

4.1 INTRODUCTION

This chapter will deal with planning, decision making and resource allocation and links with chapter three. This chapter argues that the outcome of quality assessment activities should be utilised for adjustments by means of remedial action plans and for the allocation of resources. Smit and Cronjé (1999:11) state that the success of an organisation depends on how an organisation's resources are organised and coordinated. The goals and resources determine the organisational structure and should accommodate the particular needs of an organisation.

Lategan (1999:13) defines a quality system as an "upward feedback spiral", with the following procedures:

- Defining goals and action plans.
- Designing or adopting quality standards.
- Designing and implementing self-assessment
- Policies and procedures.
- Implementing self-assessment.
- Producing self-assessment reports.
- Reviewing and improving the strategic plan of the institution.

The above-mentioned description of a quality assurance system accentuates the important aspect of integration of quality management with institutional planning, which includes resource allocation. The intention of this study is not to reflect in detail on resource allocation and planning, but rather to explore the generic processes of planning in order to discuss a possible framework and the development of a model for the integration of resource allocation and quality management in the planning process. The current discourse and disputes regarding planning, to mention only two examples, the concept strategic planning *versus* strategic thinking (Mintzberg, 1994:107) or strategic planning as strategic programming (Liedtka, 1998:3), will not be addressed in this study as it does not fall within the scope of the

research. This study will rather reflect on the “generic” processes of planning and resources allocation within the context of higher education, without making claims that these complex processes are thoroughly unpacked or addressed. Even a well respected exponent in resource allocation in higher education, William Massy (1996:7), argues that due to the complexity of resource allocation in higher education, it will be impossible to offer a resource allocation guide for institutions that if followed faithfully, it will ensure success. As mentioned in chapter one, the purpose of discussing the process of planning and resource allocation in this study is to reach a better understanding (as an exploratory study) of the integration of quality management, planning and resource allocation.

Systems theory is in more detail discussed in chapter three. From a systems theory point of view, two concepts namely synthesis and alignment are imperative for ensuring effective quality management and planning. As discussed in chapter three, the concept synthesis refers to the organisation as a whole and focuses on what is important for the organisation. Alignment means concentrating on the organisation’s key linkages with reference to the organisation’s strategic directions. An organisation’s results should therefore continuously be monitored by utilising quality assurance mechanisms, followed by a response to the outcomes of the monitoring exercise. Synthesis and alignment are therefore common concepts in quality management. National quality models such as the Baldrige model (*cf.* 3.3.3.3.2) make provision for the elements of synthesis and alignment.

4.2 PLANNING

A distinction is usually made between planning on strategic level and planning on tactical and operational level. The concept “planning” refers in simple terms to two phases. The first phase focuses on the visualisation of what an organisation aims to achieve in future in order to be successful (Kroon & Van Zyl, 1995:111), followed by the establishment of an organisation’s goals and objectives and an agreement on the best method to achieve them. The development of a strategic vision, mission and setting of objectives are based on basic direction-setting tasks by an organisation’s top management and involves strategies which constitute a strategic plan (Thompson, Strickland & Gamble, 2007:41).

The second phase in planning, according to Kroon and Van Zyl (1995:111) is to ensure the feasibility of the plan. This involves the allocation of resources, development and maintenance of policies, programmes, and the development and implementation of processes and methods. Despite the fact that there are different planning phases, in practice

they form an integral part of the planning process. Therefore, in practice it might occur that attention should be given to more than one phase at a given time.

Churchman (1968:147) defines planning as “a goal is set, a group of alternatives is selected, the plan is implemented, and the decision maker checks to see how well the plan worked”. What is not mentioned by Churchman is the components that make the “second” phase feasible with special reference to the allocation of resources, development plans and strategies. These are important components that support the implementation and operationalisation of the plans and eventually enhance improvement in order to reach the institution’s goals.

Kroon and Van Zyl (1995:112) summarize the characteristics of planning as follows:

- A “think and do” process.
- A process that is “future oriented”.
- A systematic process.
- A process during which aims and goals are formulated.
- A process of identification of activities and resources in order to achieve the goals.
- A process of enhancing the effective utilisation of available resources.
- A process of decision-making.

The critical management processes of reviews, strategic planning and resource allocation/budgeting should not function in isolation. The integration of these activities is imperative for an institution in its quest for effective management and for reaching its goals. As mentioned in chapter 1, the lack of integration of the processes of planning, resource allocation and quality management, is a common tendency. The problem seems to occur not necessarily with regard to direction setting but the feasibility of it. This is not unique only to universities in South Africa, as Barak and Sweeney (1995) describe this phenomenon as a global trend in higher education.

According to the HEQC, with reference to audit criteria 1 and 2, the success of quality management at institutions of higher learning depends on the integration of mechanisms for quality assurance and quality development with institutional planning and resource allocation. This emphasises the important element of the systems approach, i.e. “synergy”, i.e. the interaction of different entities, agents or forces that cooperate advantageously for a final

outcome so that their combined effort is greater than the sum of their parts. A university's quality assurance policy and system (policies, strategies and targets) provides a framework and mechanism to monitor progress towards an institution's goals and to ensure continuous improvement in the performance of all areas of the institution. This is common international practice and the corner stone of effective quality management (USC, 2007:1).

Information on the internal and external customers' needs, expectations and requirements is the foundation of planning. The objective-setting, planning and resource allocation exercises for the core activities of teaching and learning, research and community engagement, provide a strategic framework for achieving the quality objectives of the core business of an institution of higher learning, and are essential foundational elements for the success of an institution of higher learning (CHE 2004b:5).

An institution of higher learning is a typical open-system that cannot function in isolation because the influences of the macro level (e.g. national policy development) and that of the meso level (DoE, HEQC, SAQA, ETQA's, etc.) have an impact on the university on micro (institutional) level. Planning in a university takes place on strategic level (responsibility of the university's top management), on a tactical level (senior management level) and on an operational level (programmes, teaching and learning etc). In this chapter, a discussion with regard to planning on tactical and operational levels will follow the discussion on strategic level. The following discussion of strategic planning should be regarded as a very "concise" version of complex exercises.

4.2.1 STRATEGIC PLANNING

Effective strategic planning is according to Bryson (1995:227) a "collective phenomenon", it involves facilitators, teams, task forces, and a variety of stakeholders. It ensures coordinated actions. Inputs, processes and outputs are planned for an organisation as a "whole" in order to avoid duplication and to create synergy (Kroon & Van Zyl, 1995:111). Effective strategic planning requires not only leadership and stakeholder involvement but also adequate management information and data, a structured process, adequate resources and sufficient time (Thompson *et al.*, 2007:19). The following can be regarded as the generic cyclical "phases" that are characteristic of strategic planning:

- Revision of the institutional mission (or the development of a mission).
- Reflection on the values and principles of the institution.
- Alignment of the institution's vision for the next 3-5 years.

- Situation analysis.
- Identification of the strategic priorities of the institution.
- Planning supporting by resource allocation and budgeting processes.
- Review and alignment of plans and budget.
- Review data and information feeds into the planning process for the next planning cycle.

This concurs with the view of Smit and Cronjé (1999:118; 140-141), according to them strategic planning:

- Have an extended time frame, usually more than five years.
- Focus on the entire organisation.
- Reconcile the organisations resources with threats and opportunities in the external environment.
- Focus on an organisation's competitive advantage.
- Take synergy into consideration.
- Involves an ongoing process.
- Requires well-developed conceptual skills.
- Are performed by top-management.
- Are future oriented.
- Are concerned with an organisation's vision, mission and objectives.
- Integrate all management functions.
- Focus on opportunities or threats that may be exploited or dealt with by means of the application of resources.

Thompson *et al.* (2007:19) refer to five interrelated and integrated phases in the context of crafting an organisation's strategy which concurs with the above-mentioned generic phases: the development of a strategic vision, the setting of objectives or strategic goals and the utilisation of them for the purpose of performance and progress evaluations, the crafting of a strategy to achieve the objectives, the implementation of the strategy, the evaluation of performance and initiating corrective adjustments. This concurs with the cycle for continuous

improvement or the Shewart cycle of "Plan, Do, Check, Act" (PDCA model) which was adjusted by Deming as PDSA or "Plan, Do, Study, Act" (Evans & Lindsay, 2002:587) which will be discussed later in this study. An effective quality assurance system is an "upward feedback spiral" (Lategan 1999:15) that is based on the:

- defining of goals, targets and action plans;
- designing or adopting of standards;
- designing and implementing self-assessment policies and procedures;
- implementing self-assessment;
- producing self-assessment reports;
- reviewing and improving institutional plans.

The above-mentioned "spiral" demonstrates the integration of planning and quality assurance.

A distinction should be made between "strategic planning" and "long range" planning. Strategic planning *per se* is much more sensitive to the external environment than ordinary "long-range planning" (Paris, 2003:5). Long range planning is more "inwardly" focused. In long range planning, minimum attention is given to the larger system in which the institution is functioning when the goals and objectives are formulated. Long range planning tends to maintain the *status quo* – assuming that the future is a linear extension of the present. Strategic planning is a deliberate move in direction and focus with regard to the vision of a "desired future". According to Bryson (1995), long range planning focuses on the specification of goals and objectives while strategic planning focuses on the identification and resolving of issues. Strategic planning places the long range vitality and survival of the institution first. For the purpose of this study, strategic planning is a quality assurance mechanism that ensures that an institution will not be taken by surprise as it enables the institution to be proactive, giving attention to trends and external developments. The latter is important because an institution of higher learning, as an organization, is viewed in this study as an open-system (*cf.* 3.3.3). Process of environmental analysis is therefore important during the revision of an institution's strategic plans and goals.

Strategic planning is a structured process and provides a framework in which management information and data can move vertically from the operational levels of an organisation to all the layers of management, from "down" to "the top", as well as the movement of decisions and strategy from the top downwards. Dissemination of management information to all

levels is imperative in order to inform strategic decision-making, planning, policy development and quality management processes. Continuous feedback of members that are not directly involved in the planning process is imperative.

The following elements and phases of strategic planning can be regarded as “generic” for of all institutional planning exercises i.e. on strategic, tactical and operational levels.

4.2.1.1 The vision

A vision is imperative for an organisation’s success as it leads it into the future. The vision is informed by anticipating where an organisation will be within the near future. Managers are compelled to think about ways to ensure an organisation’s future and to formulate it by means of a vision statement. The vision statement is a managerial decision. The vision provides as Thompson *et al* (2007:46) states “for a long-term direction and infuses the organisation with a sense of purposeful action”. The vision statement communicates the aspiration of the organisation to its stakeholders. It has many positive consequences, to mention a few, it promotes organisational change, provides the basis for strategic planning and helps to keep decision making in context. Strategic planning translates the vision of an organisation into “corporate behaviour” (Liedtka, 1998:3).

