OPTIMAL OBJECTIVE ACHIEVEMENT VIA BALANCE OF CONTROL

by

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Pectora roborant cultus recti

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DECLARATION

Hereby I, Gideon Johannes Pienaar, declare that this assignment is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not previously in its entirety or in part been submitted at any university in order to obtain an academic qualification.

G.J. Pienaar October 2002

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ABSTRACT

Organisations need assurance that strategy is executed as planned and objectives are met, when matching organisational capabilities with the opportunities in the market. Control can give management such an assurance and is ultimately the responsibility of management. It is not however only management that may be interested with proper control in an organisation, all stakeholders wants some degree and form of control to safeguard their interest in an organisation.

Management has a daunting task on their hands to ensure an organisation achieve its objectives as effectively, efficiently and economically as possible, while keeping all stakeholders informed and happy. Vast amounts of resources will be used to achieve objectives and management needs to strike a balance between protection of these resources and empowering employees to utilise these resources. A balance between the control systems over the different resources must also be in place. Management needs to have a balanced focus regarding the measurement of activities and behaviour relating to specific objectives, due to the time, cost, quality and innovation effects of control systems. A balance between costs and benefits of control systems must also be obtained.

Control needs to be integrated as part of the management process to ensure optimal achievement of objectives. A holistic approach towards control and the usage of a sound control environment combined with relevant, organisational specific control systems that are flexible can ensure balance of control. All employees of an organisation have control responsibilities and must give inputs in the control process. Employees must view control as an aid and not as a stumbling block, when trying to achieve objectives. Management must be empowered and empower employees to have the relevant knowledge regarding control and control systems that can be used, when to use them and how to use them. These control systems must be continuously improved to ensure sustained, optimal achievement of objectives.

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OPSOMMING

Organisasies benodig versekering dat strategie uitgevoer word soos beplan en dat doelwitte bereik word, wanneer die organisasie se vermoë gepas word teen geleenthede in die mark. Beheer kan vir bestuur so 'n versekering gee en is eintlik bestuur se verantwoordelikheid. Dit is egter nie net bestuur wat belang kan stel in voldoende beheer nie, maar alle belanghebbers soek 'n mate en vorm van beheer oor 'n organisasie, om hul belange te beskerm.

Bestuur het 'n uitdagende taak op hande om te verseker dat doelwitte doeltreffend, doelmatig en ekonomies bereik word, terwyl alle belanghebbers ingelig en gelukkig gehou word. Groot hoeveelhede hulpbronne word gebruik om doelwitte te bereik en bestuur moet 'n balans verkry tussen die beskerming van hulpbronne en die bemagtiging van werkers in die aanwending van die hulpbronne. 'n Balans tussen die beheer stelsels oor die verskillende hulpbronne moet ook in plek wees. Weens die tyd, koste, kwaliteit en innovasie effek van beheer moet bestuur 'n gebalanseerde fokus hê rakende die meting van aktiwiteite en gedrag betreffende spesifieke doelwitte. 'n Balans tussen die kostes en voordele van beheerstelsels moet ook verkry word.

Beheer moet 'n ge-integreerde deel van die bestuursproses wees om optimale doelwit bereiking te verseker. 'n Holistiese benadering rakende beheer en die gebruik van 'n voldoende beheer omgewing, gekombineer met relevante, organisasie spesifieke beheer stelsels wat buigsaam is, kan balans van beheer verseker. Alle werkers in 'n organisasie het beheer verantwoordelikhede en moet insette verskaf in die beheer proses. Werkers moet beheer as 'n hulpmiddel ag en nie 'n struikelblok nie, wanneer doelwit bereiking nagestreef word. Bestuur moet bemagtig wees en werkers bemagtig om oor die nodige kennis rakende beheer en beheer stelsels te beskik, watter beheer stelsel gebruik kan word, wanneer om dit te gebruik en hoe om dit te gebruik. Die beheer stelsels moet aaneenlopend verbeter word om volgehoue, optimale doelwit bereiking te verseker.

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CHAPTER 1
INTRODUCTION AND GENERAL CONTROL ISSUES

1.1 Introduction and background

Control in any organisation is essential for optimal objective achievement and for the organisation as a going concern. This is high lighted by the amount of fraud in the public sector, fraud in the private sector such as the LeisureNet Group (Hasenfuss, 2002: 11; Du Toit, 2002: S 1), organisations that was deemed to be profitable and then suddenly file for bankruptcy such as Enron in the United States (Eisenburg, 2002: 35-37) and the financial troubles of the subsidiary of ABSA, UniFer in South Africa (Basson, 2002: 8-10; Theobald, 2002: 42-43). In any organisation control is necessary, but control has cost, quality, time and innovation implications and therefore a proper balance between the empowerment of employees and the relevant control in an organisation needs to be in place.

To ensure that organisations reach their objectives efficient, effective and economically, managers need to plan, organise, lead and control the organisation, related systems and resources (financial, human, physical and information). These four functions of management are inter linked and entail good co-ordination. Without the necessary controls in place various intentional and unintentional irregularities may occur and the objectives will not be met as efficiently as it was intended to.

To ensure the required level of customer satisfaction organisations need to be willing to endure certain costs to ensure the product or service is of the expected quality. The costs to achieve these objectives must be carefully managed to keep the long-term cost of control at a desirable level and in balance with the value from control. Good management and a balance between quality and the cost of control are necessary to ensure a competitive edge. The costs of the control must not be more than the value thereof to the organisation and customer. The cost of control can be divided into

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prevention costs, appraisal costs, internal failure costs and external failure costs (Oakland & Sohal, 1996: 115-117).

The control system must not cause unnecessary time delays in the fast changing business environment. It must be able to adapt to new developments and the expectations of managers. Controls need to change as objectives and priorities change. The control system must be specific and simple enough to ensure a continuous flow of work.

In everyday life a balanced lifestyle is advocated to ensure good health. In organisations a balanced approach towards control and objective achievement may be necessary for long-term success. Such a balanced approach towards control may include a balance between the costs and value of control systems, a balance between operational efficiency and the appropriate protection of resources, a balanced focus between the control over resources and a balance between stability and optimal objective realisation.

1.2 Purpose of study

The purpose of this study is to assess the necessity of having balance of control in an organisation and to formulate methods management can use to obtain balance of control in an organisation to optimally achieve overall objectives.

1.3 Method of research

In order to realise the purpose of the study the collection of data will be done by critically scrutinising primary and secondary sources and will be primarily a literature study complimented by limited empirical research. Books, magazines, journals, articles, unpublished works, and internet websites relating to the subject were scrutinised and relevant information were used in the study. Some primary data were obtained through various informal personal and telephonic interviews with managers and auditors regarding control matters. This includes visits to the Internal Audit division of the South

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African National Defence Force (SANDF) and policy making departments. These interviews did not require a formal questionnaire, but merely a discussion process.

1.4 Scope of the study

To realise the purpose of the study, the scope of the study includes the following:

- The first chapter gives an overview of the general control issues in organisations including the importance of control, the control process, how control fits into the business system, the types of control, the methods of control, internal control, qualities of effective control systems and ways to overcome negative reaction towards control.
- Chapter Two investigate the control over the four resources used by organisations to achieve the overall objectives and the balanced focus necessary when utilising the resources.
- Chapter Three assess the costs of control and includes the amount of control by addressing the economic and behavioural aspects regarding control, the general costs of control and the relevant financial and non-financial costs of control. It is necessary for management to know all the relevant costs involved with control systems to make informed decisions regarding the amount of control.
- Chapters Four assess the value of control systems and includes the general value of control systems by investigating the determination of value and assessment of non-financial benefits of controls, the investigation of risk management, assessing the influence, prevention and detection of fraud and corruption and important role of corporate governance in organisations.

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- Chapter Five investigate current management systems used by management to optimally reach overall objectives to assess the relevance thereof as ways to obtain a balance of control. This chapter includes the cost-benefit analysis, total quality management, strategic control points and the balanced scorecard.

- This study is concluded in Chapter Six with a summary, conclusions and recommendations. It is suggested that the recommendations can be useful for organisations to optimally achieve overall objectives.

1.5 Relevance of control

1.5.1 Control defined

According to Robbins and DeCenzo (1995: 345) control can be defined as the process of monitoring activities to ensure they are accomplished as planned, to correct significant variations and improve current systems. According to Smit and Cronjé (1992: 426) control relates to the influence of the behaviour of individuals in the course of activities.

All managers and employees should be involved in the control function regardless if systems are functioning correct or not. Managers will not really know if their department performs up to standard if they have not evaluated activities and compared the actual performance with the standard. When controlling activities a responsible employee ensures that activities proceeds as they are suppose to and the objectives are met. The main objective of a control system is to ensure the goals of the organisation are met in the way management intended it to do and although control is seen as the final step in the management process, control starts already during the planning phase. The four management functions (planning, organising, leading and control) are inter-linked and necessary for effective management. The best plans can be formulated, the best structures designed and people can be motivated to attain objectives, but activities and behaviour may not go according to plan and objectives will not be reached if the proper

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1.6.1 Step1. Set objectives and standards

Planning and control cannot be separated. Part of planning involves the development of controls. Setting of objectives is the starting point for planning and control. Setting objectives and standards is part of the input process and ensure that managers have preliminary controls in place (Schermerhorn, 1999: 182-183; Lussier, 2000: 490). The objectives set by management must be SMART (Sims & Smith, 2001: 35):

- Specific. The objective must be unambiguous.
- Measurable. The objective must be set as a quantity.
- Attainable. The objective must be within reach. Set it high enough to encourage more effort that will lead to improved productivity.
- Relevant. Objectives must relate to the mission of the organisation.
- Time. A completion date must be set.

Standards are set and used to measure if objectives and the level of excellence required are met. According to Schermerhorn (1999: 182) two types of standards are set:

- Output standards. Output standards measure outcomes in terms of performance quantity, quality, cost and time.
- Input standards. Input standards measure the effort expected to complete a task.

It is vital that standards are set as realistic as possible or deviations from the standard will be meaningless. According to Lussier (2000: 490-491) standards must measure the levels of performance in the following areas:

- Quantity. This includes for example the amount of units to be sold or hours of service rendered.

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- Quality. This states how well a job needs to be done and the amount of faults that will be acceptable in the beginning and later as the learning curve effect starts.
- Time. Certain tasks will be given a time range in which it must be completed.
- Cost. It must state the costs allowed to complete a task. Some production departments will use budgets while other's use cost accounting methods.
- Behaviour. This relates to what employees may and may not do. Policies and procedures in organisations can ensure that standards are set. In the SANDF Standing Operating Procedures (SOP's) are used to regulate performance and behaviour to ensure objectives can be met. A Code of conduct can be useful in regulating behaviour and to give guidelines to employees.

1.6.2 Step 2. Measure performance

To ensure that the set objectives are met and to improve performance an organisation needs to measure the performance. Management must determine what, when and how frequently performance will be measured and measure the correct activities and outputs at the correct stage and frequency. The specific situation normally dictates the methods of control and the frequency thereof. To assist management to measure correctly they must identify Critical Success Factors (CSF) after they have set the objectives by deriving them from the strengths and/or core competencies of an organisation. They are the limited number of areas in which an organisation needs to be successful to ensure successful competitive performance and to achieve the set objectives. It is almost impossible to control everything in the organisation due to financial and time constraints and therefore the controls must concentrate on achieving the CSF's (Lussier, 2000: 492).

When making use of CSF's management must follow the following six-step process to ensure objectives are met (Sims & Smith, 2001: 35):

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- Identify the CSF's. The list needs to be kept short to ensure management concentrates on the important aspects.
- Identify the competencies necessary to gain the competitive advantage in each CSF. This involves a thorough analysis of the activities, skills and processes to reach the CSF's.
- Ensure the list of competencies are enough. Management needs to have enough of these competencies or if they don't, management need to assess what may be necessary and from where can it be obtained.
- Identify Key Performance Indicators (KPI). These key performance indicators constitute the basis of performance measurement and the control system. They can be seen as the enablers to reach the CSF's and will form the basis of a performance measurement and control system to implement and review the strategy.
- Ensure that competitors cannot imitate the organisation's performance. Management needs to preserve their competitive advantage as far as possible.
- Monitor competitors. Management needs to predict the likely impact of their actions on the organisation and act when necessary and if possible pre-amptively.

1.6.3 Step 3. Compare performance to the standards.

If management has performed step one and two correctly this step will be relatively easy. The actual results are now compared to the objective or standard set. The result will be a variance/performance report (Lussier, 2000: 492). A variance report is not a solution to problems, but merely indicates problem areas. The reason for the variation needs to be investigated. Not all variations will be investigated, as it entails costs and time. Certain ranges for each control aspect will be set and if the variation is outside of this range it will be investigated. Small variations that continuously occur will also be investigated (CIMA, 1999: 164-171).

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The comparison can ultimately lead to continuous improvement, which is essential to gain or keep the competitive advantage over rivals. The Japanese use Kaizen budgeting for achieving continuous improvement by including continuous improvement in the budget process (Horgren, Foster & Datar, 1997: 235-236). Benchmarking of variances can assist managers with improvement. Benchmarking is the continuous process of measuring performance against best practices. Some consulting organisations provide the necessary information, as it can be difficult to obtain the sensitive information needed from similar types of organisations (Horgren, et al., 1997: 235-236). Information for cost benchmarking can also be obtained from published reports, trade groups, industry analysts, customers, suppliers and joint venture partners. Since benchmarking involves competitively sensitive information about how to reduce costs, close competitors will not be keen on openly providing such information (Thompson & Strickland, 1999: 122-123).

1.6.4 Step 4. Correct or reinforce

If the standards were not met there must be an investigation into the reasons therefore and if someone was responsible corrective actions need to be taken. Management must analyse if the preliminary controls are sufficient and if not they need to be changed to ensure future success. It does not help to evaluate performance only at the end of a process, as it may be too late to rectify mistakes. Preliminary controls need to be in place to ensure pro-active actions (Lussier, 2000: 492). It may be possible that the standard was unrealistic or due to changes in the business environment it may be no longer relevant. The standard and/or objectives then need to be changed to be realistic (Robbins, 2000: 175).

Where performance was up to standard or better than the standard, reinforcement must take place. Reward employees with financial and/or non-financial rewards. To use the correct type of reward it is necessary to know what employees deem as important to them. Feedback obtained from performance measurement can also ensure continuous improvement for the organisation (Lussier, 2000: 492).

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and at the right price. The resources need to be used effectively, efficiently and economically to achieve organisational objectives. By obtaining the required materials organisations can reduce costs such as inventory carrying costs. Organisations may need new employees, because of factors such as loss of personnel, shortage of personnel or new skills may be required. New employees need the required skills and attitudes to fit in the organisation and in South Africa the total workforce needs to be representative of the country's population. Managers make decisions based on information from internal and external sources.

According to Lewin and Harris (2001: 3) information must be accurate, relevant, timely, understandable, concise and complete to ensure informed decision making by management. New funds obtained by organisations, must be of the correct type (long-term loan, short-term loan, shares or own capital), it must be obtained from the correct institutions at the lowest cost and at the optimal time.

1.8.2 Controlling the process

By controlling the transformation process of producing goods and services managers can correct problems before outputs have been negatively affected. Appointed managers will be responsible for measurement at specific predetermined points during the process. They will have a set of aspects to check and must report any inconsistencies immediately so that corrective actions can be taken as soon as possible. This also entails the observation and correction of employee behaviour. Managers at all levels will be involved during the process to control resources and systems (Mondy & Premeaux, 1995: 518-519).

1.8.3 Controlling the outputs

According to Mondy and Premeaux (1995: 519-520) controlling outputs in the business system consists of quality and quantity controls, financial controls and evaluation of

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employee performance. Organisational structure needs to be designed to facilitate control.

- Quality and quantity controls. According to the Draft Management Doctrine of the DOD (1997: 63-64) to deliver a product at the least cost of logistics, while conforming to the clients needs, the processes need to be as effective and efficient with the resources available. To obtain this, continuous improvement is important and the outputs must be measured against a standard to ensure quality is reached and maintained. Organisations need a situation specific process that is standardised, with standard outputs. According to Mondy & Premeaux (1995: 519-520) trade-offs are necessary between the level of quality preferred and the cost of achieving that level to obtain a balance of control. Productivity is vital to any organisation. Productivity measures the amount of outputs produced by a certain amount of inputs. To improve productivity organisations need to obtain more output from the same amount of input or obtain the same level of output from less input. Organisations need to stipulate the standard quantity needed to be produced and if these amounts are not obtained corrective actions may have to be taken.
- Financial control. Most organisations operate to earn profits and those that do not, must ensure costs are kept at acceptable levels. External parties usually use financial statements. Routine and non-routine internal reports provide essential information for controlling and decision making. Managers can use these reports to evaluate the effectiveness in the use of resources. Budgetary controls can assist management in ensuring that organisations perform financially as planned and enable them to control by taking corrective action where needed (Mondy & Premeaux, 1995: 520).
- Employee performance evaluation. Evaluating employee performance is a formal and systematic measurement and evaluation of job performance. It enables managers to identify and rectify mistakes, eliminate weaknesses and to build on strong points of employees. This can ensure continuous

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improvement. Performance evaluation forms part of the control over human resources (Mondy & Premeaux, 1995: 520).

1.9 Types of control

1.9.1 Feedforward control

Feedforward control (also called preliminary control) prevents anticipated problems. Requiring approval for expenditure is an example of such controls (Rue & Byars, 1995: 462-463). It takes place in advance of the actual activity and is future directed. Feedforward control systems can ensure objectives are clear, proper directions are established and that the right resources are available to accomplish them. These control systems are preventive in nature and a forward thinking and proactive approach to ensure objectives are met. Feedforward control systems are desirable as they allow management to prevent problems in stead of curing them afterwards. To achieve this requires timely and accurate information. Feedforward control systems can be difficult and costly to implement for an organisation (Schermerhorn, 1999: 185; Robbins & DeCenzo, 1995: 351-352).

1.9.2 Concurrent control

Concurrent control relates to the focus on events that happen as inputs are being transformed into outputs. They are designed to detect problems when they occur, for example the supervision by a manager over an employee (Rue & Byars, 1995: 463). Problems can be corrected before they become too costly by using concurrent control. Concurrent control systems monitor ongoing operations and activities to ensure that everything goes according to plan. Concurrent control systems need to allow corrective actions to be taken before the task is completed and the same problem re-occurs. The focus is on quality and it can reduce the amount of waste (Schermerhorn, 1999: 185; Robbins & DeCenzo, 1995: 351-352).

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1.9.3 Feedback controls

Feedback control (also called post action control) is designed to detect existing or potential problems after they occur but before they reach crises stage. Examples of these types of control systems are written reports stating faults that have occurred in the organisation (Rue & Byars, 1995: 463). Feedback control systems are normally the most popular type of control and takes place after the work has been done. The focus is on the quality of the end result. The main drawback of this type of control is that by the time the manager has the information the damage is done. There are certain activities where feedback control may be the only type of control that can be implemented. The two main advantages of feedback control over the feedforward and concurrent control are (Schermerhorn, 1999: 185; Robbins & DeCenzo, 1995: 351-352):

- Continuous improvement. Feedback provides management with formal and useful information on how effective their planning was and where improvements can be made. Where huge variances between the standard and the actual output occur, plans may need to be revised to ensure better performance in future. This and benchmarking against best practices will ensure continuous improvement that is essential in getting or maintaining the competitive advantage in the ever changing business environment.
- Performance rewards. Feedback provides formal documentation of results on the effectiveness and efficiency of systems and employees. This information can be used in rewarding people for excellent work done in ensuring that the objectives of the company are met. These rewards can motivate people to do their work and ultimately improve the competitive situation of the organisation. By rewarding people for reaching the objectives of the organisation goal congruence is achieved. According to CIMA (1999: 118) goal congruence is the state in a control system which leads employees or groups to take actions which are in their self-interest and in the best interest of the organisation.

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When providing feedback the following must be kept in mind (Robbins & DeCenzo, 1995: 353):

- Focus on specific behaviour. Feedback should be specific and not general. This can ensure useful information in making corrective decisions and rewarding the correct people.
- Support negative feedback with facts. The manager needs to have the facts on paper when correcting mistakes to ensure continuous improvement. When correcting behaviour managers need to act with caution in the way they go about and the correct person responsible for the outcome needs to be reprimanded or praised in such a manner to motivate better performance in future.
- Comments need to be impersonal and job related. Feedback of the negative nature needs to be descriptive and job related. Managers must not criticise the employee personally but criticise the wrongful job-related behaviour.
- The recipients need to understand the feedback. Feedback needs to be complete, relevant to the recipient and concise. Ensure that the recipient understands fully the feedback and the impact there of.
- Direct negative feedback toward the responsible person. Negative feedback should be directed towards behaviour controllable by the recipients. Employees need to know that they can be held responsible for their action and non-action over those activities they are responsible for. Do not provide employees only with the negative feedback, but offer guidelines and suggestions on how the situation can be improved.

1.10 Control methods

1.10.1 Five control methods

According to Williams (2002: 189-195) management can use the following five different methods to ensure effective control of behaviour in their organisations:

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- Bureaucratic control. It is the use of hierarchical authority to influence employee behaviour by means of rewards or corrective actions. Managers can impartially evaluate behaviour according to the policies and procedures of the organisation. This type of control is supposes to make an organisation more fair, effective and efficient. The problem with this type of control is that it can make the organisation's operations very rigid and managers unwilling to change.
- Objective control. Observable measures of employee behaviour or outputs can be used to evaluate performance of employees and to influence their behaviour. The control focuses on behaviours and outputs. The two aspects are:

  - Behaviour control. This is the regulation of the behaviour of employees, to ensure they do the right things that may lead to the achievement of objectives.
  - Output control. Managers do not measure what employees do, but the results of their efforts. Employees are more empowered to do their work within certain organisational guidelines, as long as they achieve the desired results. Rewards and incentives are usually linked to the outputs.

- Normative control. It is the use of the organisations shared values and beliefs to regulate employees' behaviour and decisions. Organisations must be very careful in who they hire as these new employees will also influence the shared values and beliefs. These new employees will learn from mentors and co-workers how they must behave and what to do and what not.
- Concertive control. It is the regulation of employees' behaviour and decisions through the values and beliefs negotiated by work groups. Autonomous work groups are groups that don't have managers and are responsible for their own planning, organising, leading and control. This type of control does not realise

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overnight and the therefore the workgroup usually feels very strong about them.

- Self-control. Managers and employees control their own behaviour. They do this by setting their own goals, in line with that of the organisation, by monitoring their own progress and rewarding achievement or punishing when objectives were not reached. Clear boundaries need to be in place to guide their behaviour. Professionals can usually be controlled in this manner.

1.10.2 When to use the different methods of control

These different methods of control can all be useful in different scenarios and organisations. Table 1.1 shows when it is appropriate to use the different methods of control.

Table 1.1: When to use different methods of control (Williams, 2002: 195).

S/No	Method of control	When to use a method of control
01	Bureaucratic control	To standardise operating procedures. To establish limits.
02	Behaviour control	It's easier to measure what employees do, than what they accomplish. Where "cause-effect" relationships are clear. When good measures of employee behaviour can be created.
03	Output control	It's easier to measure output than what employees do on the job. When good measures of employee output can be created. Clear goals & standards for employee output can be set. Where "cause-effect" relationship is unclear.

