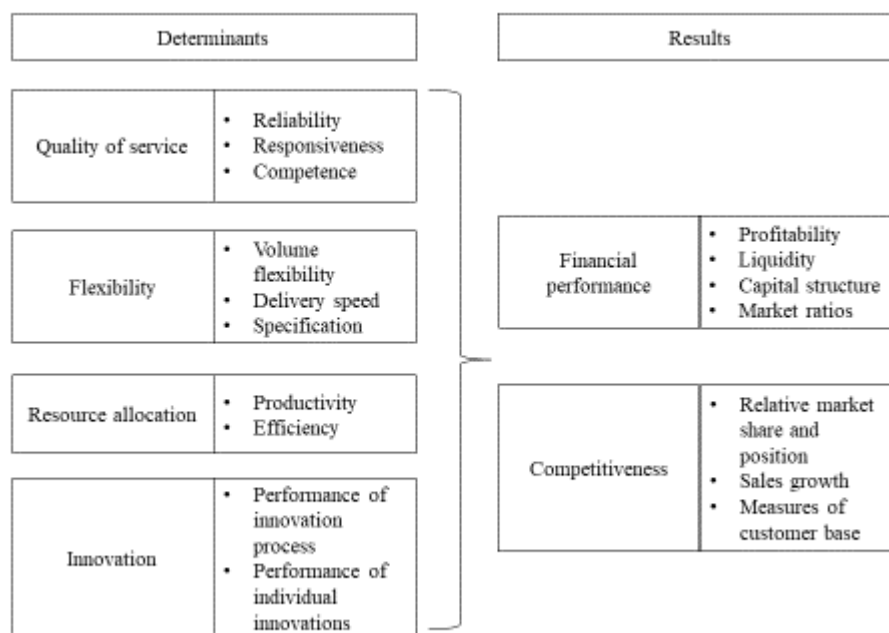

Figure 10.4 Multidimensional approach to performance management for service organizations

The secret to performance measurement is to gain an understanding of what determines success. The understanding can be built up over a period via the use of a range of multidimensional measures. Performance measurement, however, is only part of the broader concept of performance management. Therefore, for the measurement to mean anything, the results must inform management such that it stimulates appropriate actions.

10.5 Simons' levers of control

> **Active reading.** Note that the financial controls, such as budgetary control, would fall within the diagnostic category. Beyond budgeting, however, might include elements of interactive controls.

Simons' (1994) levers of control are often used as a framework for categorizing the type of controls that an organization can use.

- Diagnostic use of control systems—ex-post monitoring, corrective action, and management by expectations
- Interactive use of control systems—frequent use and dialog to stimulate organizational learning and change, for example, meetings and briefing sessions
- Belief systems—communication of core values related to sustainability to trigger a change in mindset and support organizational change processes (for example, mission statements)
- Boundary systems—restraining organizational members from entering in an extreme zone (for example, code of conducts, anti-bribery guidelines)

In practice, an organization will use a range of controls. However, due to its culture, it might use a predominance of one of these; for example, a highly controlled bureaucratic organization might use the prevalence of diagnostic controls. In contrast, an organization run as a meritocracy that gives employees more autonomy, and encourages an open exchange of information and ideas, might use a predominance of interactive and belief controls. Therefore, the culture of the organization, as well as the strategy, has an impact on the type of controls that would be adopted. This tailoring of control implies that the design of management accounting systems can help to support and develop the culture of the organization.

10.10 Behavioral aspects of performance management

Active reading. Note the significance of considering the behavioral implications when establishing performance measurements.

An aspect of performance management that we should not forget is that organizations are made up of people, and performance measurement may be subject to behavioral implications, or behavioral displacement. For example, there can be a tendency to depress bad news and focus on the positive aspects of performance or manipulate performance measures to look good.

Behavioral aspects occur in setting, measuring, and interpreting performance targets. For example, creating slack resources within the budget or setting soft targets. In situations where it becomes known that senior management will ask for the expense budget to be reduced, there can be a tendency to inflate costs knowing that it will be cut later. It is essential, however, that the managers responsible are actively involved in the budget and target-setting process, in line with strategic objectives, as this will ensure their buy-in to the targets set.

Managers may undertake gaming activities; that is, focus on those areas they know are being monitored closely to the detriment of other areas. In some instances, this can lead to suboptimal behavior as managers pursue a narrow range of objectives. Sub-optimal behavior can occur in situations where managers' focus on local objectives, such as their divisional return on investment target, perhaps where this is linked to a personal bonus. Behavior such as this could be detrimental to the organization as a whole.

Presenting a biased message can occur in reporting performance or interpreting results, where information is presented in a positive light by filtering out bad news and focusing on the

message the recipient wants to hear. Care must be taken in choosing the performance measures as this can also create sub-optimal behavior. For example, in health care, focusing on reducing bed occupancy rates may encourage hospitals to send patients home earlier than usual, which reduces the days a patient occupies a bed. However, if the patient is readmitted later due to becoming ill again, this is a new admittance, and the bed occupancy for the second admittance starts from zero. Therefore the occupancy rates can remain artificially lower, but the patient recovery takes longer.

Behavioral aspects can emerge throughout the whole performance management process, hence their significance in the design and operation of management control systems. The best type of performance measure is one that is understood by all involved, is seen to be fair, and is equitable and can be monitored cost-effectively. When performance is linked to reward systems, it can present problems if seen to be unfair. When linking reward and pay, there are several roles that the performance measurement system performs.

10.10.1 Roles of performance measurement in reward systems

Informational

Informational, that is, the performance measure used sends a signal to employees that management is focusing on an aspect of performance, and employees will direct their efforts toward ensuring that performance is excellent.

Motivational

Motivational, that is, the measure used acts as a motivator for employees. However, note that performance requires more than just motivation; for example, it also requires the resources to do the job. Pay is frequently linked to performance and is intended as a motivator. Not all employees, however, are motivated by money to the same extent, and motivation is not the only element of excellent performance. For example, an employee may be highly motivated, but if they do not have the resources to do the job, then any amount of motivation will not help.

Attracting personnel

Regards can be personnel-related in that the performance measures used can attract certain types of an employee to the organization. For example, if a sales force is paid a low salary but a high performance bonus it will attract people who are confident of their ability.

Non-control purposes

Rewards can be used for non-control purposes. For example, where pay is linked to organizational performance, perhaps via a "share-of-profits bonus scheme", the amount of the

bonus, and hence the amount of cash required, will be less in poor performing years and can smooth remuneration payments to match the earnings of the organization.

The key to performance management systems is to match the objectives of employees with those of the organization, which will aid in the implementation and achievement of the strategy.