4.2.1.2 The environmental analysis and mission

The institution’s mission, strategic priorities, goals and objectives are linked to the organisational vision and are used by many institutions of higher learning to drive their strategic planning processes (SHU, 2002:1). The strategic mission of an organisation describes its ultimate purpose (Kreitner & Kinicki, 1995:567). The mission is a formulation of answers to the questions of why an organisation exists, who the stakeholders are, what their needs are and what plans are in place in order to address it. The mission and goals of an institution is useful as it identifies the function of an institution, describes its uniqueness and niche and serve as a basis for evaluation (Piper, 1993:7).

Institutions of higher learning are discussed in chapter three as typical “open-systems” (*c.f.* 3.3.3). Open systems have environments that impacted on them. It is therefore imperative that institutions should assess their environments on a continuous basis. The development and revision of an institution’s mission and vision takes place by means of an environmental “scan” or analysis. This is an important first step in planning - to be conscious of the

problems or opportunities that the organization as open system is facing, both internal as well as external.

This analytical exercise offers staff and management a clear understanding and knowledge of an organisation's capabilities, its future opportunities and a vision of what can be achieved (Smit & Cronjé, 1999:127). This process of analysis from a systems thinking approach, helps managers to estimate the worth of an activity for the total system (Churchman, 1968:41). The analysis of the environment, both internal and external, indicates to management whether an institution's mission statement is still realistic. It provides also the participants in a planning exercise with required knowledge and counteracts the "barriers to effective planning" (Smit & Cronjé, 1999:130-131) which will be discussed later in this study (*cf.* 4.2.3).

The forecasting of situations in the micro-, and macro-environments serves as a basis for planning in the present. The following presents an example of questions that are relevant to ask during a situation analysis exercise (Smit & Cronjé, 1999:147):

- Where is the institution at present?
- What are the needs of its stakeholders?
- What management information is available (statistics, evaluation reports, remedial action recommendations and plans)?
- What happens in the external environment that will have an impact on the institution?

The above-mentioned questions emphasise the characteristic of strategic planning, i.e. to be sensitive to the environment, especially with regard to the external environment in which the organization, as an open-system, functions. The following are guidelines for an internal and external environment scan that an institution can conduct in order to develop its strategic priorities:

a) Internal environment : The identification of strategic internal factors.

An organisation identifies, by means of an internal analysis, its strengths and weaknesses which inform its strategic priorities and strategic plan. The analysis consists of three processes: the identification of strategic internal factors, the evaluation of the strategic internal factors and the development of input for the strategic planning process. The outcome of this analysis can be presented in the form of an organisational profile or portfolio which indicates to top management what the organisation's capabilities are. In finding the

strategic internal factors, managers identify the key aspects of the organisation's limitations, capabilities and characteristics. The managers decide on the strategic factors by evaluating or assessing the functional segments or functional areas of an organisation.

Information on the potential strengths and weaknesses of the institution will help the managers to identify strategic internal factors. The functional segments of an institution should also be evaluated against the mission and objectives of the organisation. As already discussed in this study, the mission statement portrays the organisation's purpose or reason for existence. Components of the mission statement refer to the organisation's, product, market and technology or the ways in which it services the market, as well as its philosophy on management, employees and society.

b) The external environment: identification of the critical environmental variables

An organisation should constantly be aware of the key variables in its external environment as it is not functioning within a vacuum. Smit and Cronjé (1999:152) refer to the macro-environment of an organisation as the uncontrollable remote environment composing of (to mention a few) the economic, political, technological, societal, ecological and international environments. This statement constitutes the university as a typical open system that has no control over the external environment. The macro-environment is subjected to constant change and it therefore presents opportunities that the organisation can exploit or threats that can be converted into opportunities.

In order to survive, an organisation should anticipate or predict environmental changes and prepare for these changes. This is also true with regard to planning on operation level. Management should identify and select the critical environmental variables. Kennie (2002:77) developed a formal framework, the "STEPE analysis" for the scanning of the external environment within the context of an academic department. STEPE refers to the following elements of the review framework:

S – Social.

T – Technological.

E – Economic.

P – Political.

E – Environment.

The STEPE analysis framework can be used to do an assessment of the impact of these environmental influences on the department or disciplines being considered. Strategic issues that are facing the department can also be identified by utilising a SWOT analysis. The (S)trengths and (W)eaknesses refer to the assessment of the performance of the department with regard to the internal processes and the (O)pportunities and (T)hreads are the external factors that should be considered in identifying the strategic choices.

The strategic plan and more specific the institutional mission usually links with national education plans (Strydom, 1999:411) or the "master plan" (Glenny *et al.*, 1976:80-81). The national education plans sets the framework for all planning activities on strategic, tactical as well as operational levels. Many institutions of higher learning in South Africa include in their strategic intend and mission elements of the national imperatives of the White Paper on Transformation on Higher Education and the National Plan for Higher Education (2001:section 2.1). The National Plan states the following transformational issues that a higher education system should consider in order to:

- Promote equity of access and fair chances for success while eradicating all forms of unfair discrimination and the redress for past inequalities.
- National development needs should be addressed through well-planned and coordinated teaching and learning and research. High on the agenda is also skilled employment needs.
- Support a democratic ethos and a culture for human rights by means of educational programmes and practices conducive for critical discourse, creative thinking, cultural tolerance and non-racist and non-sexist order.
- Contribute to advance all forms of knowledge and scholarship, addressing the diverse problems and demands of local, national, Southern Africa and African contexts, and uphold rigorous standards for academic quality (White Paper par.1:14).

A good example of the integration of quality management and planning at an institution of higher learning is the utilization of the outcome of HEQC audits together with the information gathered during ongoing quality assurance processes which creates baseline information for institutions of higher learning that should inform strategic planning exercises (Lange & Luescher, 2003:88). This information can inform the mission and goal setting exercise.

The mission statement is also informed by the operating principles with regard to the values and principles of the organisation. The institution's mission and operating principles influence the vision of the institution regarding where it would like to be within 3-5 years and by anticipating what the needs of the stakeholders will be.

4.2.1.3 Setting of strategic priorities and institutional goals

Planning always includes the setting of strategic priorities and goals. Planning also determines on strategic level the organisational structure that is required, the leadership that is needed and the control that should be conducted in order to guide the organisation towards its goals. Based on the outcome of the situation analysis, the institution should identify or revise its strategic priorities and bring it on par with the present situation. The following provides an example of questions that can help an institution to arrive at its strategic priorities:

- What are the major directions that the institution will focus on?
- To what extent do the new or revised strategic priorities support the vision and mission of the institution?
- How will success/improvement be measured?
- What should be done differently or be stopped doing?

The following is an example of the strategic priorities and goals of the Minnesota State University in 1999 (MNSU, 2009):

Strategic Priorities:

1. Global solutions
2. Doctoral institution
3. Quality in Excellence
4. Extended learning
5. Campus of the future

Goals:

1. Promote diversity
2. Graduate education
3. Undergraduate excellence
4. Campus wide plans

5. Distance learning
6. International programmes
7. Wellness

Oakland (1998:61) defines a goal as a result, a milestone or checkpoint in the future “which will indicate significant progress towards the vision”. Goals inform strategies and action plans (Kreitner & Kinicki, 1995:186).

With regard to strategic planning, the “past” – with reference to the aims, goals, rules, regulations, budgets, decisions, plans and organisational structure of an organisation, its strong and weak points as well as the external influences with reference to information on the economical, political, social, technological, physical and international environment is taken into consideration and feeds into the planning process which takes place in the “present”. Strategic planning relies on information from internal and external stakeholders, i.e. students, staff, employers, graduates and the community (Liston, 1999: 54) with regard to their needs, expectations and requirements which forms the foundation for planning (Paris, 2003:5). The outcome of quality assurance activities can therefore be viewed as information with regard to the “past” that feeds into the planning process (not only on strategic level but also on tactical and operational levels). The outcome of quality assurance initiatives through quality assurance mechanisms such as customer satisfaction surveys (student-, staff-, alumni surveys, etc.), tracking systems, focus group interviews etc., should inform this process.

Participation of stakeholders in the planning process is an important aspect of the planning process (Massy,1996; Thompson,*et al.*, 2007). Massy states that a university “may well be productive but not in the ways deemed useful by those who pay for higher education” (Massy, 1996:59-60). According to Massy, the goals of an institution of higher learning should therefore be considered from the point of view of society at large as well as those who work within the institution. This participative approach to planning creates a broad decision-making group. A value of this participative process is that it pushes decision-making “down”.

The composition of a strategic planning group, within the context of participation of members on all levels, ensures that “intellectual fusion” takes place when the “right” key stakeholders with good will are actively involved in the planning process. It is advisable therefore that the quality assurance manager or functionary for quality assurance is involved in the planning process. The involvement of all key role players of an institution of higher learning in this process can result in an experience of intellectual stimulation for participants and may deliver tangible results for the institution. The principle that more superior results are generated

through a structured group approach than by individuals within the group is a fundamental strategic planning principle and forms the rationale for a structured group approach in planning. Participants that are involved in the planning processes are usually committed to support the results of the group's work even although they have different opinions. This is based on the principle that adequate opportunity for individual reflection and individual opinions was given during the planning process.

A goal is a particular future state that an institution or organisation should achieve. Goals are specific and concrete and are differentiated in terms of their organisational level, focus, degree of openness and time-frame (Smit & Cronjé, 1999:103). Goals are quantifiable or measurable and contain deadlines for achievement (Thompson *et al.*, 2007:29).

The institutional goals of an organisation give direction to its institutional planning processes and are used for the establishment of goals at its "lower" levels and sub-structures, i.e. on tactical and operational levels. There are different goal-setting processes that range from centralised (e.g. a board of directors set the goals) to decentralised goal setting activities. The managers on each level of the organisation have a dominant influence on goals setting. The basic approaches to follow with regard to goal setting in an organisation are: a top-down-, a bottom-up-, or a combination of a top-down- and bottom-up approach (Smit & Cronjé, 1999:110). In a typical top-down approach, top management (board of directors) usually sets the corporate goals. These goals are usually approved by higher level managers. In a bottom-up approach, the lower levels of management usually set their goals followed by the higher level managers that set their goals according to that of the lower level management goals.

Goals can be regarded as:

- specific (to what they are related to, time frames) and flexible (allowing modification within a turbulent environment);
- measurable (can be evaluated or quantifiable);
- attainable (realistic);
- congruent (the attainment of one goal should not preclude another); and
- acceptable (goals should be consistent with the perceptions and preferences of managers).