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04	Normative control	Organisational values, beliefs & culture are strong. Difficult to create good measures of employee behaviour. Difficult to create good measures of employee output.
05	Concertive Control	Autonomous work groups have responsibility for task. Managers want employees to have ownership of their behaviour & outputs. Management desires a strong form of worker-based control.
06	Self Control	Employees are intrinsically motivated to proper work. Difficult to create good measures of employee behaviour. Difficult to create good measures of employee output. Employees are taught self-control and self-leadership skills.

1.11 Internal control

Management is responsible for control in the organisation. The system of corporate governance can ensure that organisations are properly directed and controlled. The relevant acts regarding the reporting and auditing responsibilities of organisations try to ensure that proper internal controls are in place to safeguard the organisation and stakeholders from losses (CIMA, 1999: 377-379). The Public Finance Management Act (PFMA), Act 1 of 1999, as amended by Act 29 of 1999 states that managers in state departments can be held accountable for their actions or non-action. It also states that General Accepted Accounting Principles (GAAP) must be used and therefore responsibility for operating systems and the accounting thereof must be divided (Craig, 2001).

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1.11.1 Internal control defined

According to CIMA (1999: 254-256) internal control are those actions taken by management to improve the likelihood of the organisation reaching the established objectives. Management plans, organises and directs the performance of activities and actions in order to get reasonable assurance that the objectives can be reached. An organisation's internal control system comprises out of the control environment and control procedures. The control environment includes the attitude, awareness and actions of managers regarding internal controls and their importance. Management style, corporate culture and the shared values of employees are included in the control environment. It provides the background in which various controls can operate. The control procedures are the policies and procedures established to achieve the organisations objectives. This will include the adherence to internal policies, the safeguarding of physical resources, the prevention and detection of fraud, the reliability of all relevant records and the management information system. Control procedures need to be in tact with the control environment, at all times.

1.11.2 Internal control principles

For internal control to be effective in ensuring a balance of control throughout the organisation, these controls must adhere to certain principles. According to Puttick and Van Esch (1998: 167-178) the principles of internal control are:

- Separation of duties. If one manager must authorise, execute and record transactions and activities the possibility exist that assets can be misappropriated and accounting records can be manipulated. To ensure proper control these three aspects should be performed by different individuals. Collusion between employees is always possible and can be reduced by proper staffing measures in place to ensure employees with sound ethics are hired. The control measures must ensure that the employee

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executing the transaction or activity can still perform his task efficiently to ensure customer satisfaction.

- Custody of assets. Organisations need to ensure that appropriate controls are in place to ensure the physical security of assets. Managers can be held accountable for those assets under their control. In an organisation such as the SANDF that has vast amounts of resources the related policies and procedures need to be in place to ensure the assets are protected. The officers whose responsibility it may be to safeguard these resources can be held accountable for any losses. They need to ensure the necessary rules and procedures are followed to safeguard the assets. This includes the safeguarding of intellectual capital.
- Recording control. Financial transactions and other activities such as the issue of rations or ammunition need to be recorded accurately and in a timely fashion. The documents need to be properly protected and easily retrievable. Where possible it must be incorporated in the management information system to improve decision making. To enhance control these recordings need to be organisation specific, multipart forms must be used, separate persons must check the accuracy of the information recorded and there should be frequent audits on the records by independent persons.
- Authorisation. Only after the appropriate manager have authorised the activity can the activity starts. This can ensure that the assets of an organisation are safeguarded and can not be misused. Authority can be delegated to specific persons to ensure fluent execution of activities. The manager who delegates authority to another employee can still be held accountable for the assets under his/her control.
- Management supervision. Management supervision is actually control over control and involves the following:

  - Monitoring if the control procedures operate, as it is suppose to.
  - Analysing problems detected by internal controls and taking corrective action to ensure continuous improvement.

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- Initiating changes in the internal control systems where weaknesses become apparent.
- Conducting unannounced checks and follow-ups on audits and corrective action.
- Preparing forecasts and budgets and comparing them with actual results and performance.

1.11.3 Management's internal control responsibility

Management is ultimately responsible to ensure the organisation's objectives are met by ensuring proper control over systems, activities and resources. According to Puttick and Van Esch (1998: 172-173) management needs to do the following:

- Identify risks. The various risks to which an organisation will be exposed must be identified. This includes financial loss due to fraudulent actions and theft of assets.
- Control objectives. The different control objectives and control procedures must be determined.
- Comparing costs and value. The monetary value of the potential risks must be compared with the cost of implementing the control procedures. A balance must be obtained between the cost of control and the potential benefit thereof.
- Decisions. Decisions need to be made on what control procedures can be implemented and what risks may be assumed.
- Supervise and monitor. The introduction of the control procedures must be supervised and monitored to ensure effectiveness of the internal controls and to ensure continuous improvement.

1.12 Qualities of an effective control system

Effective control systems have certain qualities in common. These qualities and the relevant importance thereof can differ, depending on the situation. The following

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characteristics can make a control system more effective (Robbins & DeCenzo, 1995: 354-355; Smit & Cronjé, 1992: 446-448; Hunger & Wheelen, 2001: 168; Plunkett, Attner & Allen, 2002: 535-538):

- Integration. The control system needs to be integrated with planning, as it is a vital input to the planning process. Controls can enable managers to revise standards and processes where deviations occur. Usually the closer the interface between planning and control the better the control system will function. This integration involves the support for control from the corporate culture. When controls are consonant with the values of the organisation, they will not impede work, but assist in reaching set objectives.
- Accuracy. An accurate control system needs to de reliable to produce valid information from which informed control and corrective action decisions can be taken. Inaccurate information can lead to incorrect rectification and new plans may be based on unreliable data. This information needs to be concise, as too many information and controls can create confusion.
- Flexibility. A control system needs to be flexible to accommodate change and adjust to take advantage of new opportunities. In the ever-changing business environment it is imperative that plans and objectives can be adjusted and controls need be adjusted accordingly.
- Timeliness. Control systems need to provide information regularly, when needed. Managers need to avoid reports becoming habitual and need to ensure reports are available at relevant intervals. Even the best information can be worth nothing if available too late. Timely information can ensure that corrective actions can be taken before it may be too late. The controls need to be short-term and long-term to ensure the organisation can reach their overall objectives.
- Understandable. Control needs to be user-friendly for those involved in the process. It is therefore sometimes necessary to avoid unnecessary complex control systems and to implement less complex control systems. A control system that is too complex can take up too much time of employees, may lead

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to too much information that can be time consuming to process, can cause unnecessary mistakes, frustrate employees and can lead to resistance to control systems.

- Acceptability. The controls of an organisation need to be acceptable to those employees working with them and not impact negatively on their efforts to achieve personal goals. If controls seem to be arbitrary, subjective or an invasion of privacy, employees may resist the proper application thereof. Too restrictive controls can lead to the covert and/or overt opposition thereof.
- Reasonable criteria. Control standards like objectives need to be reasonable and attainable. Controls need to inspire employees by challenging them to reach higher performance levels. If they are too high or unreasonable they may no longer motivate employees and can lead to employees taking shortcuts.
- Strategic placement. Not everything in an organisation can be controlled. It may not be cost-effective. Therefore managers need to concentrate control on the strategic aspects of the organisation's performance. Management need to ensure that the necessary control systems are in place to ensure effectiveness and efficiency in the use of resources, organisational processes and activities.
- Emphasis on the exception. Managers need to place strategic control devices on exceptions as they cannot control all activities. This can ensure that managers are not overwhelmed by information and tasks. Each level of management can use an established range within which they can approve expenditure or rectify mistakes. If it exceeds the range it will go to the next level of management. For example, in the SANDF Force Structure Element (FSE) commanders can only approve financial expenditure up to R500. If the amount is more authority need to be obtained from higher Head Quarters (Norrie, 2001).
- Multiple criteria. Managers can be held responsible for all areas that they have to control and therefore need to control financial and non-financial aspects. Multiple criteria can make it more difficult for managers to

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manipulate the system in order to look good. Multiple criteria can also ensure a more objective assessment of performance. This needs to include the monitoring of co-operation in the organisation.

- Rewards. Controls need to be focussed on rewarding performance that meets the standards or exceed standards rather than punish failure to meet standards.
- Corrective action. An effective control system needs to indicate the problem area and specify the most appropriate solution to the problem. If-then guidelines and contingency plans can ensure that control systems point out possible solutions to problems.
- Economic feasibility. The costs of control need to be evaluated against the benefits gained from them. Too costly controls can influence an organisation's efforts to achieve objectives negatively. Expensive controls may be necessary to prevent problems that when they occur can lead to irrecoverable loss or damage that may be far more costly than the controls.

1.13 Ways to overcome negative reaction to control

Managers and employees sometimes resist controls especially those who are difficult and time consuming. This will be counterproductive and according to Mondy and Premeaux (1995: 524-525) the following may be solutions for this problem:

- Justifiable controls. The reason for the control measure needs to be known to those who have to comply with it. This can improve the acceptability thereof. Quality standards need to be adhered to, to ensure continuous business, profit and the ability of the organisation to pay competitive salaries.
- Understandable expectations. Managers and employees need to know for which aspects they can be held responsible and what is expected from them regarding the control system. What may be expected from them regarding the control system needs to be stated in understandable terms. For example a decrease of 10% in out of stock situations over the next three months.

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- Realistic standards. For the control system to be realistic the standards and objectives set need to be attainable. Too high standards can frustrate employees and may lead to counter-productivity.
- Timely communication of findings. The information about deviations should be communicated to employees as soon as practical and need to be relevant. To ensure continuous improvement corrective actions need to be taken as soon as possible against those responsible and systems need to be rectified as soon as possible.
- Accurate findings. Inaccurate information can lead to wrong decisions and actions. This can decrease quality, slow down the process of continuous improvement and de-motivate employees as their performance evaluation may be based on wrongful information.

1.14 Summary

Everyone on all levels in an organisation is responsible for control to ensure objectives can be met and the overall strategy can be realised. Control is the process of monitoring activities to ensure objectives are met as planned. Control cannot be separated from planning, organising and leading and management needs to make use of an integrated approach to ensure a balance in utilising the resources of the organisation to optimally achieve objectives. The control systems process incorporates the four functions of management with the control process of setting objectives, measuring performance, comparing performance to the objectives and correcting mistakes to ensure continuous improvement.

Such an integrated approach needs to be combined with the business system to ensure objectives can be met effectively, efficiently and economically. Inputs need to be controlled via feedforward controls, the business process via concurrent controls and outputs via feedback controls. Management needs to be aware of the different control methods, in order to use them at the most appropriate time to obtain a balance between the costs and benefits from control systems.

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Management is ultimately responsible to ensure proper internal controls are in place in an organisation, to optimally reach objectives and to safeguard the interest of all relevant stakeholders. Management needs to identify risks, make sound decisions, supervise behaviour and compare the costs and value from implementing control systems. Management needs to ensure a proper control environment is in place to enhance the effectiveness of the control procedures. The control environment is the background wherein control procedures can operate and includes corporate culture, management style, their background, qualifications and understanding of accountability, since management need to set the example. The control procedures are the policies and procedures set out to guide behaviour of employees to ensure a balanced approach in achieving objectives and utilising resources. By adhering to sound internal control principles, such as separation of duties, supervision, responsibility and accountability, management can achieve balance of control.

A balanced control system can ensure optimal objective achievement by consisting of qualities such as proper integration between the functions of management, producing accurate results from which relevant decisions can be made and need to be flexible to change as strategy and the focus of the organisation changes. Control systems need to provide timely results to ensure timely reaction and even pro-active action by management, while being organisational specific and understandable for all. Too complex and comprehensive control systems can be counter productive and employees may prohibit optimal objective achievement and continuous improvement. The employees utilising the control systems need to accept the control systems by understanding the purpose of the systems and the control systems need to be reasonable. Too high objectives may discourage employees in stead of motivating them to higher levels of performance. Management and employees need to be rewarded for results they where responsible for and corrective actions need to be taken against those responsible for non-optimal performance. Part of a balanced control system is the realisation that not every aspect in an organisation can be controlled and management need to prioritise processes and resources of strategic importance to be controlled,

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along with the intensity of the controls. Management can use multiple criteria which may include financial and non-financial aspects to effectively control the relevant areas and resource utilisation. Management needs to assess the economic feasibility of controls to ensure optimal objective achievement.

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CHAPTER 2
BALANCE OF CONTROL OVER RESOURCES

1.1 Introduction

For organisations to optimally achieve overall objectives a balanced focus must be in place in the utilisation and control of the resources the organisation utilise. Managers cannot always control the utilisation of all resources, due to the cost, quality, time and innovation implications of control systems. A balance between operational efficiency and the appropriate protection of resources and a balanced focus regarding the control over resources is necessary for optimal objective achievement.

Managers need to plan, organise, lead and control resources of an organisation. The four basic resources used by and organisation is financial, physical, human and information resources (Smit & Cronjé, 1992: 433). Different organisations will utilise these resources in different relations and in different quantities. There still need to be a balanced approach in the control over the resources.

Various tested and proven control methods and control systems are available for organisations to utilise, to control resources. Management needs to have the necessary knowledge to assess, choose and implement the most appropriate control system for the situation to control the resources. Policies that will act as guidelines for employees with regards to resource utilisation need to be implemented and regularly inspected and updated where necessary.

During this chapter the balanced focus regarding control over resources will be discussed, indicating the interaction between control measures over the different resources. Then the alternatives for management if work procedures and behaviour do not conform to standards are discussed. This is followed by addressing control measures for the different resources, starting with financial resources, followed by physical resources, then human resources and lastly information resources.

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2.1 Balanced focus regarding control over resources

Managers need to effectively, efficiently and economically utilise the resources of the organisation to obtain the objectives of the organisation. Personnel tend to do what will be inspected. Many resources can be controlled via finances and associated budgets, but the managers and employees are responsible to apply control systems within the control environment, to ensure objectives can be met. If those employees responsible to apply control systems do not apply the control systems as planned or deliberately misuse their position it can lead to sub-optimal performance. Control must therefore focus on the effective management of all the resources and the optimal achievement of objectives. If management control one resource relative more than the rest the balance of control may not be in equilibrium. This can lead to some objectives not being met (Weyers, 2002). The focal points of control are illustrated by Figure 2.1. By focussing on the control of these resources productivity in the business process can be obtained (Smit & Cronjé, 1992: 433-434):

- Financial resources. Financial resources are situated in the centre as they are controlled in their own right (for example cash-flow and debtor control) and most control measures and techniques such as budgets, sales production costs and market share are quantified in financial terms.

- Physical resources. Control of physical resources includes aspects such as quality control, inventory control and control over equipment.

- Human resources. Controlling the human resources starts at the selection and placement process. It also entails control over training, personnel development, performance appraisal and remuneration.

- Information resources. This includes the economic and market forecasting, environmental scanning and the effective utilisation of a Management Information System (MIS) in the organisation.

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- Quasi-control: When control is not possible. If control is necessary, but not possible due to costs or cybernetic infeasibility management can use two quasi-control options. Firstly management can reduce the dependence on certain critical resources by abandoning or changing certain objectives. Secondly management can restructure the dependence on critical resources by exchanging dependence on one critical resource for dependence on another.

2.2 Control over financial resources

Organisations need to obtain the correct type of finance needed, at the lowest cost and at the optimal time. Financial resources are a group of resources in its own right, but also relates to the control of other resources of the organisation. Pure financial management is for example cash flow management to ensure that the organisation may have cash available when needed, without having idle cash that could have been used more productively. Financial management impacts on other resources such as inventory. Too high inventory levels may lead to more costs, but can reduce the possibility of a stock-out. This can have an impact on the cash flow of the organisation (Smit & Cronjé, 1992: 438-439; CIMA, 2001: 75-82). Most of the internal financial controls such as ratio analysis, audits, and budgets are feedback controls as historical information is used. This information can be compared over time and with similar organisations to be meaningful.

2.2.1 Budgetary control

A budget is the most basic and widely used quantitative planning and controlling technique. A budget is a quantitative expression for the planned allocation of resources and expected results, for a specific period. Actual results are then compared with the budgeted amounts. Most areas of operation in an organisation can use budgets to ensure that the overall objectives of the organisation are met. These departments need to operate within the budget guidelines to create goal congruence (Rue & Byars, 1995: 463; Mondy & Premeaux, 1995: 529).

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Types of budgets. Different specifically modified budgets can be used for departments, operations and areas that need to be controlled. Two broad categories of budgets are capital budgets and operating budgets. A capital budget is a plan for expenditures on facilities and equipment that stretches over a few years. An operating budget is a plan for income and expenditures of a department and the organisation. Many organisations budget by making use of the previous budget and adjusting the figures according to future expectations and aspects such as inflation (padding). Another way to budget is to use a zero-based budget. Zero-based budgets force managers to start from scratch and look at what they really need to do their work. Managers need to be able to justify the entire budget in detail. To move away from the rigid budget process flexible budgets are being made use of. A flexible budget recognises different cost behaviour patterns and can change as the volume of the activity changes. When necessary changes can be made to the flexible budget and variances can be divided into budgeted and actual variances (Mondy & Premeaux, 1995: 529-532; Rue & Byars, 1995: 464; CIMA, 1999: 152-154).

Benefits of budgets. Budgets can be used at all levels of the organisation to plan, monitor and control activities and operations. Some of the benefits from using budgets and the participation of employees in the budget process may be (Mondy & Premeaux, 1995: 530-531; Smit & Cronjé , 1992: 439; CIMA, 1999: 111-122):

- Provide standards. Budgets can provide standards against which actual results can be measured. Performance can be evaluated objectively as the plans are quantified.
- Priorities. The allocation of funds relates to the organisation's dedication towards a particular objective. If the objective is important the necessary funds need to be allocated to ensure the objective can be reached. If there are not enough resources cuts in objectives can be made starting at those with the lowest priority. If the resources are too few, managers may critically evaluate objectives and projects to ensure that overall organisation objectives can still be met.

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- Co-ordination. Management can use budgets to co-ordinate the operations, projects and resources of the organisation. The budgets can provide guidelines for the application of the organisations resources.
- Motivation. Employees need to know what are expected of them and what the performance standards are. The involvement of managers and employees can lead to a more motivated workforce as employees feel that their inputs are used. Different perspectives and specialised knowledge can improve plans and lead to higher productivity.
- Future outlook. Budgets can force managers to make use of forecasts and to plan for the future. It can enable managers to recognise problems and to take appropriate corrective action when necessary and even to act pro-actively. This can insure that the organisation is prepared to some extend for future changes in the business environment and that contingency plans can be set in place.
- Communication. Budgets improve the ability of managers to communicate plans, standards and objectives of the organisation. It indicates the importance of certain objectives and projects. Budgets shows to lower level managers how their units relate to other units in the organisation, which can improve commitment and goal congruence.

Limitations of budgets. Although budgets are widely used by organisations some problems may occur, that must be recognised and corrected where possible. Some of the problems from using budgets and the participation of employees in the budget process may be (Mondy & Premeaux, 1995: 531; CIMA, 1999: 111-122):

- Budget slack. The different departments of an organisation need to budget for their operations and submit it for approval. Usually cuts will be made to these budgets to fit it all into the overall budget. Managers tend to build in budget slack by deliberately budgeting for more resources than necessary, so when their budgets are cut they can still be able to do their work. This can be counter productive as it can lead to imperfect planning and focussing.

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- Spending all the resources. Some managers tend to spend all available resources of the budget. They fear that if they do not spend it all this year, they may not get it the next year, when they possibly do need it. This can be to the advantage of that specific department, but can impact negatively on the organisation as a whole, which could have saved those resources.
- Restrictive. Budgets can permit little discretion for managers in managing their resources. The future cannot be predicted with certainty and expenses may accrue that was not budgeted for. Sometimes funds may not be transferable from one account to another. Operations and projects can be disrupted while permission must be obtained for the additional resources.
- Performance evaluation. The performance of managers may sometimes solely be based on budget variances. This narrow sighted view to performance measurement can lead to managers becoming de-motivated as there may be unforeseen events that can cause deviations from the budget. Managers need to be evaluated on those aspects they have control over. Managers may spend most of their time to comply with the budget, to get a bonus, instead of spending their time on creative and innovative ideas.
- Time consuming. The whole budget process is very time consuming. A lot of time goes into planning, obtaining actual results, comparing it with the plans and standards, compiling variance reports, investigating deviations and taking corrective actions. It is therefore important that management focus the budget on the important issues. When involving employees to participate more ideas can be generated that can be even more time consuming.

2.2.2 Financial ratio analysis

Financial ratio analyses are widely in use in different organisations. It gives the opportunity to managers to evaluate the performance of the organisation by looking at key financial ratios compiled from the income statement, cash flow statement and balance sheet of the organisation (Van Nieuwenhuyzen, 2002). The ratios can provide an indication of the financial performance of the organisation and assist managers in

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controlling those areas that may lack control by indicating problem or high-risk areas (Smit & Cronjé, 1992: 439-441; Robbins & DeCenzo, 1995: 382-383).

Management can use a variety of ratios to maintain the correct balance when evaluating organisational performance. The four main types of ratios are the following (Robbins & DeCenzo, 1995: 382-383; Rue & Byars, 1995: 464-465; CIMA, 2001: 48-68; Van Nieuwenhuyzen, 2002):

- Liquidity ratios. These ratios measure the ability of the organisation to meet its short-term financial obligations. It evaluates if the organisation will be able to repay debts over the short-term by taking into account the amount of liquid assets of the organisation. For example the current ratio (current assets/current liabilities).
- Leverage/Debt ratios. These ratios indicate the organisation's ability to meet its long-term obligations. It evaluates the amount of borrowed funds being used to operate and expand the organisation. It also shows the amount of risk involved. For example the debt-equity ratio (debt/equity x 100). With a high level of financial leverage creditors may not be that willing to grand new loans for organisations. Such high ratios may signal directors to reduce the amount of borrowed capital and in so doing, reduce the amount of risk.
- Operating/Activity ratios. These ratios indicate how effective managers use the organisation's resources. For example the asset turnover (sales/assets). This can provide useful information to managers to make decisions from, regarding new controls to be implemented to concentrate effort on problem areas and to maintain a balance of control.
- Profitability. These ratios indicate organisational operating efficiency and effectiveness and how well the organisation is being managed. It indicates for example how effective assets were used to make a profit. For example return on assets (profit after tax/assets).

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2.2.3 Audits

An audit is a formal verification of an organisation's accounting system, operating procedures or performance. One of the most important factors regarding audits is that the party executing the audit should be independent from the department that is being audited. An auditor's main concern regarding the information examined by him/her is that material errors or misstatements may occur and that those who do occur are not detected. The risk of material errors and misstatements occurring depends on the strength and effectiveness of the internal control system of the organisation. The auditor need to evaluate the effectiveness of the internal control system to assess the risks involved with the audit (Robbins, 2000: 178-179; CIMA, 1999: 257; Puttick & Esch, 1998: 173-177). Audits can be divided into (Robbins, 2000: 178-179; CIMA, 1999: 257-263) the following categories:

- External audits. It is the periodic verification of an organisation's financial statements and records, by an independent third party. This is to ensure that the financial statements and records are properly maintained, accurate and comply with legal requirements and accounting standards. It also acts as an internal control measure, because it serves as a deterrent against fraud.