The bottom-up approach may have a negative impact on congruency and might therefore be problematic in producing a cooperative effort. A combination of the bottom-up and top-down approaches ensures that the mission and purpose of the organisation as set by top management is taken into account, and is linked with the strengths and weaknesses of the functions on operational level. What is important in this exercise of goal setting is that when agreement is reached with regard to the goals of an institution, every member of the organisation should be informed in order to achieve it. What is even more important and relevant for the purpose of this study, is that the organisation should ensure that after goals are set and plans are developed, adequate resources should be allocated in order to reach them (Smit & Cronjé, 1999:110). Quality cannot be improved without adequate resources, it require increased expenditure (Massy, 1996: 66).

Therefore, effective communication, participation and commitment of members on all levels of the organisation are imperative factors to consider during a planning exercise. The setting of high-level goals by the top management of Exxon Chemical in the United States provides a good example (Oakland 1998:62-64). In the case of Exxon Chemical, top management sets a number of goals in order to achieve the vision. Each goal has a measure with achievable targets. Top management gets buy-in and involvement from the organisation starting with the next level down, which might be in the case of an institution of higher learning, the meso level or senior management level. The next-level-down management (Heads of Departments etc) develops a set of strategies to achieve the goals. This process demonstrates effective communication and participation in the exercise. Each subordinate in the organisation should understand the organisation's purpose, its mission and long-term goals and strategy because they guide the establishment of plans as well as the allocation of resources and budgeting.

4.2.2 STRATEGY IMPLEMENTATION

The institutional strategic priorities or strategic goals inform the institution's tactical goals and plans as well as the operational goals and planning activities. The operational goals and plans are usually applicable for the duration of one year. This includes the budgeting processes and the operational initiatives that will ensure the enhancement of the quality of teaching and learning, research and community engagement.

Strategic planning is traditionally the responsibility of top-management. Tactical planning is the responsibility of middle-management and includes functional strategy and policy, aims, goals and budgets. Examples of typical tactical plans at an institution of higher learning are

financial and academic plans. A Faculty or Department plan can be viewed as typical operational plan. From the strategic plan follows the implementation of the strategy by means of structure, leadership, the tactical plan (and operational plans) and control (Pearce & Robinson, 1991:297-378).

4.2.3 TACTICAL- AND OPERATIONAL PLANS

With reference to the discussion on the setting of goals in this study, the private sector uses the concept tactical goals when referring to specific functional areas (marketing, finance etc.). Tactical goals are usually set by middle management. Operational goals are set by lower-level management, and they are derived from the tactical goals. Operational and tactical plans are developed within the framework of the operational and tactical goals.

4.2.3.1 Tactical plans

Tactical plans are plans of the different functional levels of an institution. An academic plan and financial plan are typical tactical plans within the context of a university. The senior managers of a university are responsible for the development of tactical plans, e.g. the deputy vice chancellors, registrars, etc. Tactical planning committees are usually established by the involved senior manager and consist of relevant key stakeholders on middle management levels, e.g. deans of faculties, directors and managers.

Tactical plans deal with people and action, and have usually a 1 – 5 year time-frame. Tactical plans are more specific and concrete in their focus than strategic plans and are related to the functional areas of the institution, e.g. finance, teaching and learning, research, support services, etc. During the planning exercise, tactical goals are developed by using the strategic plan as a framework, followed by tactical plans. It is during the tactical planning phase that issues such as human resource commitments are taken into consideration (Smit & Cronjé 1999:121). As with strategic planning, the tactical planning process relies on sufficient and reliable data and information (quantitative and qualitative) which should be accessible and available to the planning team. Reliable data and information can be collected by means of e.g. an institution's quality assurance processes. With reference to chapter three of this study, effective quality assurance procedures and mechanisms generate management information (Strydom & Van der Westhuizen 2002:127) that is useful for this purpose.

4.2.3.2 Operational plans

In the context of institutions of higher learning in South Africa, faculty and departmental plans are viewed as operational plans that flow from strategic and tactical plans. Middle-level and lower-level management are usually responsible for the development of operational plans. These are developed on par with the tactical plans in order to achieve the operational goals of the organisation. Operational plans (single-use or standing plans) have a relatively short time horizon in comparison with strategic and tactical plans. Two types of operational plans should be distinguished, namely single and standing plans. Single plans refer to nonrecurring activities, while standing plans usually remain for longer periods of time. A budget is an example of a single-use or “numeric” plan. (Smit & Cronjé, 1999:123). A standing plan specifies how continuous or recurring activities are to be handled. They are usually policies, rules and procedures and are useful over many years.

Planning determines the organisational structure that is required, the leadership that is needed and the control that should be conducted in order to guide the organisation towards its goals. It has therefore financial and human resource implications. Strategic planning is not a substitute for effective leadership but rather a set of procedures and tools that will help leaders of institutions to think strategically, to build commitment, to address key institutional issues in order to enhance the core business. The following figure is an adaptation of Kroon’s (1995:141) model for strategic management for organisations. Figure 4.1 shows the relationship of strategic-, tactical- and operational plans. The model shows how strategy implementation takes place by means of the implementation of tactical and operational plans. The implementation of an institution’s strategies and plans should be evaluated on a continuous basis. The information gathered by means of evaluations (quality assurance processes) should inform the next cycle of strategic planning.

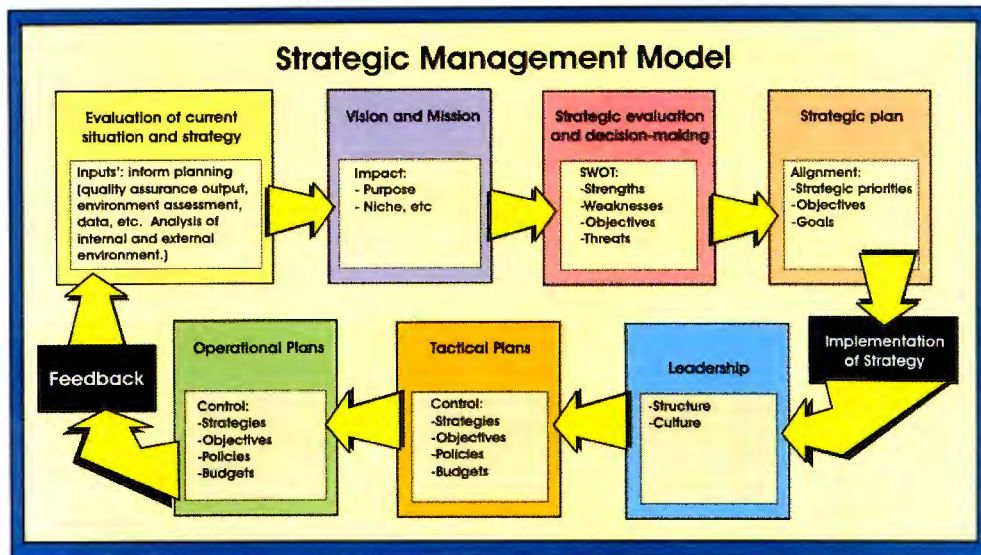


FIGURE 4.1 : Strategic, tactical and operational planning (Researcher's adapted version of the Strategic Management Model ((Kroon (1995:141).

Leadership is a collective enterprise, it requires people with different responsibilities and qualities in order to develop and implement institutional plans (Bryson, 1995:212). The implementation of plans is not always without difficulties and stumbling blocks.

4.2.4 BARRIERS TO EFFECTIVE PLANNING

Smit and Cronjé (1999:130-131) refer to some of the "barriers to effective planning" as the lack of environmental knowledge, the lack of organisational knowledge, a reluctance of members to establish goals, resistance to change, time and expense.

4.2.4.1 Lack of environment knowledge

The answer to organisational survival lies in the external environment, as mentioned in this study, the external environment is not controllable (Churchman, 1968:54). It has conditions that are constantly changing. Managers should have insight into issues that are related to the external environment such as technology that is affecting the organisation, competition, changes in customer profiles, new legislation, internal gaps and deficiencies, etc.

4.2.4.2 Lack of organisational knowledge

Planning cannot take place without management information. Massy (1996:26) states that by enhancing planning methods, management information, and decision support systems, institutions can adapt to external pressures. Reliable quantitative and qualitative management information informs the planning and decision making processes. Managers should be informed on issues such as the strengths of the organisation. They need a clear understanding of which resources their organisation can utilise to reach its goals and mission. Managers should understand the strategy that the organisation is following. They should also understand the goals of their own function, department or unit and that of other entities in the organisation. This will ensure that institutions are not working in silos.

4.2.4.3 Reluctance to establish goals

Smit and Cronjé (1999: 130-131) emphasise that managers' lack of confidence in their own ability and that of other subordinates creates reluctance to establish goals for their subunits. Reluctance to formulate goals may also be as a result of fear for failure. If no goals are set for their subunits, they cannot be held responsible for attaining them. Goal setting may also enhance silo management. According to Massy (1996:61), groups within a university may establish "conflicting goals" when departments are more concerned about increasing their own prestige rather than that of the institution.

4.2.4.4 Resistance to change

Planning usually involves changing of certain aspects of an organisation to enable it to adapt to the external environment. A principal barrier to planning is resistance to change. Changes may include organisational elements such as structures, span of control, salaries, replacement of human resources, working hours, etc. Staff may fear the impact of drastic changes such as the merging of institutions. Massy (1996:25) refers to the predictable pattern that universities follow when confronted with changing environment and financial difficulties, if plans to enhance revenue fail, institution may eliminate or "downsize" services which may include the cutting of jobs.

4.2.4.5 Time and expense

Planning is time consuming and is sometimes neglected by managers due to their busy schedules and day-to-day activities. To set a planning system and to collect information,

requires time and effort from many people in the organisation. Planning is therefore often reduced to a superficial process. According to Pearce and Robertson (1991:297-378) the implementation of the strategic plan takes place by means of structure, leadership, tactical plans and control.

Managers at all institutional levels should be confronted with decision making during the development of institutional planning and goal setting phases. Standing plans such as policies can be viewed as guidelines that can be followed during decision making.

4.3 DECISION-MAKING

The aims and priorities of a total system should guide institutional management decisions. They should be supported by means of the allocation of the necessary resources (De Bruyn, 2002:288). Pretorius (2004:107) states that universities have usually a very complicated decision making system. Some decisions are made by academics and others by administrators that are operating within a very fragmented system. Policies are the statements that influence decision making including allocation of resources in an organisation. Policies ensure that the decisions that are made in an organisation comply with the goals of the institution. They set limits and boundaries for decision making.

A decision can be defined as an option chosen between two possibilities or a resolution that is made after consideration. Decisions are choices that individuals are making among two or more alternatives. Decisions are made when managers of an organisation face a problem or an opportunity and various courses of action are proposed and analysed. For the sake of enhancing the success of the organisation, managers draw a conclusion and select a specific course of action. In the case of major decisions, managers can utilise decision making techniques. Managers make usually either programmed or non programmed decisions (Smit & Cronjé, 1999:171).

4.3.1 PROGRAMMED AND NON PROGRAMMED DECISIONS

Programmed decisions are repetitive and routine. Managers make programmed decisions on a daily basis without spending unnecessary time. Managers can handle programmed decisions by means of rules and procedures as well as the development and implementation of policies. The decision maker can eliminate the process of identifying the best option and can make a new choice every time that a decision has required. A negative aspect of programmed decision making is that it limits the flexibility of managers.

Non programmed decisions are ill structured. There are no methods for dealing with them. Managers on all levels of an organisation make non programmed decisions. An example of non programmed decisions is the changing of work-flow procedures in a department. Some of the most difficult managerial situations have to do with non programmed decisions. Non programme decisions require creative problem solving techniques. Decisions can be made under conditions of certainty, risk and uncertainty (Kerzner, 2006:712).

4.3.2 CONDITIONS OF CERTAINTY, RISK AND UNCERTAINTY

When a decision is made under conditions of certainty, the available options, benefits or costs associated with each option are known to the managers. In this case, "no element of change intervenes between the option and its outcome" (Smit & Cronjé, 1999:172). Managers are faced with identifying the consequences of available options and select the outcome with the best benefit. Managers rarely make decisions under conditions of certainty as the future is usually not known with perfect reliability.

Decisions that are made under conditions of risk are more common than the decisions under conditions of certainty. Decisions under conditions of risk are made when the available options and the potential benefits or costs associated with them are not known. (Smit & Cronjé, 1999:172). Decisions can also be made when the options are already known but the outcomes are not certain. The probability of their occurrence is known. Probability can be objective or subjective. Objective probability is based on historical evidence, meaning that the likelihood of a particular state of things will occur. Object probability is thus based on facts and figures. By examining past records, managers can determine the likely outcome of an event.

With regard to subjective probability, the historical evidence is not available and a manager must rely on personal estimate and belief of the situation outcome. Uncertainty is a condition under which managers make decisions when the available options, the probability of their occurrence and their potential benefits or costs are not known. These types of decisions are most difficult as managers have no knowledge on which to base an estimate of the likelihood of various outcomes. There is usually no historical data available or the circumstances are so complex that comparative judgments are out of the question. Managers have to rely under these circumstances on their "managerial instincts". Robins states that "intuitive decision making is an unconscious process created out of distilled experience". The utilisation of performance indicators and management information is not unfamiliar to higher

education since the late seventies (Segers *et al.*, 1990:1). It is common practice to use performance indicators in universities during decision making processes.

4.3.3 MANAGEMENT INFORMATION

Managers monitor progress towards achieving organisational goals and turns plans into reality by means of accurate or reliable information (Smit & Cronjé, 1999:191). The fewer the performance indicators during decision making processes, the greater the gap that has to be bridged (Segers *et al.*, 1990:1).

Management information informs all forms of planning including remedial action plans, financial plans and decision making on strategic, tactical and operational levels. The quality of information determines the quality of decision making. Quality of information refers to the accuracy of data gathering, processing and presentation. Management information should therefore be timely, accurate and relevant to a situation. An institution should have mechanisms in place that ensure the distribution of management information to all relevant key role players of the institution. Computer-based information systems can provide the information that is necessary for effective decision making as well as qualitative information. The latter can be available in the form of self-evaluation and audit reports based on the outcome of institutional and external quality assurance initiatives.

Data from the external and internal environments are transformed into management information by means of an information system. An information system involves the people, procedures and other resources that are used to gather, transform and disseminate information into an organisation. Usually universities establish institutional structures to deal with the gathering and transformation of data and information. An institution's quality assurance system should therefore be effective in gathering reliable information for planning and decision making purposes.

Institutional managers on all levels are responsible for the continuous monitoring and enhancement of processes and for making decisions that will have an impact on the quality of the core business. Every manager can therefore be viewed as a "quality manager" (Evans & Lindsay, 2002:56). It is therefore imperative that reliable information is accessible to all managers on strategic, tactical and operational levels. Reliable management information is imperative as it effects change in an institution (Geall, Harvey & Moon, 1997:193). Churchman (1968:161) states in this regard that information that is accurate, reliable and precise should be available to the decision maker in order to make refined choices and hence to reduce the risk of error. Managers should therefore utilize management information

in order to make the best choices and to decide how best to use the resources over which they have discretion (Levačić, 2000:5).

As already discussed in this study, resource allocation and budgeting forms part of an institution's planning processes during which certain decisions are made in order to ensure that an institution will attain its goals.

Budget setting forms part of the resource allocation process where financial resources are transformed into real resources namely staff, physical resources and services. The successful attainment of an institution's goals by means of the implementation of a university's strategic plan depends to a large extent on its decision making –, budgeting- and resource allocation processes. According to Glover (2000:117) is resource management an essential tool in achieving the aims of university.

4.4 PLANNING, BUDGETING AND INTERNAL RESOURCE ALLOCATION

University leaders proclaim the need for sustained funding in order to maintain and enhance the quality of their core business, while political figures and the general public is skeptic about institutions' ability to "improve productivity" (Massy, 1996:3). Quality management and the notion of "accountability", as discussed in chapter three, requires quality assurance initiatives such as reviews of the academic and administrative processes of institutions. The allocation of resources impacts on the remedial action initiatives of an institution of higher learning and deeply effect the success of its quality management.

External resource allocation to universities is beyond the scope of this study, the focus is on the utilization of resources as a support for the enhancement of the quality of the core business. The focus is therefore on "internal" allocation of funds, including budgeting. The Oxford Dictionary and Thesaurus (Elliot, 1997: 87) defines the concept "budget" as an amount of money needed or available. Hughes and Senaratne's (2002:2) definition of a budget is more relevant to this study. They define it as a mechanism for planning, organising and managing resources in order to ensure that the daily operations of an institution are on par with its strategic goals. Budgets can be defined as "goals with price tags" that are attached to them. This emphasises the relationship between planning and budgeting. In order to reach its strategic goals, it is imperative for an institution of higher learning to plan and to budget. Budgeting is a mechanism that can be used to plan and manage an institution's operations towards the achievement of its strategic goals. A budget is therefore a

detailed “plan” that reflects the expenses of a university for the implementation of its activities. In other words, it is a “management plan” that is phrased in financial terms. In this study a budget is viewed as the translation of planning decisions into financial plans over a specific budget period (e.g. a year). From a systems thinking point of view, it involves an estimation of the resources that are needed in order to accomplish goals through the implementation of plans and emphasise the link and integration of goals and plans with an institution’s resources.

As already discussed, the development of strategic priorities and goals (on strategic, tactical and operational levels) should inform the development of plans. The latter should finally be converted into budgets. Budgeting ensures therefore that the resources are available to carry out the plans in order to reach the goals of an institution. Traditionally the term “budget” refers to an institution’s revenue sources as well as its expenditures (USUD, 2008:1). The term “budget” will be utilized in this study as a synonym for “operating budget”. An institution’s operating budget refers to all the monies that are needed in order to cover its normal expenses with regard to its key business. An example of a budgeting process on operational level is when an academic department or school sets its objectives and plans, submits them to the involved Dean of the Faculty followed by a financial approval of its plans (Davies, Haines & Allen, 2002:66).

An important assumption in management is that a budget should follow a plan and not *vice versa*. The researcher is of the opinion that the opposite can occur in situations where institutional functions operate in “silo’s” and where the basic elements of the systems approach is transgressed. The budgeting process is often a process of negotiation, compromise and political success, with an impact on many issues in an organisation such as salaries, class sizes, laboratory facilities and the quality of teaching and learning (Courtney & Richardson, 2006:1). The successful attainment of an institution’s goals by means of the implementation of a university’s strategic plan depends to a large extent on its links with its budgeting processes.

The concept “resource allocation” in literature can refer to the allocation of funds to institutions of higher learning by e.g. government, which is not the focus of this study, it can also be described as the internal funneling of resources in a system or on institutional level to faculties and department/unit levels. The term “resource allocation” refers therefore to the channeling of resources in order to support specific priorities, goals, projects and programmes (USUD, 2008:1). It can also be viewed as the way in which (financial) resources are distributed amongst competing groups. A resource allocation model (RAM) should form part of the budget process and therefore also the strategic planning process of

an institution (OU 2004:2). A RAM provides the method that an institution utilises to distribute income between e.g. academic - and academic support units.

Resource allocation is a mechanism that a university uses in order to distribute revenue among the constituent parts of the institution and it can therefore be viewed as a “budgeting device”. The budgeting process and the allocation of funds within an institution mirror an institution’s organisational perspectives and its commitment to its strategic goals. According to Levačić (2000:7) a university’s organisational perspective determine to a great extent how it envisages the linkage of resources to e.g. learning outcomes.

4.4.1 THE AGENCY THEORY AND RESOURCE ALLOCATION

The allocation of resources should occur in terms of certain norms that reflect the:

- strategic intend and goals of the institution,
- condition of affordability, efficiency and excellence in service delivery.

Resource allocation at institutions of higher learning can be viewed as an exercise that is underpinned by the agency theory. “Agency” theory describes the ideal arrangement for relationships between one party which is called the “principal” with another, the “agency” (Massy, 1996:75). The principal delegates or determines work which the agent undertakes (Eisenhardt, 1989:58). According to this theory, when there are conditions of uncertainty or incomplete information, two problems may occur, i.e. adverse selection and moral hazard. Adverse selection refers to circumstances where the principal cannot determine if the agent correctly signifies his ability to conduct the work which he is reimbursed for. Moral hazard occurs when the principal is unsure if the agent has conducted his maximal endeavor.

The government can be viewed from the principal-agent theory as the principal that establishes the rules within the principal – agent relationship. Government enters an agreement with institutions of higher learning. Government or, the principal, has certain expectancies, i.e. that the institutions should create the requested outcomes by means of choosing the best actions. Institutions of higher learning has a prominent role to play in ensuring that the country has a skilled labour force that will contribute to the economic and social welfare of the country, especially in a political new dispensation of a democratic South Africa (*cf* 2.3.2). Universities can therefore be viewed as generators of human capital and as contributors to the prosperity for the country. It is a global tendency that governments govern the world of academia by means of the “power of the purse” (Rungfamai, 2008:12).