- Internal audits. It is an independent appraisal activity, established by management from within the organisation to review the accounting and internal control (financial and non-financial) systems of the organisation. The design of the systems will be reviewed, operations monitored by means of tests and corrections for continuous improvement can be made. Internal auditing assist employees to work effectively and efficiently, by reviewing the economy, efficiency and effectiveness of operations. Internal auditing covers a range of other tasks such as the examination of financial and operating information, reviewing the compliance with laws and regulations, reviewing the implementation of overall objectives, special investigations and identifying significant business and financial risks. For the internal audit department to work effectively they need

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to receive adequate resources, have qualified personnel, need access to relevant information and activities and be seen by the other employees as there to assist them and not to spy on them.

2.3 Control over physical resources

An organisation's physical resources are those tangible assets such as vehicles, office and manufacturing equipment, buildings, trading stock, raw materials, work in progress and finished goods. Most of the physical resources can be controlled by control systems of an administrative nature. These control systems includes the usage of procedures, policies, periodic inspections and stock takes. These control systems tend to fall within the ambit of internal auditing. The control systems regarding inventories, raw materials, goods in progress and finished goods includes inventory controls, operational controls and quality control (Smit & Cronjé, 1992: 434).

2.3.1 Inventory control

Inventory includes raw materials, components, finished goods at manufacturing and those products held in stock to satisfy the needs of customers. Inventories are kept by organisations to ensure continuous flow of manufacturing, to make large-scale manufacturing possible, to get discounts from buying in bulk and to satisfy the needs of customers. High inventory levels can have many advantages such as high levels of customer satisfaction, discounts on bulk purchases and productive manufacturing. High levels of inventory can lead to higher costs such as opportunity costs (the money tied up in inventory could have been invested in projects with a high rate of return), warehousing costs, insurance and the possibility of inventory becoming absolute. This may lead to the implementation of control systems, by organisations, such as (Mondy & Premeaux, 1995: 536-540; Smit & Cronjé, 1992: 434-436; Lambert & Stock, 1999: 407-435):

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- Economic Order Quantity (EOQ). The aim of the EOQ inventory control system is to minimise total inventory costs by balancing ordering costs (all expenses in obtaining the inventory) and carrying costs (all the costs in maintaining and storing the inventory). The EOQ is the optimal amount of inventory that should be purchased. A disadvantage of EOQ may be that inventory needs to be kept regardless customers' needs or the needs of an internal department at that moment. The calculation of EOQ can be seen in Table 2.1.

Table 2.1: Equation for EOQ (Mondy & Premeaux, 1995: 538).

$$EOQ = \sqrt{\frac{2\,(\text{Ordering cost})\ /\ (\text{Annual demand})}{\text{Carrying costs}}}$$

- Materials Requirement Planning (MRP). The demand for different raw material and components necessary to produce finished goods can be estimated and ordered only when needed.
- Just-in-Time (JIT). The JIT system is a refinement of the MRP system. The whole production process is demand (pull) driven. Customer demand dictates manufacturing, thus reducing inventory levels to the minimum. Raw materials may only be obtained when necessary for manufacturing and goods can be manufactured on demand. For JIT to operate effectively the organisation needs quality products from suppliers, at the right time, in the right quantities and a reliable work force and manufacturing set-up. Close ties and long-term relationships with suppliers can assist organisations to use JIT to reduce inventory costs.
- ABC inventory method. It may not be necessary to monitor and control all inventory items with the same level of intensity. The ABC inventory method classifies inventory items, for control purposes, into three categories, according to

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unit costs and the amount kept. Category A is the group of items that accounts for 70% of the monetary value of inventory; it may be a small amount of items and have high unit costs. They need to receive frequent attention. Category B represents 20% of the monetary value of inventory and can still represent a substantial amount of investment. They need to receive moderate attention. Category C is the less expensive inventory items and is used less often. They need to receive less frequent attention.

2.3.2 Operations and quality control

Operational control systems need to ensure economy, efficiency and effectiveness. Increased quality usually results in higher costs and prices. Some customers may accept lower quality at lower prices. Therefore it is of utmost importance that an organisation satisfies the needs of customers regarding quality and prices (Mondy & Premeaux, 1995: 532-533). Quality control relates to the quality of raw materials, components and finished goods. The Total Quality Management (TQM) management philosophy is customer-orientated. All members in a TQM organisation need to strive, to systematically improve the organisation through the ongoing participation of all employees with regards to problem-solving efforts even across the normal boundaries. TQM incorporates the concepts of product quality, process control, quality assurance as well as quality improvement and thus the control of all transformation processes of the organisation to improve customer satisfaction at the lowest cost (Schlenker, 1998: 2).

For TQM to operate optimally in an organisation all aspects must be focused on quality. Purchasing control must ensure that the materials needed are obtained in the right quantity, when needed, are of the right quality and configuration and at the lowest cost. To ensure continuous quality of purchases and to enhance an organisation's competitive advantage, it may be beneficial for the organisation to build close, long-term links with suppliers. The contractual agreements with suppliers must state the required level of service and quality and what will happen if any irregularities do occur (Robbins & Coulter, 1999: 596-599; Thompson & Strickland, 1999: 82).

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Operations of an organisation can be seriously affected when a break down occurs during manufacturing. Preventive maintenance is scheduled on regular basis and tries to prevent breakdowns from occurring. Conditional maintenance is the repair of machinery in response to inspections. Remedial maintenance is the complete replacement or repair of machinery when it breaks down. It is therefore of the utmost importance that organisations, as far as possible, prevent such break downs and if they do occur, management must have properly exercised contingency plans in place to immediately rectify mistakes (Robbins & Coulter, 1999: 596-599).

Using budgets and cost centres can control the costs and efficiency of operations. A cost centre is a unit for which a manager can be held responsible for all the associated costs. The total cost of such a unit can be divided into the following categories (Horngren, et al., 1997: 257-265; Robbins & Coulter, 1999: 596-597; Rue & Byars, 1995: 508-509):

- Direct costs. Direct costs (variable overhead expenses) are those costs that changes in proportion to the output.
- Indirect costs. Indirect costs (fixed overhead expenses) are those costs that do not change significantly if output changes.

To gain a competitive advantage over rivals by means of costs usually entailed mass production to get economics of scale. Flexible manufacturing systems integrates computer aided design, engineering and manufacturing to produce low-volume, custom goods at relative low cost. The control systems need to be flexible to change with the process. Speed can also give an organisation a competitive advantage. If an organisation can develop, produce and distribute quality products or deliver quality services faster than rivals they can obtain a competitive advantage (Robbins & Coulter, 1999: 596-599). An organisation can evaluate its overall competitive advantage by using a weighted competitive strength assessment. Key success factors for the industry or type of business are decided on and after an evaluation, ratings are given to the relevant organisations. The relevant importance of a specific key success factor is

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determined to give the weighted overall strength rating for the organisation. This evaluation can enable managers to make sound strategic decisions and to concentrate control on the most important aspects (Thompson & Strickland, 1999: 127-129).

2.4 Control over human resources

According to Hickman, Piquero, Lawton and Greene (2002: 1-3) deviations of human behaviour are the product of complex interactions between three key variables: motivation, constraint and opportunity. Control over human resources must reduce the motivation of employees to deviate from prescribed behaviour, must clearly dictate corrective actions to constrain deviations and must reduce the opportunity for deviations. Management needs to be aware of the control ratio of individuals, consisting of the amount of control to which one is subject, relative to the amount of control one can exercise. This control ratio affects the probability of deviance as well as the specific form of deviation. An individual's control ratio is influenced by a global control ratio, which reflects an individual's average control configuration and situational control ratios, which reflects the dynamics of specific situations, such as the workplace.

Human behaviour can be one of the most challenging aspects to control. Performance measurement is the best-known control method for human resources. To control human resources effectively an organisation needs to start with control during the recruitment and selection process. Candidates need to be scrutinised to evaluate whose values, attitudes and personalities will fit in with the organisation's culture. During a preliminary interview managers can gain valuable information regarding the candidate and can get more information during the employment interview. Personal reference checks and background checks can ensure that possible problems in future are avoided (Robbins, 2000: 175; Mondy & Noe, 1996: 180-209; Weyers, 2002).

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2.4.1 Orientation and mentorship

After new employees are hired, they need to be orientated. This may include formal training and/or informal communication with regards to what behaviour is acceptable in the organisation and what behaviour is not. The organisation's vision, mission and overall objectives will be explained to these employees. New employees may receive a copy of the code of conduct and shared values of the organisation, to give the new employee a reference of mind to guide decision making. This will orientate the employee with regard to the organisational culture, which forms part of the overall control environment. Mentoring is another way to enable new employees to learn how things should be done in an organisation. Mentoring is also used by managers to teach protégés the correct behaviour. Newly appointed managers must understand their full range of responsibility and must buy in on it (Robbins, 2000: 176).

2.4.2 Job design

The job design and duty sheets, as used by the SANDF, determine the specific tasks that need to be performed by employees. It needs to stipulate the methods and procedures used to perform these tasks and how the job relates to other work in the organisation. The job design indicates to employees to whom they need to report and who will report to them. Employees need to sign the job design and duty sheets, to acknowledge that they know what are expected from them. They need to keep a copy and a copy needs to be filed (Mondy & Noe, 1996: 111-112; Botha, 2002).

2.4.3 Policies

Policies and Standing Operating Procedures (SOP's), as used by the SANDF, are formal regulations that provide a clear framework to guide the practices and behaviour essential for quality achievement throughout the whole organisation. SOP's define acceptable practices and constrain behaviour where necessary. The policies need to be properly and consistently implemented by all employees (Robbins, 2000: 176; Jarvis,

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2000: 2-3; Botha, 2002). These guidelines can assist employees in decision-making to ensure goal congruence as they are usually linked to the strategy of the organisation. Policies need to be developed with inputs from all and regularly reviewed to ensure that they are updated when necessary for controls to be relevant. Policies need to be properly communicated, implemented and audited to ensure employees abide by them and control objectives can be met (The European Foundation for Quality Management, Public and Voluntary Sector, 1999: 14-15).

2.4.4 Supervision

Managers oversee the work of employees daily and need to identify employee behaviour and correct problems when necessary (Robbins, 2000: 177). According to Thomson and Strickland (1999: 285) there has been a shift from multi management layers organisations to more flat decentralised structures with empowered employees. To act and react quickly to the competitive environment, managers need to be empowered to use resources and to make sound decisions. Pushing down decision-making authority can result in more timely, informed and competent decisions, ultimately leading to better productivity. Employees can be held accountable for their decisions and actions. To ensure proper control in such a business environment an organisation needs to make extensive use of guidelines in the form of policies, SOP's, the organisation's mission statement and a code of conduct.

2.4.5 Training

Training and re-training are essential to ensure employees are competent. Follow-up training and evaluation of the training are necessary to assess if the desired outcomes are obtained (Oakland & Sohal, 1996: 205-212). For training to be effective proper training programs need to be in place, it needs to be adequately funded and skilled, knowledgeable and experienced instructors need to be used. Training needs to be able to change rapidly and stay in line with organisation strategy (Thomson & Strickland, 1999: 277). Training needs to be standardised throughout an organisation. In the

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SANDF all training, for example for logisticians, need to be centralised to ensure consistency. For this to realise the logistical processes in the SANDF needs to be the same in the respective services (Craig, 2001).

For the SANDF to ensure quality force preparation, training is viewed as a force multiplier. The whole force preparation process is designed to cater for change and needs the active commitment and contribution of all. Training should add value to the individual and the organisation (Romano, 2001: 5-6).

2.4.6 Performance measurement

Performance measurement (appraisal) is the periodic evaluation of someone or something in relation to set standards, previous performance or in comparison with someone or something else. Performance measurement communicates the objectives of the company, it concentrates efforts towards those objectives and feedback is given for continuous improvement. Performance measurement must always be in line with achieving the desired standards as formulated in the objectives. Performance measurement can also be used to make decisions regarding human resources such as changes in remuneration, training needs and providing documented prove to support termination decisions. Performance measurement must therefore always be objectives orientated (Mondy & Noe, 1996: 326; Robbins & DeCenzo, 1995: 385; CIMA, 1999: 177).

The subjectivity of performance measurement due to the human factor usually influence the effectiveness of performance measurement and management needs to establish and implement objective performance measurement systems. If an employee and a manager have personality clashes it can be reflected in the performance measurement of the employee. Managers tend sometimes to concentrate on a few incidents in stead of looking at the overall work performance over the relevant period of evaluation. The use of rating scales or weighted checklists can reduce the human influence. Other means of performance measurement are the use of written essays, critical incidents,

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ranking scales or behavioural-anchored rating scales (a combination of the last two). Management by Objectives (MBO) can also be used where outputs are measured and compared with the required objectives (Mondy & Noe, 1996: 334-338; Robbins & DeCenzo, 1995: 385; Botha, 2002).

When conducting performance measurement it is vital that the focus of the performance measurement is correct. To ensure management focuses correctly with the performance measurement the questions shown in Table 2.2 can be useful.

Table 2.2: Key performance areas (CIMA, 1999: 178).

S/No	Area to consider	Comments
01	What is evaluated?	The whole organisation, a department, a team or an individual.
02	Who wants the evaluation?	Management, shareholders or other interest groups (employees).
03	What are the objectives of the organisation?	Is it a single objective or multiple objectives. Are they short or long-term.
04	Are quantitative or qualitative measures appropriate?	Quantitative measures (ROI of projects) may not be relevant sometimes and qualitative measures (perceived customer satisfaction) may be too subjective.
05	What targets is used to assess performance?	Comparisons need to be made for example against historic figures, standards, similar external or internal activities, indices and trends over time.

The performance measurement process of an organisation need to be formal and well documented to ensure proper control over behaviour of employees. Employees need to

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2001: 174). The MIS is an integrated approach for providing interpreted and relevant data (information) to assist managers in decision making and for control over those activities of an organisation for which they are responsible. A MIS should organise, interpret and filter data to give the manager relevant and timely information (Rue & Byars, 1995: 535; Lewin & Harris, 2001: 56). The MIS can enable managers to obtain more accurate and complete information for control purposes. By obtaining precise information when a manager needs it, the problem can be solved sooner to ensure continuous improvement in the organisation. The MIS can enable managers to be more effective and efficient in controlling their responsibility areas (Robbins & DeCenzo, 1995: 374).

Due to the strategic purpose of quality information, the significant expenditure on IS and IT and the vast amount of threats to computerised information systems, it is essential that management has the necessary control in place for the hardware and software of an organisation (Lewin & Harris, 2001: 174). An organisation cannot control every transaction, activity or process and therefore need to evaluate the importance of data and the level of risk present at a specific activity or process and control accordingly. The risk assessment includes the determination of the frequency of a problem and the potential damage if a threat realises (Laudon & Laudon, 1998: 644-645). The threats to computerised systems are illustrated in Table 2.3.

Table 2.3: Threats to computerised information systems (Laudon & Laudon, 1998: 627).

S/No	Threat	Cause
01	Hardware failure	Fire
02	Software failure	Electrical problems, viruses
03	Personnel action	User errors
04	Terminal access penetration	Program changes
05	Theft of data, services, equipment	Telecommunication problems, hackers

Computer systems can be controlled by a combination of general controls and application controls. General controls are the overall controls that control the design,

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security and use of computer programs and the security of data files in general. Application controls are specific controls unique to each computerised application such as order processing, and payroll (Laudon & Laudon, 1998: 635).

2.5.1 General control

General control is the overall control systems to ensure the effective operation of the information systems and IT. General control systems apply to all application areas and consist of a combination of system software and manual procedures to create an overall control environment. According to Laudon and Laudon (1998: 635-640) general control includes the following:

- Implementation control. Implementation control systems audit the systems development process at relevant points to ensure the process is properly controlled and managed. The implementation controls should evaluate the level of user involvement and ensure system feasibility by means of a formal cost-benefit methodology. Proper documentation showing how the system operates from a technical and user perspective is essential to maintain and improve the IS.
- Software control. Software control monitors the use of software, ensure security and reliability of software by preventing unauthorised access to software and computer programs. Program security controls prevent unauthorised changes to programs.
- Hardware control. Hardware control ensures that computer hardware is physically secure. It also ensures the correct performance of computer hardware. Access to rooms with computers should be restricted to relevant personnel and the rooms should be locked after work. Computers should be protected against fires and extreme humidity and temperatures.
- Computer operation control. Computer operations control is the responsibility of the IT department to ensure programmed procedures are consistent and they are applied correctly to the storage and processing of data. These control

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systems include control over the backup and recovery procedures if processing ends suddenly, the set-up of computer processing jobs and operations software.

- Data security and network control. Data security control ensures that organisations data files are not subject to unauthorised access, change or destruction. Security can be developed by means of restricting the access to terminals to authorised personnel, systems software that includes the use of user-names and passwords and additional passwords for specific systems. Firewalls can prevent unauthorised users gaining access to the IS of an organisation.
- Administrative control. Administrative control is the formalised standards, rules and procedures to ensure an organisation's general and application controls are effective. The most important administrative control systems are segregation of duties, written policies and procedures and supervision. Weaknesses in one of these control systems may have widespread influence on programmed procedures and data in an organisation.

2.5.2 Application control

Application control is specific control systems for each computer application. They include automated and manual procedures to ensure that only authorised and relevant data are completely and accurately processed by the application. Application control focus on the objectives of ensuring completeness and accuracy of inputs and the update thereof, the validity of data and maintenance of data on computer files. According to Laudon and Laudon (1998: 640-643) application control can be divided into the following:

- Input control. Input control needs to ensure completeness and accuracy of data when entered into the systems. All input need to be authorised and recorded. This includes formal procedures for authorising transactions before the relevant data can be entered into the computer. When inputs are converted by the computer transcription errors can be reduced by capturing data directly from the

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source documents. Edit checks can be done on input data on a routine basis to correct errors before processing.

- Processing control. Processing control verify that data are complete and accurate during updating. Run control totals are procedures that compare the input control totals with the totals of items that have updated the file. Computer matching compares the input data with the information held on master or suspense files. Items that do not correlate will be highlighted for investigation.
- Output control. Output control needs to ensure that the information is accurate, complete and disseminated to the relevant employees. It includes the review of processing logs, audits of output reports and the procedures and documentation of reports and checks.

2.5.3 Electronic commerce and security

Electronic commerce (E-commerce) is doing business over the Internet. It entails public relations, marketing and retailing by an organisation on-line over the Internet. For E-commerce to reach its full potential management and customers need to belief that the transactions on-line are safe. To improve security transactions on-line need to be at a secured Internet site,. Organisations make use of encryption to code and scramble messages to prevent unauthorised access, such as Secure Sockets Layer (SSL) and Secure Hypertext Transport Protocol (S-HTTP) (Lewin & Harris, 2001: 62-63; Laudon & Laudon, 1998: 643-644).

2.6 Summary

Everyone on all levels in an organisation is responsible for control over resource utilisation to ensure optimal objective achievement. Managers need to plan, organise, lead and control the purchasing, warehousing and utilisation of resources of an organisation to ensure effective, efficient and economic operations. An integrated approach towards control over the four basic resources and control of business systems is necessary to ensure strategy realisation.

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Management needs to have a balanced approach towards the management of resources, since the management of respective resources cannot be separated from one another. Although many resources can be controlled via finances and associated budgets, the human resource are responsible to apply control systems, to ensure objectives can be met. The best control systems can be rendered useless if those responsible to apply them do not apply them properly or deliberately misuse their position to gain from non-optimal performance. Management can utilise a wide range of tested and proven control methods to control resources and need to be aware of what is available, what can be utilised in their organisation and when to utilise what control method.

If standards and objectives are not met, management need to assess if more control is necessary, by evaluating the dependence on and access to critical resources. Then management need to assess if more control is possible by evaluating all relevant benefits and costs of control and by evaluating the possibility to implement each step of control process (cybernetic feasibility). If control is necessary, but not possible management can either reduce the dependence on certain critical resources by changing some objectives or by restructuring the dependence on certain critical resources.

Control over financial resources includes pure financial management and the control systems such as budgets that influence control over the other resources. Proper control over financial resources can reduce the amount of control necessary for other resource utilisation. Management needs to ensure the necessary financial control systems such as audits are in place in their organisation to avoid legal problems.

Control over physical resources tends to be more of an administrative nature to safeguard tangible assets of an organisation. Managers must implement proper inventory control combined with operation and quality control to ensure standards can be reached as planned. TQM as management philosophy can assist management to

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create an integrated approach to satisfy the needs of customer, by continually improving products, services and systems and by empowering employees to do their work.

Control over human resources is one of the most challenging aspects of control and of vital importance to ensure control systems are executed as planned. A control environment, established by aspects such as a well defined corporate culture, combined with relevant control systems can be useful to optimally control human resources and must reduce the motivation of employees to deviate from prescribed behaviour, must constrain deviations and must reduce the opportunity for deviations. Management must be aware of the control ratio of individuals to obtain balance of control over human behaviour and ultimately over all resources. Control systems related to human resources starts at recruitment and selection and include the orientation and mentorship programs of organisations, the job design of a specific post, policies and procedures that act as guidelines for behaviour, proper supervision, training and empowering of employees and the performances measurement of work done by employees.

Quality information is of vital importance to effectively plan, organise, lead and control organisations. The dynamic business environment necessitates managers to make quick, informed decisions and they therefore need an adequate MIS. Management needs to ensure the necessary general controls are in place and then implement the relevant application controls to ensure proper control over information resources. Organisations involved with E-commerce must ensure proper security for their systems and for customers.

Management needs to be trained in the relevant control systems and needs to lead by example to ensure the correct corporate culture can be set. Control methods may need some adjustment to be organisation specific to assist management with optimal objective achievement. Management needs to take into account the benefits and problems relating to these control methods and plan accordingly when implementing them, to achieve balance of control.

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CHAPTER 3
COSTS OF CONTROL

3.1 Introduction

Controlling every aspect in an organisation may lead to excellent levels of quality and may satisfy those customers willing to pay a premium, due to the considerable control related expense of the organisation. It may however not be economically feasible to control too much in the long run. Management need to take in consideration the financial and non-financial implications of control systems for organisations. Organisations need have a balanced outlook in determining the amount and intensity of control. Strategic important objectives may necessitate more control than routine aspects in an organisation. The costs to achieve these objectives need to be carefully managed to keep the long-term cost of control at a desirable level. A balance between quality and the cost of controls may be necessary to ensure optimal objective achievement and to satisfy the needs of all relevant stakeholders.

This chapter starts with the decision of management on the amount of control by assessing economic and behavioural factors. Secondly the general costs of control are addressed, since management must be aware of all possible costs of control and the impact thereof on the organisation and stakeholders.

The chapter thirdly address the financial costs of control followed by the non-financial costs of control since all costs need to be effectively managed to ensure the benefits exceeds the costs thereof. Due to the strategic importance of objectives or the detrimental impact of not controlling certain aspects it may be necessary to pay more for controls than what the benefits from these controls may be. The overall value, if the strategic importance can be quantified, may far exceed the costs of these controls.

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3.2 Deciding on the amount of control

According to Rue and Byars (1995: 458) management needs to decide on the relevant amount of control to ensure objectives can be met in the most optimal manner. When deciding on the amount of control necessary to ensure objectives are met effectively, efficiently and economically management needs to consider economic factors and behavioural factors.

3.2.1 Economic factors

The instalment and operating of control systems have a cost implication for an organisation. A quality control system may necessitate additional labour, additional labour hours and advanced technological equipment. These costs can usually be estimated with more accuracy than the value derived from the control systems (Rue & Byars: 1995: 458-459).

3.2.2 Behavioural factors

Managers need to assess the possible impact of the control systems on the employees of the organisation. A balance of control is needed to ensure optimal employee behaviour. Too strict controls may lead to de-motivated and disgruntled employees, frustrated in doing their work. Too little control may lead to employees not knowing what they actually must do and can lead to substantial losses for an organisation. When organisations flourish controls seem to be more relaxed and as soon as financial hardships occur the controls are tightened. A problem with obtaining a balance of control may be the different reactions of employees to similar controls or similar changes to controls. By ensuring the following managers can avoid compliance and resistance related problems with control systems (Rue & Byars: 1995: 458-459):

- Realistic standards and control systems. Standards and control systems need to be challenging, but attainable.

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- Employee participation. If employees are involved with the planning and implementation of controls, it may reduce the level of resistance during operations, because the relevance is understood.
- Use controls only when necessary. Controls need to be continually updated and improved to ensure continuous improvement in an organisation and to avoid absolute controls that may reduce productivity.

3.3 General costs of control

To ensure an organisation's objectives can be met, an organisation needs to invest in control systems to ensure that products and services of high quality can be delivered to the customers. The costs to achieve these objectives need to be carefully managed to keep the long-term cost of control at a desirable level. If all activities are controlled the costs may be so high that the organisations objectives cannot be met. Economic pressures usually fix prices in a certain range. To ensure an organisation delivers a competitive product or service there need to be good management and a fine balance between quality, innovation, time and the cost of controls. The costs of the control systems should not be more than the value they add to the organisation and customers (Oakland & Sohal, 1996: 115-116).

According to Oakland and Sohal (1996: 116-117) the general costs of control can be divided into:

- Prevention costs. Prevention costs are those costs associated with the design, implementation and maintenance of control systems. These costs can be planned for and are usually incurred before operation. Prevention costs may include:

  - The determination of service requirements and the setting of standards.
  - The planning for quality at all levels and during all processes, as well as for the final product or service.

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- The creation and maintaining of a quality assurance system.
- The development and obtaining of inspection equipment and procedures.
- The development, preparation and improvement of training programmes for all employees.
- The management of miscellaneous activities regarding quality.

➢ Appraisal costs. Appraisal costs are the costs a supplier and customer incur when they evaluate services to ensure the standards set are met. This may include:

- The verification of the services against agreed standards.
- The cost of quality audits to check if the quality system is functioning satisfactorily.
- The maintenance of inspection equipment and improvement of inspection procedures.
- The rating of all vendors regarding consistent quality products and services.

➢ Internal failure costs. Internal failure costs are the costs incurred by the organisation if products or services fail to reach the standard set and it is detected before delivery to the customer. This may include:

- The costs of disposing of waste products or doing unnecessary work prior to delivering the product or service.
- The scraping of defective products and materials not used.
- The rectification of defective material and the re-examination of products and services.

➢ External failure costs. External failure costs occur if products and services fail to reach the desired standard and are only detected after transfer to the customer. This may include:

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- The repairing of products and redoing of a service.
- The claims that may resolve out of warranties and liability on changes of contracts.
- The work and costs associated with dealing with customer complaints.
- The loss of goodwill and the impact on future sales. Although it may be difficult to quantify, it may have a detrimental effect on future profitability.

3.4 Financial costs of control

The financial costs of controls are the quantification of the control systems and processes used by an organisation. To achieve the overall strategy and organisational objectives while reaching optimal quality and productivity levels, an organisation can control a huge amount of aspects and activities. This may however not be the most profitable way and in the long run the organisation may not be able to continue as a going concern. To ensure optimal levels of control, managers need to carefully assess the costs, benefits and unintended consequences of control, to ensure the benefits exceed the costs (Williams, 2002: 184-185).

The costs of control includes the costs of the control systems and processes (internal and external auditing plus possibly consulting fees), part of the salary and empowering costs of some employees and managers and the costs associated with prevention, appraisal, internal failure and external failure. This includes all investments into equipment and processes to improve control in the organisation. Managers must keep in mind that there can be some once-off costs and running costs. Once-off costs include; the purchase of equipment, project team costs, costs regarding documentation and training of employees. Running costs include; employee salaries, overheads, training, maintenance of equipment and financing costs (Lewin & Harris, 2001: 8)

To assist management in the quantification of control, it may be useful to investigate and evaluate the costs in terms of the relevant resources applied to control a specific activity

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and to evaluate possible losses that may occur. The possible impact and likelihood of losses need to be evaluated to assess the validity of the control systems. Table 3.1 shows an example of some of the costs relating to a specific activity. This process of quantification can be linked to the budget process to enhance control in an organisation. The amount and rate that applies are situation specific and can differ between the resource, the level in the organisation and between different organisations. It needs to be regularly updated as the situation changes and new information comes to light, to ensure continuous improvement in measuring the costs of control. The rate used in Table 3.1 serial number 01.1.1, is the applicable salary of a senior staff officer class 1 in the SANDF, converted to working hours ({52 weeks x 5 days} = 260 days - 5 public holidays – 30 vacation days = 225 days x 8 working hours = 1800 hours, R135 000 / 1800 = R75/hour). The rates used with the spreadsheet need to be added as part of the legend to the spreadsheet to ensure user-friendliness.

Table 3.1: Annual cost of control to avoid fraudulent substance and travel allowance

S/no	Resource utilised	Amount	Rate	Total (R)
01	**Human resources**			
01.1	SO1 Support			
01.1.1	Time to draft and finalise policy	20 hours	R75/hour	1500
01.1.2	Compiling management reports	25 hours	R75/hour	1875
01.2	Departmental Heads			
01.2.1	Approval of applications/claims	10 hours	R90/ hour	900
01.3	Personnel Office			
01.3.1	Processing advance	150	55/hour	8250
01.3.2	Processing claim	100	55/hour	5500
01.3.3	Handling complaints	40	55/hour	2200

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02	**Financial resources**			
02.1	Budgeting for S&T	35 hours	75/hour	2625
02.2	Accounting for S&T	500hours	80/hour	40000
03	**Information resources**			
03.1	Related IT & IS expenditure	R2m every 5years		400000
04	**Physical resources**			
04.1	Documents & photo copies	R0.25/page	16000 p's	4000
04.2	Safekeeping of equipment	R20000 every 4years		5000
	Sub Total			471850
	Internal auditing department			
	External auditing department			
	Consulting fees			
	TOTAL			

The costs of a specific activity need to be updated annually to improve the quality of the controls and the efficient operation of the budget process. Add to the activity specific control cost, a portion of the relevant costs of the; internal auditing department, external auditing department and the consulting fees during crises times. This approach can be time consuming and may entail additional costs to the organisation. It is therefore recommended that the benefits gained from control of priority objectives need to be measured, to see if it is economically feasible to institute more control. According to Strydom (2002) the learning curve effect should be taken into account since the time spend by managers on control activities may reduce, as managers gain more experience. Therefore the standards used should be as accurate as possible to ensure meaningful comparisons between actual and planned results.

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Another approach may be to assess the overall control expenses, those budgeted for and the actual expenses. These costs need to include all investments in resources relating to control aspects (hardware, software, machines, training, etc.) and the general costs of control incurred. Management may add a proportion of the relevant salaries to assess the overall costs of control for the organisation. The overall costs of control to the organisation for a specific time period can then be compared to the profit earned by the organisation for that time period. This control ratio can be used to evaluate the trend over time. Did the organisation spend more or less on control and what was the effect on the profit? This information needs to be assessed keeping in mind other factors that contributed to the profit, to produce relevant information to guide decision making.

3.5 Non-financial costs of control

Some managers may focus so intensely on controls and on following procedures and rules to the letter that they may lose sight of creating and adding value to the service they have to deliver. The cumbersome process they have to go through to get their problem solved may frustrate employees and customers. Any control system can have imperfections and all the possible value that was suppose to stem from the controls may be eroded if the control systems become inflexible and too much emphasis are placed on the controls. Usually the dys-functionality of controls is caused by an imbalance in controls. Too much emphasis on improving quality while ignoring employees can lead to problems (Robbins & Coulter, 1999: 568-569). To improve the effectiveness of controls, managers need to know what the potential problems and non-financial costs of controls entail. This can enable them to improve the control systems to avoid such problems, leading to continuous improvement (Certo, 1994: 448).

3.5.1 Overemphasis on short-term results

The control systems of an organisation can create the undesirable overemphasis to obtain short-term results at the expense of long-term results. This can impact negatively on the efforts of the organisation to reach its objectives. The maintenance of machines

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and vehicles may be delayed to achieve short-term objectives, but this can reduce the effective reaching of long-term objectives of the organisation (Certo, 1994: 448). This problem can increase if employees receive a relative small basic salary and substantial bonuses for reaching short-term objectives. The employees may do anything to reach the desired target and receive the bonus. Proper planning and regular scheduling for repairs can reduce some of these problems. Link some of the bonuses with the achievement of sustained performance and long-term performance. Include these specifications regarding bonuses and what employees will be measured against in their job descriptions to empower them to know how their performance will be measured (CIMA, 1999: 200-208; Robbins & Coulter, 1999: 568-569).

3.5.2 Negative impact on employee motivation

Employees tend to become frustrated when there is too much control in the organisation, if controls are inflexible or if the control standards tend to be unreasonable. Employees may not get their work done as effectively, efficiently and economically as possible, because of cumbersome control processes. Employees may perceive the control process as a way by which management wants to improve productivity. The frustration from too much control can reduce morale and impact negatively on obtaining the overall organisation objectives. To avoid this frustration, employees need to be empowered to do their work and make decisions, while being held accountable for outcomes (Certo, 1994: 448; Craig, 2002; Robbins & DeCenzo, 1995: 360).

3.5.3 Falsification of reports

Employees can falsify reports or influence the information system's output to avoid corrective actions or to obtain bonuses. Employees can manipulate measures to give the appearance that their department is performing well. The likelihood of false statements and reports depend on the importance of the activity or objective. If a manager does not reach a specific target and this may lead to serious corrective actions or a loss in income the possibility of falsification increases. It is therefore vital that

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priorities are determined for objectives and that the control system is adjusted accordingly. Management needs to keep in mind that management information may be distorted and they may need to investigate suspicious reports (Certo, 1994: 448; Robbins & Coulter, 1999: 568-569). At a General Motors (GM) truck plant in Flint, Michigan in the USA, three managers installed a secret control box in a supervisor's office to override the control panel that governed the speed of the assembly line, to speed up the manufacturing process. The reason for installing the control box was to meet unrealistic production objectives, since senior executives of GM had an attitude of: "We don't care how you do it-just do it". The end result was a serious violation of the contract between GM and the United Auto Workers (Robbins & DeCenzo: 1995, 359-360).

3.5.4 Lack of goal congruence

Controls are usually designed to focus on relatively narrow areas of an organisation. These controls need to be of such a nature that they contribute to the fulfilment of the overall organisation objectives. This problem increases if managers attempt to look good only in terms of the control systems. They can manipulate the situation to improve the image of their department at the expense of the organisation as a whole. Managers can do this by not sharing vital information or resources and scheming against one another. Internal competition can be positive or destructive for an organisation (Certo, 1994: 448-449; Robbins & DeCenzo: 1995, 359-360).

3.5.5 Failure to continually improve

One of the main benefits of controls is to continually improve the quality of outputs and systems by changing constructively when necessary. By changing systems and taking corrective actions where necessary, managers can ensure continuous improvement. A problem might arise when managers perceive control activities as the objectives of the control process in stead of the means by which corrective action should be taken. The

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benefit of continuous improvement gained from the control process must exceed the costs of performing control (Certo, 1994: 449).

3.5.6 Failure to meet the needs of customers

If the control systems and relevant policies of an organisation are too rigid and inflexible it may prohibit the delivery of optimal customer service. To meet the needs of customers in an unstable business environment, an organisation needs to be able to be flexible and may need to change some objectives and relevant control systems. Inflexible organisations and control processes can have disastrous implications for the organisation as a going concern, legal implications and customer dissatisfaction. Larry Boff phoned the emergency number of the Dallas Fire Department to get immediate help for his stepmother who had trouble breathing. The dispatcher, Billie Murick, spent fifteen minutes arguing that the stepmother was required to talk over the phone, in order to determine if it was an emergency or not. The stepmother was in the bedroom, unable to get to the phone and Billie Murick continually responded that she cannot send an ambulance until she spoke with Larry's stepmother. The end result was that the stepmother died during the fifteen minutes wasted, because of unrealistic control processes and objectives (Robbins & DeCenzo: 1995, 359; Craig, 2002).

The South African Lottery Company, Uthingo, was effective and efficient in collecting funds of R6 billion in 2001, of which R1 billion must still be distributed to charities (*BusinessDay* a, 2002: 1). Uthingo was ineffective and inefficient in paying money from their trust fund to the charities that may be in dire need for support. The Blue Bulls Rugby Union received some payment in stead of charities. Strict procedures and transparency are essential to ensure only valid organisations obtain money, but too strict procedures will cause unnecessary time delays and the innocent may suffer (*BusinessDay* b, 2002: 1-2).

The South African government stated on numerous occasions their commitment to fight the AIDS epidemic. Control over the allocation of funds is necessary to avoid fraudulent

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behaviour. Too much control over this process may however have dire effects on those waiting for these funds. Daily people die of the disease, due to a lack of medicine and malnutrition. The Head Bishop of Cape Town, Njogonkulu Ndungane is requesting the resignation of the minister of health Dr. Manto Tshabalala-Msimang, due to the controversial issue regarding the R720 million that was donated by the United Nation's Global Fund to fight AIDS, TB and Malaria. The bishop is of the opinion that there is a lack of senior management commitment to fight the epidemic, especially from the Minister of Health. Too strict policies and procedures can prohibit some of the money to reach those in need in time. The Treatment Action Campaign (TAC) is of the opinion that there is continuous conflict between policy and implementation (Rooi, 2002: 5).

3.5.7 Ethical issues in control

In the workplace tension may arise between employees and managers, as managers design effective, efficient and economical control systems. The advances in technology and computerised systems can facilitate easier control. It also created ethical issues such as, what right does managers have in controlling employee behaviour, on and off the job and it created opportunities for ethical abuse by the employee and manager (Robbins & Coulter, 1999: 570; Robbins, 2000: 187).

- On the job behaviour. Information technology increased the capability of managers to monitor employees. The manager is responsible to obtain results and will control his personnel accordingly. Managers defend their action in terms of ensuring quality, improving productivity and ensuring proper employee behaviour. Various electronic monitoring systems are available to managers to determine the level of work done by employees. The monitoring systems can be used to collect, process and disseminate performance information about employees. This can be used to improve performance, assist with employee development and to identify employee work practices that might be unethical and costly. A variety of monitoring software, "snoopware", is available, such as a product from Win Vista Inc., that tracks the files that employees open, the

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websites they visit and the e-mails they send. Most organisations can and do trace e-mails of employees. This can cause tension and employee dissatisfaction, leading to lower morale and possibly a decline in productivity. To avoid such problems the organisation needs to set clear, unambiguous guidelines for the usage of e-mail, stating if it may be used for private purposes, the amount of private usage and when (tea-break, lunch) it may be used for private conversations. To decrease the level of dissatisfaction employees need to be informed of all aspects and activities that may be monitored and how this can take place. Managers need to monitor only those situations relating to legitimate business purposes, such as improving performance and controlling costs (Robbins & Coulter, 1999: 570-572; Robbins, 2000: 188).

- Off the job behaviour. Control is an integrated approach to ensure objectives are met and therefore management may monitor all relevant activities. If employees take work home after hours and during weekends, how much can management monitor what they do? Due to the substantial investment in human resources and to curve health care costs, some organisations deem it necessary to act proactively, to control private behaviour of employees. Some organisations prohibit activities such as skydiving or bungee jumping or provide financial incentives to employees who live a healthy lifestyle (Robbins & Coulter, 1999: 572-573; Robbins, 2000: 188).

3.6 Summary

Managers may not be able to reach objectives effectively, efficiently and economically if they try to control every aspect and event in an organisation. Management needs to obtain balance of control by assessing the economic factors and behavioural factors regarding control. The costs of the control systems need to be assessed to make possible comparisons with the benefits from these systems. Part of the balance of control may be to ensure optimal employee behaviour, since employees implement and operate control systems. Too rigid and inflexible control systems may lead to

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disgruntled employees and can impact negatively on productivity and optimal objective achievement. Control systems need to be realistic, employees need to participate with the planning and implementation of controls and controls should be applied only when necessary to avoid resistance from employees. Goal congruence is of importance and the goal of controls must co-inside with the goals of management responsible to implement the controls. Management must understand and support the objectives of controls.

The costs to achieve objectives need to be carefully managed to keep the long-term cost of control at a desirable level. This can assist management with overall budgeting and may increase the effectiveness of the budget process. Due to the economic pressures and prices being fixed in a certain price range, management needs to assess the general costs of control and plan accordingly to improve productivity. Prevention costs can be planned for and may be incurred before operations. It is those costs associated with the design, implementation and maintenance of control systems. Appraisal costs are the costs relating to the assessment of services and products to ensure standards are met. Internal failure costs are the costs incurred when products or services don't meet the set standard and it is detected before delivery to customers. External failure costs are the costs incurred when products or services don't meet the set standard and it is detected after delivery to customers. These general costs of control need to be documented and actively managed to produce reliable information, from which to make informed decisions to ensure continuous improvement and to obtain balance of control.

The financial costs of control can have an impact on the overall strategy and objectives of an organisation and may prohibit obtaining optimal quality and productivity, if too high. Internal controls need to ensure a balance between organisational and operating efficiency and the appropriate protection of resources used to achieve an organisation's objectives. Managers need to assess the costs, benefits and unintended consequences of control to ensure the value can exceed the costs of the control systems. The financial costs of control include all investments in equipment and processes to improve control

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and related human resource costs such as training costs and part of the salaries relating to control activities. Some of these costs can be easily quantified, while some may have much subjective judgement involved. To assist management with the quantification of controls they can combine the quantification of controls with the budget process. This can give valuable information from which to make relevant decisions. The process should be documented and updated (ongoing process) regularly to ensure continuous improvement and to obtain balance of control, since managers can assess the costs and value of controls. The process may however be time consuming and can add costs to an organisation. Management can also make use of a more holistic approach by calculating a control ratio. The overall control expenses, which can include part of management salaries, are compared to the overall profit of the organisation to produce this control ratio and to assess the benefits of the controls. Management needs to carefully assess other factors that may have influenced the profit to ensure relevancy.

The non-financial costs of control can have detrimental effect on the value added to products and services by organisations. Management needs to be aware of the potential problems caused by too much control or the wrong type of control. This can enable them to continually improve the control systems to optimally reach objectives and to satisfy the needs of all relevant stakeholders. The focus needs to be the achievement of long-term results and overall objectives. Performance rewards need to include obtaining short-term and long-term objectives to ensure goal congruence in an organisation. Employees tend to become frustrated if there is too much control or inflexible and unrealistic controls or standards. Employees need to be empowered to make decisions, while being held accountable for outcomes. The falsification of reports to obtain targets can impact negatively on productivity. Suspicious reports need to be investigated to ensure that relevant information is used for decision making. By continually improving control systems the quality of outputs may also be improved. Control systems need to be flexible enough to meet the needs of customers. It can have detrimental impact on the going concern of an organisation if the organisation cannot meet the needs of their customers due to too cumbersome control processes. Ethical issues may arise regarding the control over behaviour of employees on the job

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and off the job. Employees need to be informed regarding the level of supervision of management over their work.

All relevant costs regarding control need to be assessed by management to assist them in making sound business decisions, in order to optimally reach objectives. These costs will be compared with the benefits from the control systems to obtain balance of control.

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CHAPTER 4
BENEFITS OF CONTROL

4.1 Introduction

To ensure that managers can make sound decisions they need to rely on quality information to effectively, efficiently and economically reach objectives. To find quality information regarding the costs and benefits of decisions and related control systems is not always possible. There will usually be a part of uncertainty regarding the outcome of decisions, since no one can fully predict what may happen in future.

Some benefits of control can easily be quantified and compared to the costs of control. Some of these obvious advantages of control include reaching of objectives, reduction of risk and prevention of fraudulent behaviour. Some benefits may however be difficult to assess only in financial terms. These benefits cannot be ignored and need to be assessed when management compare the costs and benefits from control systems to obtain balance of control.

This chapter starts with addressing the general benefits of control and ways to assess the value of control systems. The non-financial benefits of control are then addressed to ensure management assesses all relevant benefits of control.

The reductions of risk as a benefit of control are then discussed, since it may have substantial advantages for an organisation. The types of risks are discussed since managers need to be aware of them and they need to plan accordingly to reduce the likelihood and impact thereof. Risk management is then addressed since it can assist managers in achieving balance of control. The problems of risk analysis techniques are also addressed followed by an example of risk management in the DOD.

The reduction of corruption and fraud are also addressed, since proper control systems can reduce likelihood and impact thereof. The types of fraud and ways to prevent and

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detect fraud are investigated, along with ethical issues. Lastly corporate governance are addressed due to the relevance thereof as formal control measure to restore stakeholder confidence in corporate organisations.

4.2 General benefits of control

The purpose of control as an integral part of the functions of management is to ensure that the set objectives are met in the most economic, effective and efficient manner. The value of the control systems can be expressed as the success or failure of an organisation in reaching its objectives and the profits made during the relevant period of time (Robbins & DeCenzo, 1995: 346). To ensure optimal organisational performance an organisation needs to assess the benefits of the control systems and processes and compare this to the costs of these control systems and processes. This can enable organisations to find balance of control. Overall organisational objectives can be met while products and services of high quality are delivered to the customers. Some of the benefits of control are easy to identify, while other benefits are difficult to predict and even more difficult to quantify. Some of the benefits of implementing a new information system, for control purposes, in an organisation may be (Lewin & Harris, 2001: 8-9):

- Improved control. The control in the organisation can improve due to more reliable information and improved decision-making. The quality of decisions may improve due more complete and accurate information, when needed.
- Improved productivity. The speed and quality of manufacturing and service delivery may increase, because of fewer delays as a result of quicker availability of needed, quality management information. The quicker availability of quality management information can enable continuous improvement to become a reality in an organisation.
- Improved customer service. The improved productivity and quality of products and services combined with quicker product/service delivery can lead to improved customer service. An organisation may be able to communicate relevant information easier and more accurately to customers.