Within the South African context, the Department of Education (government) approves the programmes that an institution may offer and allocates funds only for the programmes that appear on an institution's Programme Qualification Mix (PQM). The PQM of an institution is to a large extent regulated by the Department of Education. According to Liefner (2003:477), a range of individuals and bodies may be regarded as both principals and agents such as the University Council, the Vice Chancellor and Deans while the academic staff and researchers are viewed as agents. At an institution of higher learning, one can regard top management as the principals and the staff of Faculties and Departments as the agents. A university is an organisation with a framework within which the activities of the principals and agents are directed and coordinated (Basson, *et al.*, 1995: 594).

Universities have their own organisation perspectives that determine how they conceive the linkage of resources with their core business. The organisational perspective of a university plays a major role in its decision making processes (e.g. resource allocation and budgeting).

4.4.2 UNIVERSITY ORGANIZATIONAL PERSPECTIVES

Rational, collegial, political, ambiguity and open systems are the most common and "ideal types" of models to be found in universities. They are not likely to appear in pure form in any organisation (Bush, 2000:113). Most universities will exemplify certain components of several of the above-mentioned models in their budget and resource allocation exercises.

4.4.2.1 Rational model

Universities that have a rational systems approach, views the institution as a goal pursuing entity. As previously discussed in this study, the university has strategic priorities and goals to achieve by means of plans, formal structures, human resources, policies, etc. Decision making in the rational systems approach take place by assessing the alternative actions to be taken, and by using relevant management information in order to achieve its goals. This will enable managers to make judgments regarding the best option to reach the institution's goals.

Government policies promote in many cases a technical-rational model (Levačić 2000:8) by which educational institutions are held accountable through inspections of their educational standards. The inspection is usually held against the university strategic priorities and goals, and how effective they are achieved. The natural systems perspective views the organisation as a social unit. Universities are not businesses but organisations and social

systems (Burke, 2005: 21). According to this approach, social interaction is a high priority. The organisation is viewed to exist in order to serve the needs of its members. Its effectiveness is therefore judged in relation to its ability to meet the needs and expectations of its internal customers. Staff morale and support are the key measures of its effectiveness. In this view, the creation and maintenance of social harmony is the primary concern of management.

A rational model advocates a system that allocates resources which is directed for the achievement of its strategic priorities and goals. This requires of universities clarity in the specification of their goals, the gathering and analysing of information, alternative ways of attaining the goals, evaluation of the alternatives and the selection of those actions that might maximize achievement of the goals (Levačić, 2000:105). The rational model places a strong emphasis on economy (good standard service purchased at lowest cost), "value for money", efficiency (achieve outcomes at least cost) and effectiveness (matching results with objectives). Within the rational model, opposed to the collegial model, the decisions are made by top management or by a top manager.

According to Bush (2000:101) rational decision-making has the following sequence:

- Perception of a problem or a choice opportunity.
- Analysis of the problem, including data collection.
- Formulation of alternative solutions or choices.
- Choice of the most appropriate solution to the problem to meet the objectives of the organisation.
- Implementation of the chosen alternative.
- Monitoring and evaluation of the effectiveness of the chosen strategy.

The process is iterative as the above-mentioned evaluation may lead to a redefinition of the problem or to a search for an alternative solution, or to change the chosen strategy and the implementation of a new approach. Rational models reflect views about how individuals and organisations ought to behave and are therefore normative.

A funding formula model can be a helpful tool during resource allocation processes especially for a university that made decisions from a rational point of view. As an example, once the areas of spending have been identified by a university that made decisions from a rational perspective, the university should decide on the method to follow in the allocation of

budgets to its subunits. The funding formula model can be a helpful mechanism in this regard. The funding formula is based upon student numbers and timetable sessions for each subject with a weighting allowance per practical subject (e.g. science) which requires increased funding for consumables (Bush, 2000:108., USUD, 2008:6). The funding formula is an example of rational resource allocation in the sense that it has an objective or goal basis for decision making. It is in comparison with incremental budgeting a far more flexible approach (USUD, 2008:6).

According to Bush (2000:105-106), rational management resource allocation is underpinned by the following principles:

- Aims and priorities: resource allocation is informed by clear aims and by determining priorities among the objectives of a university. The emphasis is on output budgeting where spending is related to objectives and not input budgeting where the emphasis is on staff, equipment and infrastructure.
- Long-term planning: the longer term aims of the university are taken into consideration and the budget is therefore taken beyond the annual budget.
- Evaluation of alternatives: consideration is given to alternative patterns of expenditure “based on evaluation of past actions and assessment of the opportunity costs of different spending options” (Bush, 2000:105). This includes environmental scanning that helps in the assessment of longer-term implications of expenditure.
- Zero-based budgeting: the notion of zero-based resource allocation takes all areas of expenditure into consideration rather than simply making incremental changes to previous patterns. This would mean that no previous activities would be funded in future but it would depend on a new justification of their relevance to institutional goals.
- Most appropriate actions: rational models require a choice of the most appropriate option in relation to the institution’s objectives. The best action should be selected which might maximise the achievement of the university’s objectives.

The researcher is of the opinion that the rational model can contribute to the enhancement of the quality of an institution’s core business. The rational model’s linkage with regard to the allocation of resources to the strategic priorities, goals and plans of all institutional levels, is

according to the researcher a mechanism to integrate quality management and resource allocation.

4.4.2.2 Collegial model

Participation in decision-making is characteristic of the collegial model. This model ensures that staff is involved in decision making. A major benefit of this approach is that it fosters ownership of decisions that were taken (Coleman, Bush & Glover 1994:17). The researcher is of the opinion that the implementation of the collegial model can be a valuable tool in enhancing quality of the core business of a university as a result of participative decision making by operational staff with regard to specific resource allocation for the purpose of remedial action initiatives. Bush (2000:109) states that the decisions that were made where staff was involved enhanced the quality of decision and ensured greater success with regard to the implementation of changes (Bush, 2000:109). Bush (2000:102) links academic quality enhancement with sufficient and efficient resources in his statement: "the ability of teachers to perform well in classrooms is inevitably conditioned by the availability and quality of resources". The researcher is of the opinion that this statement is not only true with regard to the quality of teaching and learning but also applicable to an institution of higher learning's service- and support units. Participation in the decision making process during resource allocation by professionals on operational level is therefore imperative.

Academic staff members are professionals with shared values that provide the basis of a participatory approach in decision making. A characteristic of this model is that staff makes decisions by means of consensus rather than by managerial decree or even conflict. Consent is an essential principle. Collegial decision-making have also its limitations. It tends to be slow and cumbersome. Insufficient time due to work loads and busy schedules of individuals may hamper the participative decision making processes. Participants are representatives of sectional interests. It might occur that some staff involved in the decision making processes may be hostile and not willing to participate especially within a silo management context. The researcher is of the opinion that the generic practice that only senior staff members are retaining control and the mandate of decision making, especially with regard to planning and financial matters (Hopkins & Massy, 1981:401-402), may create skepticism amongst junior members which might hamper the implementation of the collegial model of resource allocation.

4.4.2.3 Political models

Political models emphasise the prevalence of conflict in a university. Conflict that might occur within a university is sometimes regarded as opportunities by political interest groups for their own benefits. Within a political model, decision-making takes place by means of bargaining and negotiations and eventually it is usually the group with most power that is satisfied. Rational considerations within a political model are to a lesser degree a factor in making resource allocation decisions. What matters from a political model point of view is the interplay between interest groups and the power that they have.

In the context of the above-mentioned scenario, is resource management nothing else but a micropolitical process where participants are given an opportunity to compete with other interest groups for resources. They simply utilise strategy in order to further their own interest. It is most likely that in a university, the values of the different discipline groups and their perceptions with regard to the importance and relevance of their subjects will be a factor for potential difference of opinion and occasionally conflict.

The type of resource allocation that will most likely involve political activity is "bidding". Bidding involves individuals or groups that apply for resources in order to sustain or expand their activities or to develop new ones. Applicants have to decide on how much to increase their bids. The decision makers have then to judge the merits of the bids. According to Bush (2000:112) the main merit of the political approach is that it is likely to satisfy a higher percentage of participants in comparison with other methods, especially those that involve only a small number of senior management or top management.

4.4.2.4 Ambiguity models

Ambiguity models suggest that there is little clarity with regard to the goals of an organisation and its linkage between resource allocation. The features of an ambiguity model involve this lack of clarity about institutional goals as well as fragmentation in decision-making which makes the outcomes of decisions uncertain and unpredictable. Unplanned rather than planned decisions are made in this context. Many institutions operate with a mix of rational and ambiguous processes. The rational model is according to Levačić (1995:82), sometimes undermined by ambiguity, because it is dependant on the availability of information of relationships between inputs and outputs. The tendency in the public sector according to Levačić (1995), is that decision making does not follows the rational model but is characterised by incrementalism. "Ambiguity damages the rational model and is based on

the flawed assumption that there will always be sufficient information to make a clear choice among competing alternatives on objective criteria" (Bush, 2000:113).

4.4.2.5 Open systems approach

The concept "open systems" is already discussed within the context of quality management and planning in both chapters three and four. An organisation that follows the open systems perspective is convinced that it is dependent for its effective functioning on its external environment. The purpose of the organisation is primarily to satisfy the external stakeholders as well as the internal members. The goals of the organisation are therefore largely set or determined by its external agents. The institution that follows this approach takes inputs from the external environment and release outputs back to it. This perspective is in harmony with both the natural and rational approaches but adds an extra dimension to it, which are its interlinkages with the external environment (which is characteristic of the systems approach). An effective organization, from an open systems approach, is one that adapts well to the changes in its external environment and continues to serve the external environment's needs (Levačić, 2000:9). The open systems approach strengthens both consumer and government control. Satisfactory educational outputs are imperative for the sake of survival and success of universities that are following the open systems approach as it attracts resources and secure support.

Rational, collegial, political, ambiguity and opens systems models should be regarded as "ideal types" and are not likely to appear in pure form in any organisation (Bush,2000 : 113).

4.4.3 A REFLECTION ON EDUCATIONAL MANAGEMENT MODELS

Most universities may exemplify components of the models in their budget and resource allocation exercises. As an example, an organisation that is undergoing radical changes, may follow the rational model of zero-budgeting. Universities with no strategic direction, planning or clear goals may follow a typical ambiguity approach. Bush (2000:114) suggests that given the imperfections of the rational process (inadequate information, unclear goals, etc.), it may be advisable to develop a modified form of rationality which acknowledges the claims of collegial, political and ambiguity models. University managers should encourage full participation of stakeholders in the process of resource allocation in order to ensure acceptability of the decisions.