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- Reduced staff levels. Usually the more automated the processes become; the less staff may be required. Although the investment in technology can be costly, it may be offset by the long-term savings regarding staff salaries and improved control systems due to less human influence.

4.3 Assessing the benefits of control systems

The ultimate benefit of control systems lies in the insurance that plans can be executed as they are suppose to and that actual performance can meet or surpass the set objectives. The benefits of control are link to the effectiveness of operations, by an organisation (Schermerhorn, 1999: 182). Controls must be a value adding activity for customers. The following methods can be used by an organisation to assess the benefits of the control systems (Lewin & Harris, 2001: 8-9):

- Ignore the benefits. Management can choose to ignore the benefits of the control systems that are too difficult to quantify and keep on controlling as they see fit.
- Quantify the benefits. Management can, by means of assumptions in some instances, quantify the benefits of a control system, to obtain the overall value of a control system. The problem with this approach may be that other managers may dispute the rational of the assumptions used and it may be difficult to prove that the claimed benefits did actually realised.
- Accept the qualitative nature of the benefits. Management can accept the qualitative nature of the benefits and construct a formal, non-financial way to assess them. Closed ended questions in a well drafted questionnaire can provide a means to measure the qualitative benefits of control systems on customer service. Customers can be asked to rate the service they are receiving with a set of control related criteria.

Many organisations consider human resources to be an asset to the organisation, but as soon as there is some financial difficulties human resources become a cost and is some

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of the first costs to be cut. The current systems and methods of evaluating human capital and culture of organisations are not producing desirable results. It does not accurately produce a value for human capital and culture. To make decisions, solve problems, change effectively and efficiently and to ensure continuous improvement entails the measurement of productivity, efficiency and performance effectiveness. Measurement needs to be followed with corrections where necessary (Rees, 2002: 4)

According to Lewin and Harris (2001: 4-5) a way to assess the value of any activity is to evaluate the extent to which it satisfy the needs of the users. Since management uses control to ensure objectives are met the following control audit process can be applied:

- Control needs assessment. Information regarding the control necessary for managers to obtain the required results is gathered by means of questionnaires and interviews with relevant personnel. Linking objectives with the necessary control systems can link the control systems with the budget process to enable the organisation to quantify the control systems.
- Control analysis. The MIS must to provide managers with the relevant information regarding objectives met and not met, along with reasons why problems occurred. The reasons need to specifically address control issues where necessary. Variance analysis as part of the budget process can assist with the control analysis to enable managers to concentrate their attention on the trouble areas, where objectives are not met.
- Gap analysis. Information from the control needs assessment and the control analysis can be used by management to identify the gap between control needed to reach objectives and the actual results. Each objective not reached can have a gap. To close this gap may entail different plans and strategies. The costs and benefits to fill the gap, in terms of control related systems and other systems can be evaluated to assess the economic feasibility thereof. The end result may be new control systems (ways), new structures (means) or lastly a change in objectives (ends). There must be equilibrium between the ends ways and means (Engelbrecht, 2002). If new control systems are too expensive

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in relation to the possible benefits and no changes can be made to either processes or structure of the organisation, managers may have no alternative, but to change some of the objectives where the gap cannot be closed. The effect of changes to the overall business plan must be assessed to ensure a change of objectives may not hurt the organisation in the long-term.

4.4 Non-financial benefits of control

It can be useful for managers to recognise the qualitative nature of some of the benefits from control systems to effectively evaluate the costs and benefits of control systems (Lewin & Harris, 2001: 9). Some of the non-financial benefits of proper control systems include:

- Improved level of customer satisfaction. The main aim for many organisations is to maximise shareholder wealth, while ensuring customer satisfaction. Customer satisfaction may be vital to the long-term performance for an organisation. An organisation cannot presume that the services rendered are up to standard if no one complains. According to Hodgetts (1996: 52-63), customer surveys need to be conducted to ensure the product/service is up to standard and to get innovative ideas from a third party. Changes in customer needs can be identified. The survey need to be well designed and easy to complete. It needs to contain control related questions, questions that the customer considers appropriate and needs to provide information that can be quantified and analysed. The organisation's commitment to quality needs to be included in the questionnaire. Hodgetts (1996: 126-127) states that the information analysed can be used to make decisions on actions to be taken and where to improve control systems if necessary. The information from the questionnaires can be used to benchmark against competitors or other organisations involved in similar processes and services. It can also be used to ensure that work contracted out is done according to an industry norm. The information obtained can be used to ensure continuous improvement and to obtain balance of control.

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- Gaining a competitive advantage. An organisation has a competitive advantage over its rivals if it uses its knowledge of the competitive forces to be in a position to exert more competitive force over its rivals than what the rivals do on the organisation (Lewin & Harris, 2001: 136). Management might make use of market share and the growth in market share of the organisation to measure the benefits and overall value of the control systems. Information regarding market share may not be easy to obtain, although some published information regarding corporate organisations are available. Another may to measure the benefits of control systems in relation to competitive advantage is to assess the reductions in manufacturing costs or service delivery. These costs reductions can give an organisation a competitive advantage over rivals since the price of the product/service is relative fixed due to the amount of competition and the organisation with the least manufacturing/service delivery cost, at the desired level of quality, can earn more profit. This profit can be utilised to the advantage of the customer by re-investing it to ensure continuous improvement. It can be used for research and development, improved marketing, increased dividends that can lead to an increase in capital value of shares of the organisation, thus maximising shareholder wealth. The problem with the increase in market share and cost reductions is to separate the effect of the control systems from other contributing factors (Lewin & Harris, 2001: 9).
- Environmental issues. Usually it is difficult to assign monetary value to the costs and benefits of the effects of a project or activity of an organisation. In depth environmental studies can produce vital information for managers regarding potential problems regarding environmental issues. A way to assign monetary value to the perceived effect of a project is to estimate what people are willing to pay to avoid such a negative impact. The value of the project or activity, such as an economic boost to the area, better infrastructure and related time saving and safety can be identified and to some extend quantified. Different people and even specialists may have different perspectives regarding the costs and benefits of projects (European Conference of Ministers of Transport, 1989: 143-151).

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4.4 Risk management

Any organisation can face various types of risk in their operations. Risk is a condition where a quantifiable dispersion of possible outcomes, from an activity exists. Thus risk differs from uncertainty, since uncertainty cannot be quantified (CIMA, 2001: 189-195). Risks can be identified, assessed and managed by management. Due to the opportunities and threats that can come from these risks, management needs to manage risk in a structured and integrated manner to ensure objectives can still be met. Risk management can be defined as a management function with the aim to protect the organisation, resources and profits, against the adverse consequences of risk and to reduce the impact and variability of losses. It is a process whereby management try to understand and manage the risks the organisation may be subject to, while attempting to achieve the overall objectives. Effective risk management can ensure improvement of an organisation's competitive advantage, assist management with identifying potential opportunities, reduce management time and related costs of solving problems, increase shareholder confidence and assist management in obtaining balance of control (Valsamakis, Vivian & Du Toit, 1992: 12-22; CIMA, 2001: 189-195). The emphasis of integrated risk management should be on obtaining risk-return trade-off efficiency on the long-term and not only on evaluating the costs and benefits of risk management on the short-term (Valsamakis, et al., 1992: 58).

To enhance the possibility of optimal organisational performance, management can make use of the Enterprise-wide Risk Management (ERM) which is the risk management philosophy whereby overall organisational risk is managed across all risk categories and business units. This can ensure an integrated approach to risk management to obtain goal congruence in an organisation. An ERM system can enable management to measure and aggregate all the relevant risks on a consistent basis, taking into account correlation and interrelationships, and may reduce the organisation's exposure to the risks. To use ERM effectively proper IT and IS need to be in place to facilitate the process by providing the relevant, integrated information, processing and presenting it in a user-friendly manner. This may be costly, but benefits from ERM

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systems may be an improvement of the quality of the risk-return analysis, greater risk awareness, more informed stakeholders due to improved risk management information and better decision-making, ensuring continuous improvement and synergy in the achievement of overall organisational objectives (Dowd, 1998: 230-235).

Organisations making use of an integrated risk management approach may have difficulties in assessing and integrating some risks, such as risk decisions affecting human behaviour. Human behaviour is complex, due to the amount of uncertainties involved and the dependence on various subjective factors. It may be useful for managers to use professionals, in a cost effective manner, to assist them with proper risk- assessment and management (Kemshall & Pritchard, 1996: 9-11).

4.4.1 Types of risks

According to CIMA (2001: 190-193) and Dowd (1998: 3-5) the different types of risks an organisation may be exposed to are:

- General business risk. General business risk is the potential variability of profits, due to the nature and type of business operations an organisation may be involved in. These risks are usually inherent in the business activity. Some of the factors that contribute to business risk may be the state of the economy, type of industry involved in, actions by rivals, labour action, dependency on suppliers, gearing level and the flexibility of manufacturing and service delivery.
- Market risk. Market risks are the risk of losses to an organisation due to adverse movements in market prices or market rates. Market risk consist of the following:

    - Equity price risk. Equity price risk is the risk associated with the volatility of the stock markets and the adverse effect on the value of an organisation and the wealth of its shareholders if there is a fall in share price of the organisation.

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- Foreign exchange risk. Foreign exchange risk is the possibility of making profit or losses on transactions with foreign trade partners, due to changes in the exchange rate. The following are types of currency risk:

  → Transaction risk. Transaction risk relates to the movements of the exchange rate from the time of entering into a deal, till the settlement thereof. The arms deal of South Africa is an example of the realisation of such a risk.
  → Translation risk. Translation risk is the changes in balance sheet values of foreign assets and liabilities, due to changes of the exchange rate between balance sheet dates.
  → Economic risk. Economic risk is the effect of changes in the exchange rate on the competitiveness of organisations.

- Interest rate risk. Interest rate risk relates to the possible changes in future interest rates and the effect thereof on an organisation's debt repayments and investment income.

➢ Trading risk. Trading risk is the possibility of adverse effects for an organisation when trading with other organisations and includes:

- Physical risk. The risk of goods being stolen in transit or the loss of related documents.
- Credit risk. The possibility of default payments.
- Trade risk. The risk of customers refusing to accept products or services after they ordered it.
- Liquidity risk. The inability to finance relevant credit.

➢ Cultural risk. If an organisation trades internationally, management needs to be aware of the different customs, languages and laws applying to trade partners. By specifically addressing the relevant issues regarding culture, conflict may be

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avoided or reduced. International trading rules can be a useful tool for management in this regard.

- Country risk. Country risks stem from trading with foreign organisations, or from holding assets in a particular country. Political, economic and legal issues are the factors that can influence this risk.
- Political risk. Political risk is the risk of political actions and decisions affecting the value and potential profits of an organisation. The political actions includes; exchange controls, tax regulations, nationalisation of assets owned by an organisation, legislation on the utilisation of local resources, restriction on the usage of local finances and certain price regulations.
- Technology risk. Most organisations depend to some degree on technology to conduct business. Information technology and related MIS can be used by management to gain a competitive advantage over rivals. If management neglects to invest in technology on a continuous basis, while maintaining a balance with objectives to be met, the organisation may find itself at a competitive disadvantage.
- Operational risk. Operational risks arise from the failure of internal systems or the personnel operating them. It may lead to temporary breakdown of manufacturing or service delivery or permanent shutdown and termination of business, such as the bankruptcy of Barings Bank in 1995.
- Fraud risk. Losses to organisations may occur due to the fraudulent actions of personnel. Proper internal control and a fraud policy that are continually improved may reduce the occurrence and effect of fraud in an organisation.

According to the Transformational Risk Management Workshop (2002: 12-17) risks can be categorised into three main categories, core risk, controllable risks and financeable risks as can be seen in Figure 4.1 This way of categorising risks can improve the effective and efficient management of risks.

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- Avoidable risks. Avoidable risks are usually discovered when old policies are re-visited and adjusted to ensure continuous improvement. Management can take preventive and contingent action to reduce the likelihood and seriousness of the risks. This can ensure an organisation, not only avoid the risks, but can also improve and refine alternative outcomes. The major cause of avoidable risks is intuitive decisions by management that have not been communicated and clarified with other relevant parties.
- Reducible risks. Reducible risks are those risks that can be reduced in terms of likelihood and seriousness, by applying decision analysis and potential deviation analysis. Management must ensure preventive measures are in place and that the necessary contingency plans are in place if something does go wrong.
- Containable risks. Containable risks are those risks that will only require contingent plans and action. Possible preventive actions usually are excessively expensive. This may negatively influence the balance of control that managed sought.

Financeable risks. Financeable risks are those risks that can be financed in some manner to reduce the likelihood and seriousness of it occurring. Financeable risks consist of the following:

- Transferable risks. Transferable risks are those risks that can be transferred from one party to another, who may be better equipped or more willing to bear it. One of the most common ways for management to transfer risk is by means of insurance. Insurance is a means whereby management can reduce its exposure to risk while paying a fixed amount to do so. Some speculative risks can be transferred by means of hedging. Hedging is the purchase or sale of goods or services for future delivery. An organisation may retain some variety of risks, whether voluntary or involuntarily. Voluntary risk retention reflects a conscious decision by management to accept and absorb certain risk exposures internally. It might also be the most cost-effective way and can

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assist in finding balance of control. An organisation can create a contingency fund, in stead of paying insurance premiums. The organisation can receive interest on the investment and use the fund to pay for possible damages, when they do occur. A disadvantage of such a fund is that it may be too small for big or continual adverse events.

- Retainable risks. Retainable risks are those risks an organisation retains and manage, because it cannot find someone to transfer it to or it may be too costly to transfer it. Retained and transferred risks relate directly to the capital resources utilised by an organisation.

By using this method to categorise risk, managers may be able to see more clearly who needs to attend to a specific risk. It can assist managers to assess if more information regarding the risk and possible outcomes may be required and what information needs to be obtained. It can enable managers to assess when the risk needs to be attended to and what possible action may be taken. By categorising the risks properly it may assist managers in the prioritising the risks and assessing appropriate action to deal with the risks in the most economical way to ensure balance of control in the organisation (Transformational Risk Management Workshop, 2002: 17).

4.4.2 The risk management process

The risk management process may be a business process, but managers need to follow an integrated approach to ensure synergy in the organisation. This can allow management to economically, effectively and efficiently control the risks in order to obtain balance of control and to assist the organisational drive towards continuous improvement (Dowd, 1998: 9; Valsamakis, et al., 1992: 60). The risk management process consists of the following steps (Transformational Risk Management Workshop, 2002: 9-10; CIMA, 2001: 194-195; Valsamakis, et al., 1992: 63-67):

- Establish measurement criteria and risk parameters. It is the responsibility of management to devise the measurement criteria and risk parameters.

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Management needs to set the guidelines regarding the measurement and assessment of priorities, risks, satisfaction and the decision-making process to be utilised by the organisation. Key stakeholders of an organisation need to be incorporated in the process of establishment of measurement criteria and parameters to be used and the acceptable tolerance level (risk culture) for the organisation. The following measurement criteria and parameters may be useful to organisations when managing risks:

- The relative weights of considerations.
- The satisfaction scores of the relevant alternatives.
- Overall satisfaction achieved by an alternative, by taking into consideration all alternatives and the integrated effect it may have. A satisfaction index can be compiled.
- A risk index of an alternative can be compiled by combining the adverse consequences of an alternative.
- Priorities can be set by the sum of the seriousness, the urgency and the negative growth of a deviation and by taking into account the different operational levels.
- Risk can be defined here as the product of the probability of something happening and the seriousness of the impact of that something.

➢ Risk identification. Management can use the different types of risks to identify the risks their organisation may be exposed to, on macro and micro level. Management needs to identify all relevant sources of risks to ensure optimal performance. The organisation's exposure to the different types of risks can differ between strategic, operational and tactical level.

➢ Risk assessment. Risk assessment and evaluation relates to the quantification of risk exposure by assessing the financial impact on the organisation and the likelihood of occurrence, of the risks. This can enable management to prioritise risks according to a structured manner and to allocate resources accordingly. Table 4.1 gives a guideline to management to quantify the adverse effects of risk

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by calculating the Expected Monetary Value (EMV). Table 4.2 can assist with risk assessment, to prioritise risks and to determine appropriate actions.

- Impact. The assessment of the impact of the realisation of a risk on the value of the organisation includes an analysis of the financial strength of the organisation. Management needs to assess the effect on present and future cash flows and profitability and the effect on present and future asset value and debt structure. The potential effects on the overall objectives need to be taken into consideration.
- Likelihood. The relative likelihood of events needs to be assessed to enable management to plan for appropriate actions to ensure, as far as possible, pre-active actions by management.

Table 4.1: Expected monetary value (Valsamakis, et al., 1992: 33).

$EMV = \sum_{i=1}^{n} p_i \cdot x_i$	
EMV	Expected Monetary Value
p_i	Probability of the ith outcome
x_i	Monetary value of outcome i
n	Number of possible outcomes

Table 4.2: Prioritising risks (CIMA, 2001: 195).

S/Nr	Impact	Likelihood	Actions
01	High	High	Immediate action required
02	High	Low	Contingency plan needed
03	Low	High	Consider taking action
04	Low	Low	No action now, review periodically

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- Risk control. After management have identified and prioritised risks they need to design and implement the practical action plan (risk management program). The objectives of such an action plan may be the reduction of the extent of the risk exposure, the reduction of the frequency of the adverse events, the handling of adverse events and the recovery from adverse events. The action plan needs to be integrated with the overall operation of the organisation and can set the scene for risk control to be embedded in the culture and processes of the organisation. Proper risk management can enable management to cost-effectively accept, transfer (insurance), reduce (hedging or cancelling activities) or control (internal controls) specific risks. According to Cooper (1995: 26-29) training is a vital aspect that can be used to control risk and to embed risk control in an organisation's culture. Training may improve risk control if it is part of induction of new employees, it is repeated periodically, training programs are updated to take into account new and changed risks and if some of the training is in-post training.
- Process review. The effectiveness of the risk management program and new possible risks the organisation might be exposed to, needs to be periodically reviewed by management. Risk management aspects need to be included in management reports. Changes in the macro- and micro environment necessitate the review, update and realignment of the risk management program. Regular discussions regarding risks and internal control aspects via a structured process can help to ensure overall objectives are met, continuous improvement in the organisation may realise and balance of control is achieved.

4.4.3 Problems with risk analysis techniques

Risk management and risk analysis are more complicated than merely evaluating sources of risk and probabilities. According to Frosdick (1997: 169-170) specific problems with risk identification include:

- Hindsight. Most risk identification techniques rely on previous events or evaluations. Sometimes management fails to include events that did not happen

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the previous time, in the new project. Too little cross industry references are used, since many disasters can happen within different industries. New risks may not be detected if the normal risk identification techniques are used. Management needs to be pro-active and assess every possible aspect that can cause a problem in obtaining the organisation's objectives.

- Cultural bias. Personnel have different perceptions regarding risks, what to fear and how to fear it. This can give rise to subjective risk analysis.
- Too many risks. Risk blindness may result from too may risks to which the organisation or project are exposed to. Management may be so involved in managing everything that they may overlook some risks to which they are exposed.

Management needs to be aware of the possible problems regarding risk estimation. The effectiveness of risk management may be severely hampered if not all risks were identified and if possible effects of those that were identified were wrongly estimated. According to Frosdick (1997: 171) specific problems with risk estimation include:

- Unreliable data. Management relies on data and information to make informed decisions. Reliable data from which to estimate risk probabilities are minimal and if unreliable data is used the validity of the estimations may be questionable.
- Expressions of estimated risk. Different measures can be used to express estimated risk. The way in which risk is estimated may affect the way in which risks are perceived when assessed.
- Scientific objectivity. Scientific objectivity seems to be a myth, since subjective issues do arise during risk identification and estimation. The implicit assumptions on which quantitative risk analysis techniques are based are sometimes questionable and give rise to subjectivity.

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4.3.4 Risk management in the Department of Defence

In the Department of Defence (DOD), the Defence Inspectorate need to ascertain the validity and veracity of management information in the DOD to promote accountable, transparent, efficient, effective and economic use of DOD resources by means of inspections, monitoring, internal audits, output evaluation and surveys. To ensure the correct focus by the Defence Inspectorate, a risk analysis for the DOD was conducted with inputs from, the Standing Committee On Public Accounts (SCOPA), Chief of Corporate Staff, PFMA requirements, Services and Divisions. The risks were categorised, keeping the strategic direction process in mind, as follows (Ramlakan, 2001: 2-4; Engelbrecht, 2002):

- Policy risk. Political risk is the risk of failing to achieve the strategic objectives of the DOD, as a result of inappropriate policy, non-existent policy or the non-compliance with approved policy.
- Strategic planning risk. Strategic planning risk is the risk of failing to achieve the strategic objectives of the DOD, because of unfeasible and/or inappropriate strategic objectives and an insufficient environmental scan.
- Strategic control risk. Strategic control risk is the risk of failing to achieve the strategic objectives of the DOD, because of the availability of incorrect, inappropriate and unverified management information or the lack of such information, to the relevant decision makers for strategic control purposes.
- Strategic sustainment risk. Strategic sustainment risk is the risk of failing to achieve the strategic objectives of the DOD, because of the non-performance of the strategic sustainment process, including all supporting processes.
- Combat readiness risk. Combat readiness risk is the risk of failing to achieve the stated combat readiness outputs defined in the strategic plan, because of the non-performance of the prepare forces processes.
- Military strategic objective risk. Military strategic objective risk is the risk of failing to achieve the military strategic objectives of the SANDF as a result of the non-performance of the employ forces process.

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- Management risk. Management risk is the risk of failing to optimise the utilisation of resources in achieving the objectives of the DOD, because of inappropriate or poor management practices.
- Financial risk. Financial risk is the risk of failing to ensure effective, efficient, economical and transparent governance regarding financial issues, because of non-compliance with financial prescripts.
- Criminality risk. Criminality risk is the risk of failing to ensure effective, efficient, economical and transparent governance, because of fraud, corruption, other criminal acts and the non-performance of the law enforcement agencies.
- Acquisition risk. Acquisition risk is the risk of failing to ensure the effective, efficient, economical and transparent acquisition of quality main equipment, livestock, stores, general equipment and services, because of non-compliance with acquisition prescripts.
- Internal control system risk. Internal control system risk is the risk of failing to ensure effective, efficient, economical and transparent governance, because of a failure or lack of the internal control systems.

According to (Ramlakan, 2001: 2-4; Engelbrecht, 2002) the risk analysis was used as the basis for the development of a detailed business plan for the financial year (FY) 2002, for the Inspector General of the DOD. Table 4.3 shows an example from this business plan. Priorities are given to each risk by looking at the expected loss index, which consists of the product of the likelihood and the impact of a risk. The risks are then arranged from the highest priority to the lowest.

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Table 4.3: Business Plan FY 2002: Inspector General, DOD (As amended from Ramlakan, 2001: A1-A3; Engelbrecht, 2002).

Legend:

Likelihood: 1=0%
9=100%

Impact: 1=Insignificant Impact
5=Significant Impact
9=Catastrophic Impact (In terms of impact on utility value to the DOD)

Expected Loss Index: This value indicates the relative magnitude of the loss to the DOD. It is the product of likelihood & impact and it is on a non-linear scale

Action by: I = Inspection
A = Internal Audit
BI = Both, Inspection the lead directorate
BA = Both, Internal Audit the lead directorate

Serial	Owner	Risk Indicator	Risk Category	Effect	Likelihood	Impact	Expected Loss Index	Action By
	a	b	c	d	e	f	g	h
1.00	**Policy Risk:**	Policy Risk is the risk of failing to achieve the Departmental Strategic Objectives as a result of inappropriate policy, non-existent policy or the non-compliance with approved policy.						
1.01	DOD	Non-adherence to DODI's	1	Non conformance to political decisions	7	8	56	I

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Such a structured approach by management can ensure balance of control by allocating resources to priority areas and objectives. For the DOD to fulfil their strategy the ends (objectives), ways (processes) and means (structure) need to be in equilibrium. If balance is not obtained between the ends, ways and means, it is highly likely that there can be a strategic compromise. Since a budget is a way to ensure the objectives can be met, it is subject to the strategy and not the other way around. In the DOD the recent budget cuts, due to changes in priorities by the South African government, leads to changes in the balance between the ends, ways and means in achieving the strategy of the DOD. To maintain this balance, changes must be made firstly to the ways and means to ensure the objectives are met. This involves working more effective, efficient and economically. Management systems such as TQM, endorsed by the DOD, provides a way in which to maintain balance between the ends, ways and means without making unnecessary changes to the ends. If all has been done and the organisation cannot obtain the objective, changes need to be made to the objectives. Objectives can be prioritised by evaluating the impact on the organisation and strategy if they are not met or left out. The objectives that can be eliminated can be disposed of and the objectives with a low priority, but still necessary can be changed to get the necessary balance between the ends, ways and means of the organisation (Engelbrecht, 2002).

4.5 Corruption and fraud

The risk of corruption and fraud to organisations is a reality that cannot be ignored by management. The more management empowers employees to do their work by training them and giving them responsibility over the management of resources, the greater the opportunity for corruption and fraud. Corruption relates to the misuse of position for private gain or unauthorised end. This includes financial and non-financial benefits such as bribery, extortion, nepotism and fraud. Fraud can be defined as the false presentation of facts, made with the knowledge of the fraudster, or without the belief in its truth, or because of reckless carelessness. The sophistication of fraud and computerised fraud creates challenges for management. Without proper internal control system, corruption and fraud can cause considerable disruptions to an organisation's

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operations, damage growth and may damage the organisation's reputation and investors' confidence (Balkaran, 2002: 41-42; CIMA, 2001: 205). According to Van Zyl (2002: 52) trade related fraud may hamper investments in a country. The trade related fraud in South Africa for 2001 is conservatively estimated to be about R40 milliard. During 2001, 31 842 cases of trade related fraud was reported in South Africa of which most cases was reported in the Gauteng area. Most organisations consider corruption-related issues seriously before making investment decisions. It is estimated that corruption increases costs for organisations by between 6% and 25%. For organisations to obtain balance of control it will be vital to economically reduce corruption to a minimum.

4.5.1 Types of fraud

It is vital that management, who is ultimately responsible for control in an organisation, is aware of the different kinds of fraud that may take place, in order to reduce the probability of fraud by means of proper internal controls. The most common methods of fraud are (CIMA, 2001: 205-206; Swanepoel, 2002: 8-11):

- Collusion with external parties. Personnel of an organisation may collude with personnel of suppliers and overcharge purchase invoices, or collude with customers to undercharge sales invoices and may even sell confidential information to rivals. Proper supervision and the review of purchases and sales may reduce the risk of collusion.
- Altering cheques and inflating expense claims. Personnel may alter cheques to their advantage and can pay them into different bank accounts. Expense claims may be inflated in order for the employee to get more from the organisation than is necessary. Periodic audits on the accounting system and cheques and the producing of expense related documentation can reduce fraud.
- Compensation related fraud. Ghost employees (imaginary employees), miscasting of the payroll by adjusting the payroll system to pay extra amounts to the fraudster and the theft of unclaimed wages can be a substantial cost for an

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organisation. Proper internal controls regarding the compensation of employees needs to be in place and ad hoc audits by the internal audit department or independent managers need to be conducted to reduce the risk of compensation related fraud.

- Debtor related fraud. Payments from long due debtors or debtors already written off may be diverted by employees to themselves. Fictional debtors may be created to steal stock or most probably to hide fictional sales; especially where employees have sales-targets to meet. Invoices may be changed by employees for them to take the extra earnings from payments.
- Teaming and lading. This is rolling fraud whereby an employee takes some of the payments to creditors or payments from debtors and replaces the amounts from other payments. Ad hoc audits and independent inspections of cash balances may discourage this fraud.
- Kite flying. Kite flying is the process whereby cash is accounted in more than one bank account. This is made possible if banks allow customers to withdraw funds against deposits, for which there are not yet funding. If more than one bank or financial institution are involved it is difficult to discover and stop such schemes.
- Theft. The usage of an organisation's assets for personal gain and the stealing of fully depreciated assets can lead to financial loss for organisations. Stock and cash can also be taken by employees, especially at those areas were there is a lack of internal control. Management can prevent or reduce theft by continually improving the internal control of the organisation.
- Issuing false credit notes. To avoid detection of the misappropriation of cash and cheques received, an employee can issue a false credit note. Proper audits can detect this fraud.
- Not recording all sales. This tends to happen more often if there is poor control over sales recording and minimal segregation of duties.

Cyber fraud. According to Campbell (2002: 29-30) the Internet created the opportunity for cyber-crimes and added another dimension to the internal auditor's struggle against fraud. Auditors need to be aware of the cyber-threat and need to understand the

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change in the paradigm of how business is being conducted and how information is being stored. A substantial proportion of financial losses from computer breaches of organisations in America were attributed to financial fraud. The most common types of Internet-related fraud are (Campbell, 2002: 30-31):

- Personal gain. Employees of an organisation can gain access to restricted information that they can use for personal gain.
- Stealing sensitive data. Disgruntled contractors with linked computer systems can steal sensitive data and sell it to rival organisations.
- Hackers. Various external parties pose a threat to organisations and may steal information or disrupt systems by changing the systems or planting viruses that can damage computer systems.
- Fraudulent financial transactions. These types of transactions are normally credit card fraud or the misuse of telephone calling cards.

To counter electronic-fraud (e-fraud), organisations and auditors can make use of various proactive approaches to reduce the risk of e-fraud. The most important factor in fighting e-fraud, may be to be prepared for e-fraud and for auditors to act proactively. According to Campbell (2002: 31-33) the following guidelines may assist organisations in fighting e-fraud:

- New internal controls. Auditors need to work with management and system developers to ensure the necessary controls over IT and IS are build in during the planning stages of new systems. Continuous improvement programs can ensure that the relevant control systems are improved after implementation of new systems.
- Bridge-builder. Auditors can interact on a regular basis with the IT department to be bridge-builders between IT and senior management. The auditors need to be informed and need to recommend specific action and decisions to be taken by senior management.

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- Knowledge management. Personnel need not to use their knowledge as a power base, but share information to the good of the organisation as a whole. Auditors must share information regarding the fighting of e-fraud to ensure continuous improvement in the struggle against e-fraud.
- Network security. Auditors need to get involved with network security and need to act proactively as far as possible.
- Security policies. The necessary policies need to be in place to counter e-fraud firstly via prevention and then via detection and the related steps to rectify the situation at hand. Auditors can add value to the process by being actively involved in the writing and implementation of such policies.

4.5.2 Fraud prevention, fraud detection and ethical issues

Responsibilities. Management is responsible for using sound accounting policies, ensuring proper internal control systems, to make fair representations in the financial statements and to prevent and detect fraud. Management rely on auditors to assist them with this responsibility. Management needs to act proactively by firstly trying to prevent fraud and then by establishing fraud detection measures. These measures need to be continually updated to ensure continuous improvement. Management needs to focus on activities at high risk areas such as, high volumes, high values and high risk items. Management needs to take an interest in the behaviour of employees to identify fraudulent behaviour (Arens & Loebbecke, 1997: 142; Swanepoel, 2002: 13-15). Management and the internal audit department need to consider what stakeholders want from the annual reports and financial statements. The critical stakeholders want more current, reliable and accurate financial information and operational information to assist them in making relevant decisions regarding the organisation. Value added audits can assist management with continuous improvement by concentrating on the relevant areas that need attention to ensure optimal objective achievement (Hutchings, 2002: 60-61).

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Fraud prevention. Fraud prevention measures may include the implementation of proper safeguards against fraud, formally included in a comprehensive fraud policy that also outlines appropriate steps against convicted fraudsters. Possible safeguards against fraud include proper internal control systems such as segregation of duties, supervision of employees, ad hoc audits and relevant personnel procedures. The personnel procedures can include the recruitment of suitable employees after relevant background checks, proper training, the establishment of an anti-fraud culture, the protection of whistle blowers, adequate compensation and working conditions for employees, monitoring dramatic changes in the lifestyle of personnel and the dismissal of employees guilty of fraud along with informing the authorities. Since some managers may collude with employees to commit fraud, auditors need to try to detect fraud, at all levels of management in organisation. Usually big corporate organisations make use of an internal auditor's department to assist management with control over the organisation. The internal auditor department will review the effectiveness of the control systems and assist in continually improving control systems. Fraud detection forms part of the responsibility of internal auditors and fraud-detection steps are usually part of the audit programs of auditors. Audit budgets have to include fraud detection to integrate fraud detection with the planning and work of internal auditors (CIMA, 2001: 207-208; CIMA, 1999: 258-260; Thomson, 2002: 63-65).

Fraud detection. Although an organisation may have elaborate fraud prevention measures in place some fraud can still take place and therefore the necessary fraud detection measures needs to be in place to detect fraud after it has happened or as it takes place. According to Balkaran (2002: 45-47) the following are ways to detect fraud:

- Red flags. Red flags are the indicators of potential irregularities. Lavish lifestyle by personnel, beyond their means, may be a sign of problems. Excessive spending by an organisation and increases in miscellaneous expenses, may point towards fraudulent actions. This may necessitate the auditor to investigate the situation.

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- Exception reporting. Unusual transactions and events listed in reports may necessitate investigation by the auditor. Periodic variance analysis reports may be useful in detecting fraud.
- Audit tools. Computer assisted audit techniques enable auditors to review all the relevant data accurately and quickly and the auditor don't have to rely on samples. The probability to detect fraudulent actions is bigger and the auditor will have more time to investigate suspicious transactions.
- Questionnaires. Questionnaires can be designed to assist management with the detection of fraud and employees may feel more reluctant to put in writing possible fraudulent actions than coming forward and report it.
- Whistle-blowing. A strong ethical culture in an organisation can increase the number of employees coming forward to report on possible fraudulent actions. These whistle-blowers need to know that their identity will remain a secret and may even receive a reward for reporting fraud.

The fraud policy of an organisation can be effective and efficient in fraud management if it includes prevention- and detection measures, along with the appropriate corrective actions that will be taken. These corrective actions should be sound and effective to scare off potential fraudulent actions. An organisation needs to retain a balance between the effectiveness of the corrective measures and the economic feasibility thereof (Balkaran, 2002: 47)

The courts have held external auditors accountable for failure to detect fraud. This failure may stem from too much trust in the management of an organisation, becoming too involved with the customer and a subsequent loss of independence or due to lack of professional care (Thomson, 2002: 63-64). The external auditor usually rely on the internal controls of an organisation to assist the external auditor with the planning of the audit, the relevant risk assessment and to determine the nature, timing and extend of tests that will have to be performed during the audit. The auditor will test the effectiveness of the internal controls to be able to calculate the appropriate amount of substantive tests. If control risk is at a maximum the auditor will do extensive

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substantive tests to reduce the overall audit risk to an acceptable level (Arens & Loebbecke, 1997: 337; Puttick & Van Esch, 1998: 175-178). Auditors with sufficient and relevant experience are less likely to be influenced by management's belief in their internal control systems and judgements of other auditors regarding the reliance on internal control systems. Audit firms may need to place more emphasis on assigning staff with relevant audit experience to avoid potential negligence by the auditors. The usage of such specialist auditors may assist managers with the prevention and detection of fraud. It may also reduce the level of subjectivity regarding judgements on internal control systems (Reeves, Holmes, Li & Patel, 2001: 12-13).

According to Clulow (2002: 3-5) and Gloeck (2002: S2) the auditors of the American energy giant Enron, which stock dropped $68 billion in value during 2002, Arthur Anderson, are being blamed for the losses suffered by the relevant stakeholders. Arthur Anderson was the world's fifth largest audit firm with global revenue of $9.34 billion. Arthur Anderson is also criminally charged for obstructing justice for shredding tons of Enron documents. This raise questions regarding professional auditing standards and ethics. Similar questions regarding the audit profession were raised after the fall of the LeisureNet in South Africa. Enron overstated profits by $591 million and undervalued their debt by $621 million during the period 1997 till 2000. Why did Arthur Anderson not report on any of these events? The audit committee of Enron failed in ensuring reliable control systems and audits. Audit committees need to be independent of mind, properly funded and allowed to do their job accordingly. Arthur Anderson provided auditing services ($25 million worth) and consulting services (and other services of $27 million) to Enron. Deloitte and Touche was the auditors for LeisureNet, while they were also responsible for the organisation's accountancy services. This raise issues regarding conflict of interest and audit independence. Audit firms rely on non-audit services such as consultancy to supplement their income. Audit firms may have to formally separate their consultancy services from their audit services. The private sector in South Africa can learn from the public sector where the Office of the Auditor General does not allow any organisation to perform work for a state entity if audit services are provide by that organisation. The Brazilian trend to rotate audits every three years may be a solution to

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stop auditors and management from becoming too closely involved. The rotation can lead to additional audit set-up costs, but these costs can be amortised over the rotation period. The rotation may increase the independence factor of audits and the effectiveness of audits in detecting substantial misstatements.

According to Payne (2002: 34-35) Arthur Anderson has a good internal audit methodology. Arthur Anderson did the internal audits at Enron as well as the external audits. An internal audit should be guided by a charter, approved by the audit committee, stating the accountabilities, responsibilities, relationships, etc., regarding the audit work to be done. It seems as if the audit committee of Enron may have failed to give Arthur Anderson a proper charter, which needs to be compiled with independent assistance. The Institute of Internal Auditors can assist with the compiling of such a charter. Internal and external audits serve as quality assurance on each other and together can ensure all risk areas are assessed, without unnecessary duplication.

Ethical issues regarding the audit profession and general business events have been raised numerous times during the end of 2001 and during 2002 in the media. Corruption in the private sector and public sector seems to be increasing. This may however not be the case, due to the increased transparency. Transparency SA is of the opinion that the struggle against corruption is gaining momentum. The national government continuously conveys commitment to anti-corruption. This can also be seen by the investigation by three public institutions regarding possible corruption with the South African strategic arms deal (Van der Kooy, 2002: 42-43). The collapse of LeisureNet, Saambou, Fedsure and Regal Treasuries, highlights the current unethical behaviour of businesses. Although most South African companies have ethical codes (codes of conduct) it does not say that they will abide by them. It is therefore important that that ethics become part of the culture of an organisation and not just another policy or set of rules against the wall. Shareholders may become increasingly involved to ensure ethical behaviour by their organisation's directors (Stadler, 2001: 11-12; Patterson, 2002: 18-20). Ethical codes and the commitment by senior management to establish and maintain an ethical culture may reap multiple benefits for organisations. At Enron it

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sometimes have happened that inexperienced, business school graduates were left to close a deal, regardless of what it took. Such a business attitude may be harmful to keeping to the ethical code of the organisation and ultimately to the image of the organisation (Eisenburg, 2002: 36).

4.6 Corporate governance

Corporate governance can be defined as the system by which organisations are directed and controlled. Management are responsible for governance in their organisations. At companies it is the board of directors who is responsible for good governance, while the shareholders will appoint the directors and the auditors in order to satisfy themselves that appropriate governance structures are in place. The directors are responsible for setting strategic objectives, leadership and to report to shareholders on management and performance (CIMA, 2002: 23). Mr Mervyn King, the chairman of the King commission on corporate management in South Africa stated that integrity is the foundation of corporate management. There is a huge responsibility on the directors of organisations to act in the best interest of the shareholders and not in self-interest (Van Rooyen, 2002: S16).

According to *Internal Auditor* (2002: 66-68) the recent corporate failures in the United States (US) highlighted the need for proper corporate governance to protect the interest of relevant stakeholders in companies. It is recommended that the New York Stock Exchange, the American Stock Exchange and the National Association of Securities Dealers jointly provide a uniform set of corporate governance principles for publicly held companies in the US. Once these standards have been set the US National Association of Corporate Directors recommends that the US Securities and Exchange Commission require public companies to disclose the extend to which they meet corporate governance standards, like countries such as Canada, the United Kingdom (UK) and South Africa. According to CIMA (2001: 23-30) the Cadbury, Greenbury and Hampel Reports were convened to improve corporate governance in the UK. These reports formulated guidelines for organisations and especially for companies regarding proper

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corporate governance. Responsibilities of the board of directors, executive- and non-executive directors and shareholders were established and the usage of a code of best practice was stressed. The usage of a remuneration committee was recommended to oversee directors' remuneration, as well the usage of an audit committee, assisting with internal control and providing formal linkage with external auditors. Guidelines regarding the reporting responsibility of the board of directors were also given to improve transparency of organisations.

The King II report on corporate governance, in South Africa, was an attempt to improve corporate governance and thereby shareholder and investor confidence in organisations. From the report is seems that the following are characteristics of good corporate governance (Wilkonson, 2002: 20):

- Accountability. Managers and employees can be held accountable for the resources they are responsible for, decisions and actions taken or not taken.
- Responsibility. Managers and employees can be held responsible for their respective delegated tasks and corrective action can be taken where necessary. Management must act responsible towards all relevant stakeholders.
- Discipline. An organisation's senior management needs to be committed to adhere to behaviour that is universally recognised and accepted.
- Fairness. The systems in use in an organisation need to ensure a balance between the interests of the relevant stakeholders.
- Independence. Conflict of interest needs to be avoided and this includes aspects such as the composition of the board of directors, relevant committees and external auditors.
- Social responsibility. Organisations need to be aware of and respond to relevant social issues. The manifestation of an ethical culture is important for proper corporate governance and managers need to set the example and lead the drive towards ethical behaviour.
- Transparency. Transparency relates to the ease with which outsiders can make a meaningful analysis regarding an organisation's financial and non-financial

business aspects. Companies are increasingly publishing statements on internal control and related aspects in their annual financial reports.

According to Mabotja (2002: 51) some South African auditors are of the opinion that the key elements of the second King report needs to be included in the Company Act, to ensure enforcement thereof. Managers need to be held accountable for wrongful or misleading presentations. Enforcing such recommendations may improve the quality of management at organisations regarding their ethical behaviour and internal control systems utilised. It may give the unique opportunity to auditors to improve the quality of transparency of annual reports and to restore some trust in organisations. According to Sergeant (2002: 17-18) Mr Mervyn King, the corporate governance guru of South Africa is a non-executive director of Anglo-plat. At Anglo plc and Angloplat, Barry Davison acts as the executive chairman and as executive director respectively. This may seem to cause some conflict of interest and questions are asked regarding in which bets interest will Barry Davidson act.

According to Joubert (2002: 41) the King II report recommends that organisations make use of the Balanced Scorecard (BSC) for reporting, since the BSC enable stakeholders to view organisational performance across financial and non-financial perspectives. This can present stakeholders with a forward-looking form of reporting to assess an organisation's sustainable success. The introducing of the BSC into the South African corporate environment can lead to better conforming by organisations to corporate governance and a more predictable environment that is attractive to all investors.

In some countries corporate governance may be nothing more than the exposition of platitudes and is like a regular template used in the annual reports of organisations. Corporate governance asks for a clear unambiguous statement that a certain level of control is in place and can reveal relevant problems that may occur relating to internal control systems. To improve corporate governance management can report on the effectiveness of internal controls as part of the annual financial reports. The report will contain a declaration by management regarding reasonable assurance of the

accurateness and completeness of the financial statements and the effectiveness and efficiency of the internal control systems of the organisation. Material weaknesses and failures need to be reported, as well as the corrections that were made. Statements regarding the operational effectiveness can also be given (Rees, 2002: 4-7; Aldridge & Colbert, 1994: 21-26; CIMA, 1999: 388-397).

After the relevant test of controls and representations from management the auditor can form an opinion regarding the effectiveness of internal controls of an organisation. This opinion should be reflected in the audit report to increase transparency to all relevant stakeholders. Organisations need to understand that their success is measured by how well they satisfy a range of stakeholders. The organisation Shell experienced some problems relating to corporate governance and transparency during the nineties. Shell now includes in their annual reports criticisms of individuals and even the incidents of bribery that have taken place to improve transparency and trustworthiness of their annual reports (Rees, 2002: 4-7; Aldridge & Colbert, 1994: 21-26; CIMA, 1999: 388-397).

4.7 Summary

The ultimate benefit of control as part of the management functions is optimal objective achievement. The financial profits and return on investment are some of the benefits of control. The value of control relates to financial and non-financial benefits. The non-financial benefits can include aspects such as the correct level of quality, customer satisfaction, influencing other stakeholders via the environment and gaining a competitive advantage. Management can ignore these types of benefits; they may try to quantify it or can accept the qualitative nature thereof. The important factor is that management takes note of all benefits of control systems to be able to do a proper cost-benefit analysis.

A Gap-analysis may be useful in determining the value of control systems. Management can determine the current level of objective achievement and compare it with what is

required. To close this gap management must assess the cost of new or improved control systems and compare it with benefits from the control systems. Equilibrium needs to be in place between the ends, ways and means. If the costs of the controls exceed the benefits thereof, changes may need to be made to the ways and means (control systems and structure) to obtain the ends (objectives) in the most economical way.

Another benefit of control is the reduction of risk an organisation may be exposed to. Due to the costs involved with risk management and the detrimental effects from some risks it is essential that an integrated approach to risk management, such as ERM, be used. The integrated approach can ensure goal congruence due to taking into account correlation and interrelationships. The complexity of human nature and related subjective issues necessitate that a more formal and documented approach is used for risk management. Management must take note of the various types of risks and the different approaches to reduce, transfer or manage risks appropriately to ensure optimal objective achievement and balance of control. The risk management process gives structure to managing risks and enhances the possibility of optimal objective achievement. Management needs to take into account problems regarding risk management such as using outdated data, cultural bias and not identifying all risks, to ensure objective and constructive risk management as part of an integrated management approach.

The prevention, detection and correction of corruption and fraud are also benefits of control. The more managers and employees are empowered to utilise resources, to make decisions and to authorise transactions the more fraud and corruption seems to take place. The sophistication of fraud and e-fraud also seems to increase. This may be harmful for necessary investments for organisations. Management needs to be aware of the relevant types of fraud that may pose a threat to optimal objective achievement and take appropriate pro-active actions. Fraud detection steps also need to be in place, because fraud prevention steps can fail. Organisations need to compile a

comprehensive yet concise anti-fraud policy, which spell out the prevention, detection and correction steps that can be taken. This needs to be disseminated to all employees.