Conceptual pluralism” rather than the adherence to one model, is according to Bush (2000), a more effective approach to resource allocation. In order to meet its objectives, a university can also reduce allocations in one area in order to meet the demands in another (USUD, 2008: 6). This can be an initiative that supports the strategic goals and plans of an institution. Many institutions of higher learning moved away from the *status quo* with regard to resource allocation processes that they viewed as “effective” in the past. These universities develop processes that are linked with a respective institution’s vision, mission, strategic priorities, goals and strategic plan and by taking into account the internal and external influences of the institution that might have an impact in accomplishing its vision and mission (USUD, 2008:8).

During the resource allocation process the following questions can be asked:

- What does the institution plan to reach within a specific period?
- How does it plan to reach its goals and objectives?
- What are the resources that will support the implementation and completion of the plan?
- What are the funding sources from which the university can attain its financial support (USUD, 2008: 8)?

An institution should critically reflect on its decision making structures. Universities cannot follow a pyramidal approach to decision making with an “autocracy” of the institution’s top executives to convey rulings. As discussed in this chapter, it is imperative for universities to follow a participative approach. Members on all levels of the university should have the opportunity to reflect and advice on the best way to accomplish the institution’s mission, goals, objectives and strategic plan. This includes the accomplishment of remedial action goals. Members of staff on all levels, should also be able to reflect critically on the adequacy of the resource allocation processes. An institution that finds it realistic to develop resource allocation processes that are based on participation and consensus, should ensure that the appropriate institutional structures and processes are in place.

An institution that follows the incremental allocation processes should be able to reduce its inequities and inefficiencies and should be able to reduce or eliminate the activities that are viewed as non-critical (USUD, 2008:10) in order to funnel allocations to the strategically important areas that are linked to the achievement of its institutional goals and plans. This intervention proofs to an institution’s customers that it is accountable and that it regards cost effectiveness as an imperative in enhancing quality of the core business.

4.4.4 SOURCES OF INCOME

As mentioned in this study, the external allocation of resources to universities is beyond the scope of this study. This is only a concise discussion on an institution of higher learning's possible sources of income and methods of resource allocation from external sources. Government funding, as discussed in this study, can be regarded as one of the main source of income for an institution of higher learning. The following are examples of traditional sources of income for an institution of higher learning (Dickson, 1999:5):

- grants from government (or the "funding body");
- general research funding from government or national research bodies;
- income from students;
- investments income;
- contributions from commercial activities;
- consultancy earnings;
- overheads recovered from external contracts and
- miscellaneous income such as the hire of university premises, hire of equipment, library fines, library borrowers' fees, hire of academic gowns fees, etc.

The above-mentioned sources of income correlate with that of universities in the United Kingdom and Australia. The University Western Universities can receive funds via e.g. "funding councils" such as the Higher Education Funding Council for England (HEFCE). The HEFCE allocates funds for teaching, research and nonformula funding and can be viewed as a "performance based" system (Massy 1996:224-226). Universities in Britain receive a portion of their funds based on the quality of their performance. In Australia, the government implements a plan for supplemental funding which is linked to quality assessment, they introduce also a programme in which universities as rewarded for extraordinary quality (Massy, 1996:224)

Funding institutions of higher learning are powerful tools in the hands of a democratic government and a major source of income for institutions. Funding is a steering mechanism. By means of incentives it ensures that institutions and students are moving into a specific direction. This was the case in South Africa in the apartheid years and it is still the case in the new dispensation of higher education. Since 1994 the new ANC government has been steering institutions of higher education in a new dispensation.

The role that politics played in the history of institutions of higher learning in South Africa is discussed in more detail in chapter 2 (*cf.* 2.2). The following is a discussion of the impact of funding during and after the apartheid era:

4.4.4.1 Funding prior and since 1994 in South Africa

Prior to 1994, in the apartheid era, two broad “types” of funding were introduced in South Africa. One type of funding was associated with historical black institutions of higher learning based on negotiations and there was a formula funding that was associated with the white institutions. These types of government funding were used to support the apartheid government’s “separate but equal” policy (Bunting 2002:73). The “non-white” institutions did not enjoy the same administrative and financial powers in comparison with the white institutions. Black institutions of higher learning had to apply for the appointment of new staff, they had little say with regard to the maintenance of buildings that they used etc. It is clear that black universities had not the same degree of autonomy as the white universities in those years.

The black institutions had to negotiate and had to submit their budgets with regard to estimated expenditures and income to their respective government departments. The revenue of the institutions reflected the amount they envisaged to receive from student fees. The budgetary mechanism made provision for the returning of “unspent” funds of the negotiated budget. This practice motivated institutions indirectly to spend all accumulate funds by the end of a financial year and did not create opportunities for institutions to grow their reserve funds. Budgets were approved on the basis of historical spending patterns and the current needs and were not linked to estimated student enrolment figures.

According to Bunting (2002:74) a percentage was in many cases simply added to the previous year’s budget allocation. The apartheid government developed in 1982 a funding formula framework for all white institutions of higher learning which was based on certain principles. According to the framework, white institutions of higher learning would be subsidised only for the activities that ensures the enhancement of “public benefits”. This complexed framework was called the South African Post-Secondary Education (SAPSE) formula.

a) The SAPSE formula

This new funding formula for white universities was introduced, based on principles such as the sharing of costs between governments and recipients of private benefits. Only the

activities that generate public benefits would be subsidised. Other principles in the framework dealt with concepts such as “efficiency, institutional autonomy and government intervention when the need existed for market failures to be corrected” (USUD,2008:75). The formula was introduced to all institutions of higher learning between 1988 and 1994.

At the end of 1980, 6 historically black institutions accepted the formula which was initially designed for the historically white institutions with a believe that the formula would render them greater administrative and financial autonomy and that they would be benefited from the increase in enrolments at that times. Since 1988, government introduced a hands-off approach to the funding and steering of the system. The SAPSE formula had had a negative impact on the historical black institutions’ finance as these institutions had to rely on student fee income. This placed a heavy burden on fee collection from students that came from economically disadvantaged backgrounds. The black universities and technikons of the TBVC countries (Transkei, Bophuthatswana, Venda and Ciskei) were incorporated on the SAPSE formula in 1995. This creates a serious problem for the latter because they received substantially higher subsidies during the apartheid era. The National Commission of Higher Education (NCHE) highlighted key problems with regard to the implementation of the SAPSE framework.

b) The NCHE’s finance task team

The following are some of the concerns that the NCHE finance task team mentioned with regard to the implementation of the SAPSE framework.

The formula was not designed for the improvement of equity through financial aid but was geared for remedial instruction for students with an economically disadvantaged background (NCHE 1996:35).

Black institutions of higher learning had to raise their fees and found it difficult to collect fees from their students.

The physical infrastructure of black institutions was not up to standard due to low maintenance.

The formulae encouraged increase in enrolments in the humanities field that is much cheaper and not in more expensive fields like science and technology (NCHE, 1996:37).

The NCHE task team recommended a new funding framework which was consistent with equity, redress, democratisation, efficiency, development, effectiveness, financial sustainability and shared costs (NCHE, 1996:216). This means that the government should

fund institutions in order to ensure that the education system is an equitable one and that the higher education system respond to the demands of a developing economy in order to ensure that it is competitive on international levels. It argues that government funding should ensure that it achieves its goals at the lowest costs and that that costs for higher education should be shared because government and students (and their families) are all stakeholders with regard to public and private benefits.

The proposals of the NCHE were accepted and included in the White Paper on higher education transformation by the new government in 1997. The White Paper stated that a goal-oriented, performance-related framework, which reminds of the British's performance based system (El-Khawas & Massy, 1996:223-242) would replace the old funding formula in the post apartheid period.

c) Funding in the post apartheid period

The new government appointed agencies such as the National Student Financial Aid Scheme (NSFAS) and the Tertiary Education Fund (TEFSA) to administer government funds. These funds are allocated in order to support students from economical disadvantaged backgrounds. Aligned with the sentiments of the NCHE (1996), government financing is linked to the principles of shared costs, equity, redress and development.

The principle of redress that underpins the financial support of government is not meant only to deal with the inequities of access of the apartheid years with regard to higher education (see Chapter two), but also to support students that are academically able but with an economic disadvantaged background.

The concept "development" refers to the financial support for the "production" of citizens that are fit to contribute to the economic and social development of the country (ICHEFAP, 2006:3). For the purpose of this study it is important to mention that the other principles include efficiency, sustainability and quality and the principle of democracy that advocates the participation of all stakeholders in the decision-making process of resource allocation (ICHEFAP 2006:2). Universities and technikons had to adapt with regard to two major changes, i.e. mission and values were well as the funding framework (Bunting 2002: 93). Institutions had to ensure that their missions and values are on par with the White Paper of 1997. The replacement of the SAPSE funding framework with a new framework had serious implications for some institutions and major benefits for others. The development of the funding framework took almost five years, the first distribution of funds under the provision of the new framework were made in 2002.

Institutions of higher learning had to ensure that they made provision for sustainable management with regard to student enrolments. They develop three-year rolling plans and indicated that they offer programmes that are approved according to the programme and qualification mixes of each institution. Enrolment planning should be viewed as an integrated part of institutional planning, funding and quality assurance imperatives (DoE, 2006:1). For the purpose of this study it is important to take note that the Ministry of Education requires that quality improvement takes place with regard to areas such as academic development, student support and the promotion of inclusive institutional cultures. In 2005 the following problem areas were identified within the sector with regard to enrolment planning (DoE, 2006:1):

The envisaged increased access was not supported by related strategies for quality improvement at institutions.

Growth in the sector was driven by institutional interests and not by sectoral or national plans.

Enrolment growth was unplanned. The growth was detached from institutions' physical and human resources and not related to the available funding resources.

Quality problems occurred due to the absence of planning which led to high student drop-out rates. Almost 50% of students that are admitted to higher education were drop-out students and did not obtain any tertiary qualification.

The Minister of Education, Naledi Pandor, proposed the following on enrolment planning for the higher education sector in March 2005:

Institutions of higher learning should respond and contribute to national human resource development and research priorities with special reference to scarce skills fields (teacher education and science, engineering and technology).

Enrolments should match available resources especially with regard to approved programmes and research.

Graduation and success rates should be improved by means of better management of new intakes and readmission of returning students.

Like most European countries such as the United Kingdom, the DoE sets limits with regard to the number of students that can be funded. The government allocates numbers of student places to institutions of higher learning in South Africa. Deviations from these totals will only be

allowed after government's approval. Institutions may also enroll students on their own cost ("unfunded students").

Both HESA (Higher Education of South Africa) and the CHE support the notion of enrolment planning. Despite this support, they raised the following concerns (DoE 2006:2):

The need for additional resources that will allow for enrolment expansion along with institutional quality improvements that should be leveraged in higher education

Alignment of enrolment planning with the human resource development requirement of the country

A differentiated approach to enrolment planning that will allow flexibility for institutions in criteria such as through-put and success rates

The review timeframes should be reviewed. Enrolment planning should be introduced over a longer period in order to ensure a period of adjustment with regard to the market needs

Expansion of opportunities for school leavers in the Further Education and Training Sector (FET).