Addressing ethical issues and corporate governance in organisations can be useful in obtaining optimal objective achievement and balance of control. Strong ethical culture in an organisation may assist management with establishing a control environment over human resources to achieve balance of control. Corporate governance must satisfy all organisational stakeholders regarding proper management and related control systems in an organisation, to safeguard their interests and to restore confidence in the management of organisations.

The benefits of control are more than just the financial benefits of controls. The total value of controls must be considered when conducting a cost-benefit analysis to ensure optimal objective achievement, while satisfying the needs of all relevant stakeholders.

CHAPTER 5
METHODS TO OBTAIN BALANCE OF CONTROL

5.1 Introduction

A balance in life as general may be essential to the well being of the individual and society as a whole. Employees need a balance between their job and family responsibilities to make a success of both (Bohen & Viveros-Long, 1981: xiii).

For optimal achievement of objectives, management require balanced control. This entails that the control measures must be cost effective, a balanced focus is necessary between the control measures over the different resources and there should be a balance of attention regarding the objectives being controlled. An integrated management approach may be necessary to enhance such a balance of control. During this chapter four methods to obtain balance of control, being the cost-benefit analysis, TQM, strategic control points and BSC will be discussed.

In order to conduct a cost-benefit analysis management must ensure that they uniformly identify all the relevant costs and benefits from control systems. This can enable management to evaluate if the benefits of control systems are more than the costs thereof and if not, to make the necessary cost efficient changes to the control systems and even objectives to fulfil the mission of the organisation.

The second method to obtain balance of control is TQM and provides a holistic approach to management. TQM is already used by various different type of organisations. In the modern dynamic business environment it is of vital importance to satisfy the needs of the customer. As the customer's needs changes, so must the products and services of the organisation. Systems in organisations must be flexible enough adapting to different circumstances to ensure situation specific results. TQM can ensure continuous improvement in processes, products and services. To implement

TQM successfully all employees need to be empowered to do their work and need to be trained in TQM (Schlenker, 1998: 2).

Thirdly strategic control points will be discussed to assess the necessity to control at certain strategic important points during operations to take time and cost implications into account (Mondy & Premeaux, 1995: 522).

Lastly the BSC as a method to obtain balance of control will be assessed. The BSC approach has been in use by various organisations to provide management with information to assist them with policy formulation and achievement. By addressing all relevant areas of performance objectively the BSC can provide management with a comprehensive, holistic framework that can translate the vision and strategy of an organisation into a coherent set of overall performance measures to enhance goal congruence. This balanced approach may assist management in satisfying all their stakeholders' needs (Kaplan & Norton, 1996: 24).

5.2 Cost-Benefit Analysis

Management can use a cost-benefit analysis in assisting them to optimally control an organisation. Relevant information regarding the costs and benefits is necessary to enable managers to utilise a cost-benefits analysis. Managers may be able to observe the costs of an activity fairly easy, but may experience difficulties in attaining the monetary value of benefits for projects such as defence spending (Robbins & DeCenzo, 1995: 383-384). Government decisions may necessitate a change in reference from private benefits and costs to social benefits and costs. If government needs to subsidise an activity, the benefits must be greater than the costs. If government has to restrict activities it may be possible for costs to exceed benefits. Management needs to evaluate the present value of the relevant costs and benefits to ensure consistent decisions (Brent, 1996: 3-4).

The subjectivity of attaining costs and benefits may dilute the value of the cost-benefit analysis as a way for management to obtain a balance of control (Robbins & DeCenzo, 1995: 383-384).

5.3 The Total Quality Management concept

5.3.1 Definitions of Total Quality Management

The TQM concept is a holistic management philosophy and can be used by management to obtain a balance of control to optimally reach objectives. TQM is driven by customer needs and expectations and focuses on continual improvement in work processes (Robbins & Coulter, 1999: 62). It is furthermore a cooperative form of doing business that relies on the talents and capabilities of labour and management to continually improve quality and productivity using teams (Jablonski, 1992: 21). In the service sector, such as in logistics, TQM offers opportunities for service workers to excel at what they do, but for quality to manifest and exist, all workers and customers need to understand what quality service means and management need to identify and consolidate their needs (Clair, 1997: 46).

According to Lambert and Stock (1999: 457-458) TQM is both a philosophy and a set of guiding principles that forms the foundation of the continuously improving organisation. It is the application of quantitative and human resources to improve the material services supplied to an organisation, the processes in the organisation and meeting the needs of customers (now and in the future). TQM includes fundamental management techniques, existing improvement efforts and technical tools with a disciplined approach focused on continuous improvement.

The TQM management philosophy is customer-orientated. All members in a TQM organisation need to strive, to systematically improve the organisation through ongoing participation of all employees with regards to problem-solving efforts even across the normal functional boundaries. TQM incorporates the concepts of product quality,

process control, quality assurance as well as quality improvement and the control of all transformation processes of the organisation to improve customer satisfaction at the lowest cost (Schlenker, 1998: 2).

The two basic aspects of quality (Horngren, et al., 1997: 683) are quality of design and conformance quality. Quality of design relates to how closely the characteristics of the service match the needs of customers. Conformance quality relates to the performance of the service according to the design specifications.

5.3.2 Components of Total Quality Management

TQM consists of the following components (Robbins & Coulter, 1999: 62; Management Doctrine of the DOD 1997: 63-64):

- Intense focus on the customer. The needs and expectations of the internal and external customers must be known and satisfied as far as possible at an acceptable level of cost.
- Continuous improvement. There needs to be commitment throughout the company to improve quality in all areas of the organisation. TQM does not focus only on the quality of the final product, but on all areas in the organisation. To deliver a product at the least cost, while conforming to the customer's needs, the processes of the organisation must be as effective and efficient as possible. Continuous improvement is important to ensure value is added for customers and the outputs need to be measured against a set standard to ensure quality can be reached, maintained and improved.
- Accurate measurement. Proper problem-solving and decision-making techniques are essential to improve processes and outputs. To make these decisions management needs accurate and timely information. TQM make use of statistical techniques to measure all critical aspects of the organisation's resources. The information from the different processes and outcomes need to be made public and disseminated to all concerned as soon

as possible. Where variances occur, the reasons therefor need to be investigated and corrective actions need to be made and followed up to ensure the desired results are obtained.

- Empowerment of employees. Everyone involved with continuous improvement needs to be able to make decisions in the areas of their responsibility. Teams are widely used in TQM programs and they must be empowered to find solutions and solve problems.

5.3.3 Total Quality Management applied in the service sector

Quality is more difficult to establish and to sustain in the service environment and therefore service organisations need good leadership. Management at all levels need to trust those who work with and for them (Townsend & Gerhardt, 2000: 290-292). The holistic approach of TQM enables it to be used in any type of organisation and even service organisations. TQM is involved, for example, at almost every logistics activity and utilises a systematic, integrated, consistent, organisation-wide perspective to satisfy the needs of the customer (Lambert & Stock, 1999: 460-462).

One way to create a corporate culture for TQM in a service organisation is to make use of quality teams. All employees need to be included in quality teams with mandates to improve specific processes and services. The teams need to be supported by the necessary communications network, proper training and recognition for results achieved. The correct utilisation of the information at hand is essential. Measurement still remains important and can be used as a yardstick of progress. Service quality processes need to be built from scratch to fit individual organisations (Townsend & Gerhardt, 2000: 292-294). Using TQM in for example the logistics environment can lead to substantial benefits for an organisation. The implementation of TQM in the materials management environment has resulted in various benefits and improvements for many companies. McDonnell Douglas Corporation reduced scrap by 58 percent when they implemented TQM. Boeing Ballistic Systems Division reduced material shortages from 12 to zero

percent and reduced parts and material lead times by 30 percent (Lambert & Stock, 1999: 460).

In the services sector, such as with other sectors, an integrated approach is necessary for optimal achievement of objectives. The optimal management of functional areas such as Supply Chain Management (SCM) may not produce overall effective, efficient and economical results. Processes such as SCM don't address the issues of integration and change sufficiently, since it does not look at the whole business process holistically. SCM is a logistic concept and it does not include aspects such as transport cost, link costs, customer satisfaction, improvement and quality (Tompkins, 2000: 35-38). Customers dictate the pace of change and may have the power in the marketplace now a day. Ultimately consumer demand and customer satisfaction may steer an organisation's overall business strategy. Techniques such as SCM can only provide true customer satisfaction and a competitive advantage if it is part of a holistic approach by management. Customer satisfaction is the output of business processes such as logistics and SCM and is the measure of the effectiveness of satisfying customer needs. Organisations can use SCM and other management approaches combined in one holistic management approach such as TQM to differentiate their products, keep customers loyal, improve quality and to become the supplier of choice. Organisations need to create and maintain good and close relationship with customers (Tompkins, 2000: 89-93).

5.3.4 Total Quality Management applied in the South African Department of Defence

For TQM to be utilised to its fullest it needs to be incorporated in the overall business strategy of the organisation (Barnard, Manu, Rosin, Bosman, Martins, Strotoukis & Thanke, 2001: 4). The DOD realised the value of the TQM concept and according to the Management Doctrine of the DOD (1997: 62), TQM is a management approach that will ensure high standards and quality control in the DOD.

The PFMA, Act 1 of 1999, as amended by Act 29 of 1999 (1999: v) and the Treasury Instructions call for improved performance, transparency, expenditure control and quality of service delivery in the public sector. This will ensure proper accountability for resources entrusted to managers (Craig, 2001). TQM was declared by the Secretary of Defence as the official management philosophy and management system of the DOD. The Secretary of Defence and Chief SANDF actively support and encourage TQM as the formal management philosophy of the DOD (Nyanda, 2001: vi).

The United States Army (US Army) also implemented TQM and renamed it Total Army Quality (TAQ). In the US Army TAQ led to incremental and breakthrough improvement and change. The US Army reinvention and quality annual report of 2000 demonstrates the scores of accomplishments Army personnel and their organisations are achieving with major changes in their functional areas (Leading Change, Implementing Total Army Quality and Supporting Reinvention throughout the United States Army, 2001: 1-5; Ellis & O'Keefe, 2001: 1-2).

5.3.5 Total Quality Management applied at General Support Bases of the South African National Defence Force

According to Craig (2001) the General Support Base concept (GSB) is not a new or South African unique concept. Defence forces of countries such as Australia, Canada and Germany make use of a similar type of logistic support system. Some of the key reasons to change to GSB's were to gain more control over the logistic system and to reduce the amount of supporting personnel. This reduction in personnel can be obtained by the transformation of the logistical system. Previously the respective services were responsible for their own logistic policies and procedures. Chief of Logistics will now be responsible for policies and procedures and the different services can focus on their core business. The control aspects at GSB's manifests into (Craig, 2001):

- Centralised control. The following aspects can now be controlled much more effectively via centralised control measures: accounting, warehousing and weapon systems management.
- Decentralised control. The accountability rests with that manager that has the responsibility over the effective and efficient usage of resources. Responsibility can be delegated, but not accountability. In order to utilise resources effectively and efficiently managers need to ensure that all the necessary procedures are in place and that they are executed as planned.

Prior research done by the author led to the establishment of Table 5.1 showing the focus areas and focus points for GSB commanders to utilise TQM to its fullest potential. The best possible logistic support can be provided to customers if customer focus, continuous improvement and empowerment as elements of TQM are in place at GSB's and ultimately may lead to optimal objective achievement in the DOD.

The needs of internal and external customers have to be satisfied. Management therefore needs to understand these needs and set standards accordingly. The customer has to tell the service provider what services are needed and not the other way around (Pelser, 2001). Honesty is critical to enhance ethical behaviour by management and GSB commanders. Employees need to be frank and fair with each other, as well as with their customers (Griffiths, 2002: 47).

To continually improve on processes and disseminate lessons learned from experience between different GSB's, the Multi Discipline Steering Committee (MDSC) discusses problems and solutions of GSB's. Their recommendations are then send to all the relevant commanders to distribute it further to the GSB's. The final GSB guidelines will be in the form of a Department of Defence Instruction (DODI) to ensure standardised procedures at GSB's. This is a method to ensure that continuous improvement is co-ordinated at the highest level and if all commanders involved in the dissemination of the information stay committed, processes and outputs can improve (Norrie, 2001). The GSB commander must implement the necessary control systems to ensure standards

are met at the lowest cost. The DOD and GSB's can use benchmarking to measure how well they are in certain tasks by comparing it to organisations and other defence forces involved in similar tasks (Pelser, 2001). Benchmarking can also be used between departments and if combine with self-assessment, it may add value to an organisation and ensure continuous improvement (Prinsloo, 2002).

In the fast changing environment organisations found themselves in, it is vital that organisations have employees with the right expertise to do the job. Where people lack the necessary expertise they must gain knowledge through proper training and education (Cummings, 2001). For the SANDF to ensure quality force preparation, training is viewed as a force multiplier. The whole force preparation process is designed to cater for change and needs the active commitment and contribution of all. Training should add value to the individual and the organisation (Romano, 2001: 5-6). With all employees participating in TQM the necessary SOP's and policies must be in place to act as a guideline for employees, to ensure the desired standard is reached.

Table 5.1: TQM applied at GSB's (As amended from Pienaar, 2001: 13-33).

S/No	Focus area	Focus points
01	Customer focus	Assessing clients and suppliers
		Customer surveys
02	Continuous improvement	Leadership and commitment
		Communication
		Control
		Organisational, process and employee alignment
		Standards, accurate measurement and feedback
		Motivation and rewards
		Statistics
		Benchmarking

03	Empowerment	Training and education
		Learning culture
		Human resource management
		Resources and accountability
		Finances
		Employee participation
		Policies

5.4 Strategic control points

According to Mondy and Premeaux (1995: 521-523) it would have been ideal to measure all resource utilisation, processing activity and outputs, to report and compare the results to the set standards. Due to cost and time considerations managers need to decide what will be measured and when. These critical points selected are critical control points and if the basic characteristics are followed, as shown in Figure 5.2, it can assist managers in obtaining a balance of control.

These critical control points can be linked with the critical success factors of an organisation to focus the attention of management on achieving the most important objectives. By determining priorities with regards to objectives managers can plan and implement relevant, cost-effective control measures within the control environment. These control measures need to identify problems as soon as possible to reduce losses and to ensure continuous improvement. In order to be able to identify relevant deviations management needs to establish the necessary level of performance at the key points during the process. Management needs to emphasise the importance of effectiveness, efficiency and economy with regards to the utilisation of resources. This needs to be done in a balanced manner to ensure all operations are controlled at the relevant strategic points to meet objectives (Mondy & Premeaux, 1995: 521-523).

5.5.1 A balanced approach

According to CIMA (1999: 181) the BSC is an approach that can provide management with information to assist them with policy formulation and achievement, by addressing all relevant areas of performance objectively. The information need to consist of financial and non-financial elements such as profitability, customer satisfaction, internal efficiency and innovation (the four perspectives of the BSC). The BSC is deemed to be balanced because managers are forced to think in terms of all four perspectives, to prevent improvements made in one area at the expense of another area.

The BSC translates vision and strategy into objectives and measures across a balanced set of perspectives that provides a framework for implementing an organisations strategy. The BSC attempts to balance financial and non-financial performance measures and assess short-term and long-term performance in one report. The BSC includes the measures of desired outcomes and the processes that need to drive the desired outcomes of the future (Kaplan & Norton, 1996: 29; Horngren, Foster & Datar, 2000: 463-464). The BSC is a balanced model, because the measures represent equilibrium between external measures for stakeholders and customers, and internal measures of business processes and learning, growth and continuous improvement (Walters, 2001: viii).

5.5.2 The four perspectives

The four perspectives and the interaction of the perspectives with the vision and mission of an organisation can be seen in Figure 5.5. This indicates the holistic approach of the BSC due to the link between the vision, mission and objectives used in the BSC. Measures will be compiled, according to the objectives, to assess the end results within the four perspectives (Horngren, et al., 2000: 469).

Financial objectives typically relate to profitability, growth and shareholder value. This can be measured by means of techniques such as operating income, return-on-capital-employed, or economic value-added. Alternative financial objectives can be rapid sales growth, cost reduction, productivity improvement or generation of cash flow. Cost reduction and productivity objectives refer to reduce direct costs of products and services, reduce indirect costs and share common resources with other business. All objectives and measures in the other scorecard perspectives may be eventually linked to achieving one or more objectives in the financial perspective.

- Customer perspective. The customer perspective relates to what existing and new customers value from an organisation. Managers need to identify the customer and market segments in which the organisation competes and the measures of the organisation's performance in these targeted segments. The customer perspective usually includes several outcome measures like, customer satisfaction, customer retention, new customer acquisition and aspects that matter to customers such as cost, quality, delivery, inspection and handling. Some of these measures may appear to be generic and should therefore be customised by the organisation to incorporate the targeted customer group from whom the organisation expects its greatest growth and profitability. The customer perspective forces managers to determine what their organisation is good at in order to build on their strengths and improve on weaknesses and to determine for whom their products are intended to satisfy the needs and to add value for these customers.
- Internal perspective. The internal perspective relates to the processes an organisation need to excel at to achieve their financial and customer objectives, especially those internal processes that may have the greatest impact on customer satisfaction and achieving the organisation's financial objectives. The internal perspective reveals two fundamental differences between the traditional, financial based approaches and the BSC approaches regarding performance measurement. First, traditional approaches attempt to

monitor and improve existing business processes and they may go beyond financial measures of performance by incorporating quality and time-based metrics. The BSC approach usually identifies entirely new processes at which organisations need to excel to meet customer and financial objectives and usually is those processes that is the most critical for an organisation to optimally reach overall organisation objectives and strategy. The second departure of the BSC approach is to incorporate innovation processes into the internal business-process perspective as shown in Figure 5.5. Traditional performance measurement systems focus on the processes of delivering current products and services to current customers, thus short-term value creation.

- Innovation perspective. The innovation perspective relates to continual improvement and the creation of future value to all stakeholders. The innovation perspective identifies the infrastructure that the organisation needs to build to create long-term growth and improvement. The customer and internal perspectives identify the factors most critical for current and future success. An organisation's workforce needs to be trained for and motivated to be creative and innovative. Organisations need to establish an effective organisational structure by assembling employees who can perform value-adding activities for customers and also develop new products or services. In the context of the BSC, performance measures are needed to enable management to assess the effectiveness of its organisation and the capabilities of its people to be able to continually improve. Organisational learning-and growth stem from three principal sources: people, systems and procedures. The financial, customer and internal perspectives of the BSC may reveal gaps between existing capabilities of people, systems and procedures and may identify what may be required to close these gaps effectively, efficiently and economically. To close these gaps may entail investment in re-skilling of employees, improving IT systems and by aligning organisational procedures and routines. Selecting the correct performance measures may require that management evaluate its current human resource

practices in light of the changing business environment in which it operates. An organisation needs to establish relevant measures to ensure continuous improvement by means of the following essential factors: education and training, internal rewards and recognition, morale, corporate culture, core competencies and innovation.

5.5.3 Advantages of the Balance Scorecard

The BSC can enable managers to avoid over-emphasising achieving short-term results at the expense of long-term value creation and growth. The avoidance of short-termism may be the main advantage of the BSC approach. Cutting on research-and development costs, marketing and training can enable an organisation to reach short-term financial objectives, but may be counter-productive to optimally obtain the overall long-term objectives of the organisation (Kaplan & Norton, 1996: 21-23; CIMA, 1999: 183). Successful BSC implementation can lead to higher profitability and competitiveness (Joubert, 2002: 41). The BSC can help an organisation to focus and align on one strategy and has the following advantages (Walters, 2001: 34; CIMA, 1999: 417):

- The BSC can be used by management as a tool for control purposes, for strategy implementation, for changing organisational culture and for modifying reward systems to support optimal objective achievement.
- The BSC can be useful in empowering employees and is relatively easy to understand.
- The BSC allows for an unlimited number of units to be measured.
- It provides for both customer and employee input, thus involving clear responses and opportunities for continuous improvement.
- The BSC may provide a balanced assessment accessible to all employees.
- The BSC makes it possible to recognise best practices.
- The BSC can clarify job functions and can provide a sound foundation for rewards.

- It may help people to prioritise their activities and to measure their progress toward objectives.

5.5.4 Disadvantages of the Balance Scorecard

The BSC also have some disadvantages that need to be taken into account by managers when using the BSC to improve an organisation's control and strategy implementation. Managers tend to over emphasise objective measures. Subjective measures such as customer satisfaction and employee satisfaction could be useful to make sound decisions (Horngren, et al., 2000: 469). The following are some of the disadvantages of the BSC when used as a management system (Walters, 2001: 35; Sims & Smith, 2001: 417; Horngren, et al., 2000: 469):

- The BSC may require considerable resources, time and may necessitate shifts in corporate culture to implement.
- The relation between the BSC and shareholder value is not clear enough.
- The BSC is relatively rigid and to be useful for some organisations the perspectives may need some adjustment.
- The measures from the perspectives can give conflicting signals and confuse management. It may be inappropriate for management to seek improvements across all measures all of the time.
- It seems as if the BSC has not placed enough emphasis on the employees of organisations since they are combined with IT and IS into the innovation perspective.
- External comparison may be extremely difficult, since the BSC was intended to be an internal document.
- The BSC may not produce a single aggregate summary control such as given by measures like return on investment.
- Management needs to consider all benefits and costs of initiatives and need to assess the linkages between different initiatives and between related financial and non-financial measures.

5.5.5 Strategic importance of the Balance Scorecard

According to Kaplan and Norton (1996: 291-292) the process of developing a good BSC can give an organisation a clear picture of the future and a possible path for getting at the desired end-state. The development process can ensure energy and commitment from senior management to obtain continuous improvement in reaching objectives. According to Kaplan and Norton (1996: 273-275) the commitment, related ownership and active involvement by senior management is the single most important condition to create a successful strategy-focused organisation. Most organisations that started the BSC effort were using the BSC as the corner stone of its management system. According to Joubert (2002: 41) management needs multi-disciplinary knowledge and understanding to implement the BSC and an accommodating culture of measurement to ensure successful BSC implementation.

Management is responsible to establish a strategic plan for an organisation and they establish operational and management control systems to ensure employees behave in the most optimal way to realise the strategic plan. The BSC is useful in implementing the strategy of an organisation and can align the vision and strategy to all organisational participants and by aligning organisational actions and initiatives to achieving long-run strategic goals (Kaplan & Norton, 1996: 16). The BSC can provide management with a comprehensive framework that can translate the vision and strategy of an organisation into a coherent set of performance measures to ensure goal congruence (Kaplan & Norton, 1996: 24).

According to Walters (2001: 84-85) the following are possible reasons why it is important to build a BSC that communicates an organisation's strategy:

- The BSC describes the organisation's vision of the future to the entire organisation and creates shared understanding.
- The BSC creates a holistic model of the strategy that allows all employees to see how they contribute to organisational success. This linkage is necessary

for individuals and departments to optimise local performance while contributing to achieving strategic objectives.

- The BSC focuses on change efforts. If the right objectives and measures are identified, successful implementation may occur. If not, resources can be wasted.

The strategic objectives and measures of the BSC are communicated throughout an organisation via various methods. This indicates to all employees the critical objectives that need to be accomplished if an organisation's strategy is to succeed. Local improvement efforts become aligned with overall organisational success factors. If all employees understand strategic objectives and measures, they can establish local objectives that support the organisations overall strategy. At the conclusion of the communication and linkage process, all employees in the organisation should understand the organisation's long-term objectives and the strategy for achieving these objectives and business unit objectives. All of the organisational efforts and initiatives need to be aligned to the necessary change processes (Kaplan & Norton, 1996: 12-13).

According to Kaplan and Norton (1996: 19) the BSC can fill the gap between most management systems, such as the lack of a systematic process to implement and obtain feedback about strategy. The BSC translates vision and strategy into objectives and measures across a balanced set of perspectives. The BSC includes measurment of desired outcomes and the processes that need to drive the desired outcomes. If used in this way, the BSC can become the foundation for managing information age organisations

According to Walters (2001: 146-147) the BSC would be the most fitting management model to enable organisations to achieve consistency of vision and action. By constructing a BSC an organisation can provide a framework for management to successfully implement its strategy, while allowing the strategy to evolve in response to changes in the environment. It can aid management of an organisation in control by monitoring the execution of its strategy as well as the achievement of the strategic

objectives. The BSC can assist management to add value for customers, by being focused on issues related to the execution of the strategy and the optimal achievement of strategic objectives. According to Horngren, et al. (2000: 466-467) the BSC can be useful with strategy implementation and can provide a holistic view of an organisation's strategy and the progress with regards to strategy implementation. Management can focus on the critical elements for strategic success. Variance analysis could be linked to the BSC effort. An example of the holistic view obtained by using a BSC regarding strategy implementation is shown in Table 5.2. The relevant linkages between the perspectives are to be kept in mind by managers to ensure goal congruence.

Table 5.2: Strategy implementation via a BSC (Horngren, et al., 2000: 469).

Objectives	**Measures**	**Initiatives**	**Target Performance**	**Actual Performance**
Financial Perspective				
Increase shareholder value	Operating income from increased productivity	Manage costs & unused capacity	R2 000 000	R2 100 000
	Operating income from growth	Build strong customer relations	R3 000 000	R3 420 000
	Revenue growth	Build strong customer relations	6%	6.48%
Customer perspective				
Increase market share	Market share in communications network segment	Identify future needs of customers	6%	7%
	New customers	Identify new target customer segments	5%	6%
Increase customer satisfaction	Customer satisfaction survey	Increase customer focus of sales	90% of customers give top 2 ratings	87% of customers gave top 2 rating

Internal perspective				
Improve manufacturing capability	Percentage of progress with advanced controls	Organise R&D/ manufacturing teams to implement advanced controls	75%	75%
Improve manufacturing quality and productivity	Yield	Identify root causes of problems and improve quality	78%	79.3%
Reduce delivery time to customers	Order delivery time	Reengineer order delivery process	30 days	30 days
Meet specified delivery dates	On-time delivery	Reengineer order delivery process	92%	90%
Innovation perspective				
Develop process skills	Percentage of employees trained in process and TQM	Employee training programs	90%	92%
Empower workforce	Percentage of front-line employees empowered	Have supervisors act as coaches rather than decision-makers	85%	90%
Align employee and organisation goals	Employee satisfaction survey	Employee participation and suggestions program to build teamwork	80% of employees give top 2 rating	88% of employees give top 2 rating
Enhance IT capabilities	Percentage of manufacturing processes with real-time feedback	Improve off-line data gathering	80%	80%
Improve manufacturing processes	Number of major improvements in process controls	Organise R&D teams to modify processes	5	5

5.5 Summary

If management identified, assessed and if possible quantified all relevant costs and benefits of control systems, they can use the costs-benefit analysis to assess the value added for stakeholders by the control systems. Present values of costs and benefits need to be used to ensure consistent information and decisions. Management can use this model to assess if the benefits of control systems are more than the costs thereof and thus assist in obtaining an overall balance of control.

TQM is a management philosophy driven by customer needs and expectations and focuses on continual improvement in work processes. TQM is a holistic management approach and can be used by management to obtain a balance of control to optimally reach objectives. Various organisations use TQM to add value to customers while ensuring optimal achievement of long-term objectives.

By focussing on their customers, ensuring continuous improvement and empowering their employees, organisations can use TQM to produce quality products and to render quality services. The needs of customers must be understood and standards set accordingly. The processes in organisations must be flexible enough to ensure a specific product or service that satisfies the needs of customers and the processes must be able to adopt swiftly when the needs change. The correct use of information technology can ensure quick information flows between an organisation and its customer to rectify problems as soon as possible. Managers can use customer surveys for performance measurement and to ensure the set standards are met efficiently.

Management must be actively involved in the process of improvement and support TQM. Managers as leaders need to create the correct climate for TQM in the organisation, they must be involved in improving processes and services, communication with customers and needs to motivate and support the personnel. Managers need to implement the necessary control systems to ensure standards are met at the lowest cost. To make sound decisions managers need accurate, relevant

and timely information and therefore the necessary information systems need to be in place and function properly. Benchmarking can be used to evaluate services rendered by comparing it with organisations that are the best in their market. Managers must motivate personnel to obtain quality in everything and reward and take corrective action where necessary. The usage of proper performance measurement such as a BSC is important to support TQM.

Managers and employees need to be empowered to perform their work. Personnel must be trained to perform their work, and in the TQM concept, starting at senior management until the last employee. Proper human resource management at all levels must be in place. Career development must be managed to enhance the capabilities of the employee. A learning culture in the organisation can assist in quality improvement. Managers can be held responsible for their actions and non-actions and need the proper resources to perform their tasks effectively, efficiently and economically. With all employees participating in TQM the necessary policies must be in place to act as a guideline for employees, to ensure the desired standard can be reached.

Merely stating TQM as the management philosophy for an organisation is not enough. Everyone needs to be educated in this concept to enhance productivity, which will ultimately lead to optimal achievement of long-term objectives.

Management can also make use of strategic control points to assist them in obtaining a balance of control. By indicating the relevant key operations that need to be controlled at the correct points in the processes, while emphasising economy and by incorporating it in a balanced assessment, can ensure effective and efficient objective achievement. Management can link the critical success factors with the critical control points to enable the organisation to focus on the most vital aspects that need to be done. This method can be combined with the BSC, since the BSC concentrate on four perspectives (balanced approach) and within each of them critical control points can be established.

Organisations can use the BSC to ensure a balanced approach regarding strategic management and to ensure the vision and mission of the organisation are translated into objectives and measures across a balanced set of perspectives. The four perspectives of the balanced scorecard can be used by organisations as a template and can be adjusted to the specific circumstances. The BSC is deemed to be balanced because managers are forced to think in terms of all four perspectives (financial, customer, internal efficiency and innovation) to prevent improvements made in one area at the expense of another area. The BSC attempts to balance financial and non-financial performance measures and assess short-term and long-term performance in one report. The measures used in a BSC need to ensure a balance between external measures for stakeholders and customers, and internal measures of business processes and learning, growth and continuous improvement.

The financial perspective is the maximising of shareholder wealth and the objectives and measures in the other perspectives may be eventually linked to one or more objectives in the financial perspective. Organisations need to satisfy the needs of customers and add value to products and services by concentrating on relevant aspects that matters to customers such as cost, quality, delivery and inspection. The BSC can ensure continuous improvement and identify entirely new processes to excel at to add value for customers and to reach financial objectives. The BSC also allows for innovation to ensure long-term growth and improvement.

Managers need to be educated regarding the advantages and disadvantages of the BSC to utilise it to its fullest potential. Management also needs to have, or acquire, the necessary knowledge to implement such a complex, multi-disciplinary management tool such as the BSC. The BSC ensure a holistic approach to strategy and strategy implementation and allows for all employees to see how they contribute to organisational success. This linkage is necessary for individuals and departments to optimise local performance while contributing to achieving strategic objectives. The integrated approach to management obtained by using the BSC can enhance the possibility of obtaining balance of control and optimal achievement of objectives.

CHAPTER 6
ACHIEVING BALANCE OF CONTROL

6.1 Introduction

The saying, *"All work and no play, makes Pine a dull boy"* is as applicable to organisations as it is to the balance between work, social life and health to ensure a sound and responsible community.

Organisations can enhance this balance through proper corporate culture, shared values and strengthened work relationships by informal interaction. Informal social gatherings can be used to decrease stress levels, on a constructive basis, while management still has some control over the situation.

It is vital; however, that management sets the correct objectives, because all efforts directed towards achieving objectives optimally through balance of control will be futile if the objectives are erroneous and not linked with the mission of the organisation. Management needs to continually scan the environment in order to recognise opportunities and to ensure that the organisation's capabilities are matched with these opportunities. This process should be as continuous as the management- and control processes. Management can ensure continuous balance of control and optimal achievement of objectives by continuously improving all processes, products and services, throughout the organisation, to create and add value for customers.

In this chapter a few final remarks and recommendations will conclude the study of the aspects regarding balance of control. If organisations implement the recommendations correctly it could assist management with optimal achievement of objectives through balance of control. In the final instance ideas for further research will also be made.

6.2 Conclusion

Control is the process of monitoring activities and influencing behaviour to ensure that objectives are achieved in the most economic, effective and efficient manner. Control in an organisation consists of a control environment and control systems. The control environment includes corporate culture, relevant Acts (such as the PFMA), managers' background, qualifications, understanding of accountability and management style. With a proper control environment in place management could then implement the necessary organisation specific control systems that would be continuously adapted due to changes in the control environment. All employees in an organisation are responsible for control and must view control as an aid for reaching objectives and not as a burden.

Control cannot be separated from the other elements of management, such as planning, organising and leading. Control systems must form an integral part of the planning process and the implementation thereof. An integrated approach by management towards control is necessary to achieve balance of control. Management cannot control all activities and behaviour in an organisation, due to the cost, quality, time and innovation implications. Control systems must therefore be effective, efficient and economical. A proper balance of control will not be possible if management control only specific activities, processes or resources in an organisation. The balance of control necessary for optimal objective achievement is summarised in Table 6.1

Table 6.1: Balance of control

S/Nr	Type of balance	Specific area
01	Balanced focus	Control systems over resources
		Achieving vital objectives
		Performance measurement
02	Balance between	Benefits & costs of control systems
		Resource protection & resource utilisation
		Strategy, TQM (philosophy) and BSC (measurement)

Employees need to be trained on how to apply the organisation's control systems to effectively, efficiently and economically utilise resources to ensure optimal achievement of objectives. These control systems must be continually monitored and updated if necessary, and redundant control systems that can prevent management from obtaining balance of control, be scrapped. Control systems should be of such a nature that if the responsible individual were absent there would be still continual control without unnecessary delays. Effective, efficient and economical control systems must adhere to certain qualities such as: integration with planning, accuracy, flexibility, provision of timely reports, comprehensibility, acceptability, and reasonability. These systems should also ensure strategic focus, emphasise exception, consist of multiple criteria, be economical and reward and punish in appropriate ways. In planning and implementing control systems these qualities must be taken into consideration. Management also needs to take note of ways to overcome negative reactions towards control, since employees may sometimes feel threatened by control systems.

Management is ultimately responsible for ensuring sound internal control in an organisation to optimally achieve objectives and to act in the best interest of the stakeholders. Management has to be aware of the different control methods (see Table 1.1) to be able to utilise the correct type of control measure in a specific situation and at the appropriate time. This is necessary to optimally utilise resources to achieve objectives in the most effective, efficient and economical manner.

It is the task of management to keep a balanced focus on the control measures over resources and a balance between resource protection and empowerment of employees in utilising resources to achieve objectives. Most resources can be controlled through finances and related budgets, but even the best control systems will be futile if the individuals or groups applying the control systems do not conform to the standards or if they deliberately ensure non-optimal

performance for personal gain. Control over human resources is one of the most challenging aspects of control. Therefore, a sound control environment combined with relevant control systems can be useful to reduce the motivation of employees to deviate from prescribed behaviour; to constrain deviations via formal corrective actions and reduce the opportunity for deviations. The organisational specific and cost-effective management information system must produce relevant, accurate, complete, concise and understandable information, when necessary, to enable management to make informed decisions in order to manage and control effectively, efficiently and economically.

Another aspect to be considered by management is the assessment of all relevant costs and benefits of control systems. The non-financial costs and benefits of control systems can have detrimental effects on an organisation's efforts to optimally reach overall objectives. Sound corporate governance is therefore vital to restore investors' confidence that is necessary for possible new investments. Furthermore, a balance between the ends (objectives), ways (control systems) and means (structure) is necessary for goal congruence and to ensure an integrated approach towards management and control. Enterprise risk management can be used as an integrated risk management approach to reduce, transfer or manage the likelihood and impact of risks on organisations appropriately.

Once all relevant costs and benefits of control systems are known, a cost-benefit analysis can be conducted to ensure a balance between costs and benefits of control systems. A balance of attention regarding objectives is also necessary. Management could use TQM (see Table 5.1), strategic control points (see Figure 5.2) and the BSC (see Figure 5.3) as part of an integrated approach to optimally control resource utilisation and to obtain a balanced focus regarding the relevant objectives to be achieved. Performance measurement through the BSC can ensure that all relevant areas of performance are assessed (see Table 5.2 for a generic BSC), and that the achievement of important objectives is monitored

(strategy implementation). The BSC can ensure consistency of vision and action since all objectives are linked to the mission and vision of the organisation and measured according to importance across all relevant perspectives (financial, customer, internal and innovation). Employees tend to do what will be inspected and not what is expected. Therefore it is vital that the correct performance measurement is applied. Management can use strategic control points within the BSC to assess the achievement of relevant objectives. Performance measurement needs to be done within the framework of TQM as a management philosophy since TQM encompass all areas in an organisation that could create a proper control environment.

To obtain and sustain optimal achievement of objectives a balance of control, as indicated by Table 6.1, is necessary. This in essence entails a balance between a well-defined strategy, a sound management philosophy (such as TQM) and organisational specific measurement systems (such as BSC).

6.3 Recommendations

For management to obtain balance of control and optimally achieve objectives, an integrated approach regarding control and management is necessary. Control cannot be separated from planning where objectives are agreed on and direction is given; or from organising where structures are created and employees and resources are combined in formal working conditions; or from leading where managers inspire employees towards optimal resource utilisation. Figure 6.1 illustrates and symbolises an integrated approach towards management that can ensure balance of control. This figure indicates that a BSC can ensure effective implementation of strategy only if an organisation has a sound management philosophy, such as TQM. The tree (organisation) illustrated by the figure cannot grow or survive without a well-defined strategy (strong branches and green leaves); or a sound and relevant management

If the branches or leaves (strategy), trunk (TQM, management philosophy) and roots (BSC, measurement system) are out of proportion in relation to one another, the tree (organisation) may survive, but its growth and functioning may be impaired. If one of these three aspects is absent the tree (organisation) could seize to exist. Strategy, management philosophy and measurement have to be in balance and fully integrated to ensure sustained and optimal objective achievement.

Management should be aware of the various internal and external influences on strategy and formally monitor them on a continuous basis to be able to detect relevant opportunities and threats in time. Internal influences include the resources of an organisation and institutionalised processes and procedures that constitute strong points and weak points of an organisation (organisational capabilities). External influences include political-, economic-, social- and technology (PEST) aspects and actions by competitors that pose opportunities and threats to an organisation. The continuous assessment of the environments and improvement of systems and resources can enable management to act pre-actively in matching organisational capabilities with the opportunities in the market to gain or maintain the competitive advantage over rivals and to optimally achieve objectives in the long run.

6.3.1 Strategy (branches and leaves)

An organisation's strategy is a plan of action to obtain overall objectives by matching the capabilities of the organisation with the opportunities in the market. The vision, mission and overall objectives assist management in establishing a control environment by acting as references for employees, while standards are derived from objectives to be used in relation with various control systems. Objectives can be symbolised with the branches of a tree that are separate, but linked with one another. Long-term objectives (big branches) are linked with the mission (top part of the trunk); while medium-term objectives (smaller branches)

are linked with long-term objectives and short-term objectives (leaves) are more specific and linked to medium-term objectives.

As a tree may shed some of its leaves to adapt to a changing environment, so an organisation sometimes needs to change its objectives, due to environmental influences. This is to ensure consistent balance and integration between strategy, management philosophy and measurement systems. Before objectives are changed, management should first assess if it is still possible to reach the desired objectives by changes to the resources and systems in use. If not, objectives will need to be changed. The strategic process in an organisation is of a continuous nature and management have to ensure that the organisation's capabilities are matched with the opportunities in the market.

6.3.2 Total Quality Management (trunk)

TQM as a management philosophy ensures an integrated approach towards management and control in order to deliver quality products and services by creating and adding value to customers (internal and external), by empowering employees to work effectively, efficiently and economically and by continuously improving systems, products and services. TQM allows managers to focus on achieving their overall objectives optimally. TQM is the trunk of the tree that holds strategy and measurement in balance and symbolise the integration between strategy (branches and leaves) and the BSC (roots). Without a sound and relevantly strong trunk (management philosophy) a tree (organisation) will not be able to grow to its fullest potential, since growth can be impaired by environmental influences.

Management is responsible for effective, efficient and economical control in an organisation and must be aware of the different control methods that can be used, in order to adapt the control method when necessary to best suit the organisational circumstances. It is vital that management applies control at the

correct place and point in time in order to quickly detect and correct mistakes before the problem increases. Employees must be involved in the relevant changes to control systems to increase the level of acceptability and to enhance the view that control systems are an aid and not a burden. If TQM is implemented and utilised optimally according to the purpose it is meant to serve in an organisation it can assist management in establishing a sound control environment as a basis for control. This could be established by the continuous focus by all employees on improving systems, products and services in creating and adding value for customers. If management then apply the most appropriate control method for the specific organisational circumstances it will be possible to achieve effective, efficient and economical control in such an organisation.

TQM, as the selected management philosophy, could be substituted for or supplemented with other preferred management philosophies as long as it still provides an integrated and balanced approach towards control and management. The integrated and balanced management philosophy chosen must suit the needs and culture of the specific organisation in order to be effective. The management philosophy followed must ensure that the organisation (tree) will be able to survive and grow in turbulent and challenging environments.

Management could use enterprise risk management, as part of the chosen management philosophy, to ensure an integrated approach towards risk management to manage the likelihood and impact of all relevant risks that an organisation is exposed to. This includes the prevention, detection and correction of fraud. Sound corporate governance along with TQM could assist management in establishing a strong control environment, within which the relevant control systems operate.

6.3.3 Balance Scorecard (roots)

A well articulated, organisational specific measurement system is necessary to enable management to assess whether the strategy of the organisation and the objectives of TQM are realised. Organisations could use the BSC for a balanced performance measurement that focus on financial and non-financial objectives in order to ensure optimal strategy implementation. The starting point should be an overall BSC (main root) with the objectives, related measures and managers responsible for those objectives, across a balanced assessment (financial, customer, internal and innovation). Each department/functional area could then have its own BSC (smaller roots) linked to the overall BSC (main root).

Without strategic implementation systems/tools (for example the BSC for performance measurement) an organisation will not be able to realise its strategy optimally. All organisational departments have to use some of the already limited resources of the organisation (financial, physical, human and information) to achieve their objectives. In this regard the BSC could assist management in ensuring that these departments utilise resources in a balanced manner to optimally achieve overall objectives. It is of vital importance that management sets appropriate objectives for the organisation or else the whole measurement system and control process will be a waste of effort, time and money. The BSC would not only ensure a balanced assessment between objectives in different perspectives, but could also ensure that relevant standards/measures are set at certain strategic control points for resource utilisation in obtaining those objectives. This ensures early identification of problems and the correct level of performance at key points during operations/activities. Actual performance is measured and compared with the set standards/measures and the responsible managers are rewarded and corrected accordingly to ensure continuous improvement in behaviour. Systems and procedures would also be continuously improved if necessary to create and add value for customers.

Included in the BSC should be the financial and non-financial costs and benefits of control systems in order to obtain a balance between the costs and benefits. It is vital that management identifies all relevant costs and benefits to minimise the detrimental effect that some of the costs and benefits such as a lack of goal congruence, failure to meet customer expectations, the negative impact on employee motivation, corruption and fraud may have. Management could either ignore the non-financial costs and benefits and quantify them by using assumptions, or accept the qualitative nature thereof as long as management take note of all the costs and benefits. If management quantifies all of the costs and benefits a cost-benefit analysis could be used to determine a range indicating the optimal amount of control to ensure balance of control.

6.3.4. Resources

Resources used by departments of an organisation must be controlled in a balanced way to ensure overall effectiveness, efficiency and economic usage thereof. If there is an imbalance in the food requirements for a tree, it will not be able to function to its utmost potential. The BSC enable managers to have a balanced focus over the control systems of resources, and a balance between the protection of resources and the utilisation of resources (the required empowerment level of employees) in supporting the mission.

Resources used by an organisation are limited and management must ensure that they obtain the highest quality of resources at relevant costs. Once these resources are obtained, they need to be controlled in a balanced manner in order to achieve goal congruence. There are reliable and tested control systems available for different resource categories for management to utilise. Management and employees need the necessary training, knowledge and experience in order to utilise these control systems effectively and efficiently, while still maintaining a balanced focus between the resources and objectives. Human resources are one of the most challenging aspects to control and the

best control systems will be useless if employees act only in self-interest. The control systems used by an organisation could be institutionalised by means of policies and procedures in order to standardise the control systems and results as far as possible. These policies and procedures have to be updated and revised on a regular basis to remain relevant to organisational circumstances.

Relevant information, regarding the utilisation of resources and achievement of objectives, is necessary for management to ensure balance of control. Management therefore needs to implement, manage and continually update a well formulated, organisational specific management information system. The necessary general controls combined with relevant application controls could ensure consistent, high quality information. Information from such a management information system would enable management to make sound decisions at the correct time to optimally control resource utilisation, while achieving overall objectives.

The resources of an organisation are influenced by the strategy, since the strategy will determine the resources necessary to obtain objectives. In order for the tree (organisation) to grow it may need more resources. Organisations compete with one another in obtaining the best resources at affordable costs and should be willing to invest in high quality resources to optimally achieve overall objectives. Resources also influence strategy since resources produce the capabilities for an organisation to match opportunities in the market. If there is a mismatch, the resources and systems used in an organisation need to be changed and if this is not possible the strategy should be adapted to best fit the new opportunities.

6.3.5 Survival and growth

A tree must be in balance with its environment for survival and growth and likewise should an organisation be in balance with its environment. A balanced

approach towards control and management entails that organisations have an integrated and balanced strategy, management philosophy (TQM) and measurement system (BSC). Management and employees should have sufficient training, knowledge and experience regarding the strategy, TQM and the BSC of the organisation. All these elements have to be organisational specific, planned for, implemented and continuously monitored and improved to assess the success thereof. The ultimate sign regarding success of control for an organisation is the degree of sustained overall objective achievement.

6.4 Further research

The practical implementation of such a balanced approach regarding control and the subsequent assessment of the success thereof are areas that could still be explored by empirical study.

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