The Ministry placed "caps" on enrolment for funding purposes in order stabilize resource allocation (funding) to institutions of higher learning and decided to have bilateral discussions with each institution in order to reach an agreement of funded head counts and FTE student totals per institution.

Institutions of higher learning spend public funds, they should therefore be accountable for the funds that they receive and for the quality of service that they rendered. Issues with regard to quality assurance and accountability were discussed in chapter three of this study. The concept accountability in higher education will be discussed in the following sub-heading in the context of funding.

4.4.4.2 Accountability in higher education

The emphasis of government on accountability (Van Damme, 2000:10; Van der Westhuizen & Fourie, 2002:5; Brennan & Shah, 2000:332; Holtzhausen, 2000:120) with regard to universities' spending of public funds within the context of declining government funding in the new dispensation of higher education, clarifies why resource allocation models turn out to be imperative instruments of quality and financial management. Accountability in higher education shifts from the notion of being accountable for allocated funds from government to

funding that is based on institutional performance e.g. student through-put rates, research outputs etc. which are linked to institutional quality management. Universities receive funds from government for academic success (research outputs, throughput rates, etc.), which sometimes creates some times tension within an institution with regard to the way in which this “reward funds” are allocated to the respective departments (Field & Klingert, 2001:84). This necessitates the development and implementation of a sound resource allocation model in order to ensure accountability to government as the resource supplier as well as to the respective departments of an institution of higher learning as the internal “owners” of the rewards. Institutional budgeting forms an integral part of the resource allocation process at an institution of higher learning.

4.4.5 BUDGETING AND RESOURCE ALLOCATION IN PRACTICE

As already mentioned, the concept budgeting refers to the plan of how monies will be expended in a university (plan per category). The concept “allocation” refers to the funneling of monies to an institution’s various subsystems (units).

“Forecasting” is an essential element in the budgeting process and an essential element of effective financial management.

4.4.5.1 Forecasting

An institution should know what the cost of its existing commitments for a specific period in question is. According to Dickson (1999:9), prior to the process of allocation of resources, an institution should make a projection of its existing commitments by compiling a forecast with estimated expenditures and cost of:

- full-time staff salaries;
- an estimated expenditure of vacant full-time posts and
- an estimated expenditure for the provision for part-time staff.

The resources of a university that are directly utilised in teaching and learning are the academic staff (lecturing, researchers, academic, laboratory and library assistants, IT technicians, etc.) and curriculum support resources, - books, materials and equipment (Levačić, 2000:6) as well as physical resources such as buildings, lecture rooms, etc. Support services operating expense include running costs (upgrading, maintenance, etc) of

buildings, administration and management. The cost of financing the operational core is known as direct cost. Indirect cost is viewed as the financing of the support services.

Dickson (1999:9) states that it is imperative to make a projection with regard to an institution's running costs with regard to:

- departments' general expenses;
- book fund of library;
- maintenance of buildings and grounds;
- insurance;
- equipment provision;
- research provision;
- student facilities;
- miscellaneous costs and
- contingency provision.

According to Dickson (1999:10) there are also known events for which provision should be made:

- Insurance premiums
- Utility charges
- Cleaning services
- Security services
- Maintenance costs
- Removal costs.

The purpose of the above-mentioned projection is to discover the total amount of expenditure if each operational area has to fulfill its role and responsibilities and maintain the desired level of quality.

The budgeting process has its limitations as well. Forecasting as an element of budgeting might be inaccurate as it involves speculations on the future and is subjected to uncertainties with regard to issues such as investments, etc. Costs of services can be fixed costs as well as variable costs. Remuneration is a good example in this regard. Permanent staff

remuneration is fixed whilst contract and part time salaries are determined according to enrolments for a specific academic year (variable). Institutions of higher learning that implements a rational model follow usually a zero-based, incremental and rolling-or continuous budget approach.

4.4.5.2 Resource Allocation Systems

Concepts such as incremental budgeting, zero budget, etc. is already discussed within the framework of "organizational perspectives" (cf. 4.4.2). The following is a discussion of the approaches or processes of resource allocation within institutions of higher learning. It links to a great extent with the above-mentioned discussion on the different organizational perspectives.

a) Incremental budgeting

Historically, institutions of higher learning relied upon incremental budgeting as the most common method for determining allocations to both academic and non-academic (academic support and administration) units (USUD, 2008:5; Massy, 1996:6). Incremental budgeting uses the previous year's budget as the point of departure for the preparation of the coming year's budget. The budget remains largely unaltered except for a few incremental changes. Incremental budgeting would as an example increase departmental budgets of a university with a fixed amount or percentage.

Incremental budgeting requires less information processing than in the case of zero-budgeting and will to a lesser extent create a micro-political activity because groups or individuals are not asked to justify their claim on resources. It is a less time consuming exercise with a low conflict potential, unfortunately it has little or no impact on dramatic changes as it never challenges the status quo. This type of resource allocation system remains static and is therefore unable to anticipate change (USUD, 2008:5). In a highly volatile environment that is characterized with opportunities and threats, it is imperative for an institution to be able to adapt to circumstances. Therefore, because of the fact that the funding levels are fixed, quality improvement initiatives can be regarded as impossible (Massy, 1996:6, 145).

b) Zero-based budgeting

It was already mentioned previously in this study (cf. 4.4.2.1) that zero-based budgeting is a typical method to be found within an institution that implements a rational model. Zero-based

budgeting involves all managers and staff in scrutinising all categories of spending. Budget claims should be justified, not just new initiatives but each area of expenditure is assessed against the university's strategic priorities, followed by priority rankings. The allocation of funds depends in this case on the size of the budget. Zero-based budgeting is therefore based on a "needs" approach. People bid for their share and budget claims should be justified. Bush (2000:107) is of the opinion that zero based budgeting is not popular in universities as "most educational programmes are not open to serious debate". It is a time-consuming exercise that creates a feeling of insecurity amongst staff members. A modification of zero-based budgeting represents a more flexible approach in resource management where managers are empowered to move allocated funds from one area of the budget to another.

c) Rolling or continuous budgeting

Rolling budgets is a synonym of "continuous budgeting", is according to the Business Dictionary (2002:2) an approach to budgeting that involves a method in which the initial budget at the start of the financial year is continuously adjusted in order to reflect the variances that occur as a result of changing circumstances.

4.4.5.3 Centralised and decentralized RAM's.

There are numerous approaches in universities over the globe with regard to a RAM. Literature refers to RAM's that are centralised to those that are decentralised. There is also a hybrid of methods between the two. A "pure" centralised model refers to the overseeing of a budget and resource allocation process from an established central office or structure. The senior executives of an institution of higher learning usually have a final say in a centralised resource allocation approach.

a) A centralised model

Within a centralised model, top management (e.g. the Vice-Chancellor, Deputy Vice-Chancellors and other senior executives) steers the strategic direction of the institution and is responsible for making resource allocations. Departments and units within a centralised system may be requested to negotiate the size of their budget according to their objectives.

Within a centralised RAM, the "centre" is the driving force that covers central costs while allocations are made according to the priorities (e.g. goals, vision, plans to overcome challenges and barriers) of faculties, departments and units (the operational level). The

traditional institution of higher learning controls resources tightly from the centre by utilizing line-item budgeting which are “considered on an incremental basis” (Massy, 1996: 26-27). In a centralised model, incremental budgeting is an approach whereby the centre, i.e. the central administration of an institution, receives all the revenue. The central administration will usually be responsible for central costs and will allocate a portion of the funds to faculties, departments and units (Ehrenberg, 1999). Centralised budgeting prohibits units on operational level to move funds from one budget category to another. It is a system that requires controlling of everything, according to Massy (1996:27), the administrators of the centre usually think that they can ensure that the institution’s resources will be managed effectively, which is not the truth.

b) Decentralised model

According to Massy (1996:31), a decentralized model is a solution to the negative consequences of line-item budgeting or budgeting on an incremental basis. A characteristic of a decentralised model is that the control with regard to budgets is the responsibility of a faculty, department or unit and not the centre. This includes the responsibility of its strategic direction, revenue generation and financial feasibility (Jarzabkowski, 2002:7). A decentralised model may use performance indicators in order to manage operating units. Incentive-based budgeting (based on performance and block-incremental budgeting) is therefore an appropriate method to follow within this approach. Usually, within a decentralised model, a department or unit will keep the revenue that they generated. They are responsible for paying for services rendered to them by the university, e.g. library, the maintenance of infrastructure, etc (Wilson, 2002:1). Some of the universities that are following a decentralised approach ensure that central services costs are paid by means of a “top-slice” charge to the relevant units and departments.

The Oxford University follows a decentralised model. This university states that its RAM is “intended to provide a transparent and consistent means of allocating the University’s income to divisions... to which responsibility for preparing academic budgets is devolved” (OU, 2004: 1). The RAM of Oxford complements the university’s structure for governance and planning. It provides a transparent as well as consistent method of allocation of resources to its respective divisions. The latter are responsible to set up their budgets which are finally been approved by the Council of the university through the Planning and Resource Allocation Committee. The university utilises its RAM to encourage increases of income by means of direct allocation of income to the divisions as well as allocation of remaining funds by means of formulaic allocations. The concept “formulaic” resource allocation refers to formula-based systems of resource allocation (Thomas, 1999: 183-191). The Oxford RAM is designed to

link the allocation of income directly to planned activities. This ensures that funds are allocated for specific strategic priorities both on institutional as well as divisional levels.

The Oxford RAM by which income is allocated to divisions is as follows:

- The amount of income that is available for allocation is determined
- Funds are allocated for specific purposes by means of top-slicing
- Income is allocated directly where appropriate
- Adjustments are made for differential salary costs
- Levy capital charge and redistribution of funds to divisions
- Levy infrastructure charge for service budgets.

An institution's RAM should form part of an institution's planning and quality management processes with a strong focus on the institution's "core business" and its strategic priorities (ISU, 2007:3; MSU, 2002:1).

4.4.5.4 Resource allocation and institutional strategic priorities

As already discussed in chapter three, an institution's mission should set direction for its academic goals and academic plan following by the necessary resources. This should be done by means of the integration of institutional planning and the allocation of resources in order to achieve its goals. The institution's mission, its academic goals and plan set a framework for decision making during the process of resource allocation. Academic goals on tactical and operational levels cannot be achieved without sufficient resources. Levačić (2000:12) states in this regard the following: "what is required from a rational perspective is that the teaching and learning in the operational core is organized and conducted effectively and supported to the greatest degree possible through the deployment of available resources". This emphasises the fact that processes of educational planning cannot be separated from resource allocation because it is tied into financial planning. Sufficient allocation should be made not only for a university's operational core but also for its support structures and services. The York University's Resource Planning Office's vision (YU, 2008:1) is a good example in this regard. They stated their purpose as: "To advance York University's mission, support its academic goals and support decision making through the effective integration of institutional planning activities and the alignment of resources with priorities".

Every organisation has an “operational core” where its primary activity takes place. As mentioned in this study, the core business of a university is viewed as teaching and learning, research and community engagement. The university’s resources should be directly utilised in supporting the above-mentioned operational core or “core business”. From a systems thinking approach, the core business cannot function without leadership and management, strategy for positioning the institution in relation to its external environment and the necessary supporting services such as administrative functions, cleaning services, professional support services, maintenance, security services etc.

The following is an example how resource allocation, institutional planning and quality management can be integrated:

- a) The RAM as mechanism to provide incentives in order enhance quality of the core business

A RAM can be utilised as a valuable quality management mechanism because it can provide incentives in order to motivate staff and students to contribute to the enhancement of academic quality e.g. student through-put rate and success, etc. This necessitates structures, processes and procedures that integrate quality management with planning and resource allocation. The Iowa State University (ISU, 2007:3) states that their model is a “useful tool” for achieving the goals of the University’s strategic plan, it also provides for incentives for student retention and research programmes.

The notion of departmental evaluations with the focus on how effectively budgets are used is not an unfamiliar practice in higher education (Massy, 1996:44). The UWS’s RAM provides incentives for quality assurance and for initiatives that are acknowledged as an enhancement of the university’s strategic priorities. The RAM links therefore quality management and planning with funding as the distribution of funding is based on the outcome of an assessment of academic plans as well as other quantitative and qualitative measures (Johnston, 2002:6).

- b) The RAM as a mechanism to support institutional strategies and plans

A RAM should be linked and support an institution’s strategic priorities (MSU, 2002:1; ISU, 2007:3), the institutional mission, vision and goals that should be delivered as productively as possible (Massy, 1996:7). An institution’s RAM can be used as a mechanism during a process of radical institutional transformation. The merging of the University of Western Sydney (UWS) and the implementation of its RAM in order to reach its strategic objectives in a period of institutional transformation, concurs with this statement (Johnston, 2002). The

UWS was restructured and went through a merging process during 2000-2001. 56 Academic schools merged into 22 schools within four colleges. The main purpose of this institution's RAM during its transformation period was to provide revenue and performance-based budgets (Johnston, 2002:3).

c) Established structures to ensure integration and effective quality management

There are institutions that realise the importance of the integration of quality management, planning and resource allocation, and demonstrate it by means of the establishment of dedicated structures to facilitate processes for the integration of institutional strategic priorities with planning and resource allocation. The City University London is a good example in this regard (CU, 2008:1). This university established an office to oversee that sufficient funds are allocated in order to achieve the institution's academic objectives. They oversee and ensure that quality management takes place, and are responsible for quality assurance processes by means of reviewing processes in order to enhance effectiveness, efficiency and economy in delivery. They identify priority areas for resource allocation and facilitate ongoing planning processes.

4.4.5.5 Important elements in resource allocation

The researcher identified from the literature review the following as important elements that institution's should keep in mind with regard to resource allocation in higher education.

a) Understanding of the system by stakeholders

A university's approach to resource allocation should be known by all its stakeholders, i.e. a clear understanding of the development and implementation of the criteria that forms the basis of its internal financial allocation.

It is also imperative for an institution of higher learning to set principles for resource allocation in order to ensure that all stakeholders understand the institution's strategic direction and strategies.

b) A RAM should not be complicated

Johnston (2002:3) states in this regard that a resource allocation model should not be too complex (e.g. complex statistical models) but easy to be understood by its users.

c) The institutional profile dictates the method of resource allocation

The form (shape, profile, structures, etc.) of an institution determines to a great extent the way in which it allocates its internal resources. They are unique bureaucracies consisting of highly developed structures and systems.

d) Resource allocation at universities is unique

Universities' uniqueness in comparison with other organisations is evident with regard to their resource allocation mechanisms and decision making processes. As a result of the fact that institutions of higher learning are not homogeneous organisations, but institutions with different missions and goals, there is no best practice or model for the best way with regard to a model for internal resource allocations for these type of complex organisations (USUD, 2008:1; Massy, 1996:7). It is therefore according to Massy (1996:7) not possible to provide "recipes" that, if followed will produce success, because higher education resource allocation is too complex.

e) The RAM is responsive to the environment

From a systems point of view, institutions of higher learning, as open-systems, have to develop their own RAM's that are responsive to their unstable environments. They are used to collegial type of decision making processes and are not always geared for quick responses to the demands of an unstable environment in which they operate.

Judgment should be exercised on the impact of the external environment i.e. the physical and social factors outside the boundaries of the university (Hoy & Miskel, 1989:34) that might have an impact on the core business. This emphasises the characteristic of institutions of higher learning as typical "open systems", with relationships with a range of external stakeholders. These relationships secure external support (government funding, partnerships, etc.) which are imperative for the flow of resources into the university and for achieving its strategic goals

f) Decision-making forms integral part of resource allocation and quality

Managers of universities have to made decisions on how best to use resources in order to achieve the desired outcomes for its operational core.

g) Stakeholder understanding of the strategic priorities and goals is imperative

The institutional strategic direction and goals, linked with an institution's strategic plan, will support the decision making process during resource allocation processes. .

h) Formulae based RAM's counteracts "power games"

Powerful groups within an institution, despite of an organizational management approach of collegiality, may indirectly dictate the outcome of allocations (Watts, 1996:55). A RAM that is based on formulae is a mechanism to eliminate power games and institutional internal politics from the allocation process. Academic departments and units that are directly linked to an institution's core business may have more power than other units and departments in a university. They may also argue that they are the revenue generating units and owners of a big portion of the institution's total income. Individuals in an institution that have status, influence and power may also have an impact on the allocation of resources. Systems such as the formulaic system can help that decisions that are made is fair.

4.5 CONCLUSION

This chapter focuses on planning and resource allocation processes at an institutional of higher learning from a systems theory point of view, the focus is therefore on the integration of planning with resource allocation. Planning and resource allocation cannot take place in isolation. This chapter also discuss how quality assurance initiatives link with planning and resource allocation. Planning on strategic, tactical and operational levels of an institution ensures that the activities of an organisation follow a specific logical and scientific method. Planning, from a systems theory point of view, ensures that coordinated actions take place for the organisation as a whole with regard to its inputs, processes and outputs. This systematic process ensures synergy and avoids duplication.

Planning on all levels of an organisation is imperative in order to ensure effective management (Kennie, 2002:73). Planning assists managers to anticipate and avoid problems and uncertainties. Managers can be proactive by taking, in advance, cognisance of the environment and by making the necessary adaptations with regard to the issues of the "controllable internal" as well as the "uncontrollable external" environments.

Planning involves the integration of the past, present and future. Decisions are made during the planning process in the present for the future by taking cognisance of the available information that is collected from the past, the present and the future. Planning requires therefore broad and effective information. According to Bryson (1995:4-5) strategic planning is a "disciplined effort to produce fundamental decisions and actions" which is necessary in order to guide and shape an organization. Improvement can only take place if informed decisions are made by managers. Quality management information should feed into all

planning processes in order to ensure ongoing improvement of the core business. It is therefore important that the outcome of surveys, evaluations and audits are utilised as input into decision making processes (Vicki *et al.*,1997:213) as well as planning processes which includes for the purpose of this study, resource allocation. Bryson (1995:214) states that a crucial way of making strategic planning, (and according to the researcher, all types of planning) work, is by allocating sufficient resources to it. The allocation of resources to plans demonstrates an institution's seriousness about planning or the lack of it. A budgetary process follows the institutional planning process and forms part of the financial management and planning strategy of an institution, with reference to the notion of "budget follows plan".

Quality management is an approach towards illuminating and preventing quality problems and should be integrated with an ongoing process of planning and resource allocation activities. It will not be possible for any institution to strive for continuous improvement without implementing plans which are not supported by adequate resources. Planning and resource allocation should be conducted in order to support the achievement of the goals and mission of an institution. Resource allocation forms therefore an integral part of planning and quality management. An institution's RAM should provide a university capacity to fund its core business on the basis of strategic priorities, including initiatives for academic quality and efficiency (Johnston, 2002:7).

The strategic plan of an institution flows usually from its vision, mission, goals and priorities. All plans of an institution i.e. plans on tactical and operational levels, should be linked with the strategic plan or institutional strategic priorities. From a quality management and systems thinking point of view, the implementation of an institutional strategic plan as it is implemented on tactical and operational levels should continuously be monitored and evaluated in order to identify deficiencies and gaps and to support changes and initiatives that are necessary for the enhancement of institutional quality and for reaching of the institutional goals.

Continuous or ongoing process of reviews determines to a great extent the success of maintaining and improving institutional quality and in achieving the goals and mission of a university. The HEQC concurs with this theory in the statement: "The success of quality management at institutions is, to a considerable extent, dependent on the integration of mechanisms for quality assurance and quality development with institutional planning and resource allocation" (CHE, 2004b:5). As already mentioned, quality management mechanisms need therefore to be appropriately integrated with institutional planning at all relevant levels of institutional operation. The HEQC (CHE, 2004b:5) states further their sentiment with regard to the integration of resource allocation with quality management and

planning: "financial planning should ensure adequate resource allocation for the development, implementation, review and improvement of quality and quality management mechanisms for the core activities of teaching and learning, research and community engagement".

Quality enhancement processes focus on the operational end of the planning exercise. The latter refers to adjustments by means of informed decisions that an institution should make in order to move into the next phase of (re-)planning. Churchman (1968:8) states from a systems point of view that an institution needs "a plan that will bring each subsystem up to standard at a desired time". Institutional managers should collaborate during the planning process on the different levels (strategic, tactical and operational) with their superiors as well as subordinates and equals. Institutional leadership is imperative for the achievement of an institution's goals and the successful implementation of its plans. The concept "leading" refers to the influence and power of managers to motivate employees and subordinates to achieve an organisation's goals and plans. Every manager and member of an institution of higher learning should be informed with regard to the goals and strategic priorities of the organization which informs decision making, resource allocation and budgeting exercises. Managers are also responsible to ensure that the organisation is on the right course to achieve its goals (Smit & Cronjé, 1999:12) which requires continuous processes of quality assurance and the provision of sufficient resources (Massy, 1996:39).