

# Selected factors that influence successful strategic planning in South African higher education<sup>1</sup>

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## **ABSTRACT**

The objective of this investigation is to examine selected factors that contribute to successful strategic planning in Higher Education Institutions (HEIs) in South Africa. Organisations, including HEIs, that wish to achieve their objectives in the current fast-changing operating environment should formulate and implement strategic plans. The King III Report on corporate governance stresses the need for leaders to take responsibility for defining the strategies of their organisations. Existing literature has identified some factors that influence the success or failure of strategic planning. However, the extent to which these factors influence - if at all - strategic planning in South African HEIs remains unclear. The importance attached to these factors in South African universities is compared with their international counterparts. In carrying out this investigation, online questionnaires were completed and returned by 108 participants comprising Registrars and Information Managers at 23 South African HEIs and Information Managers in selected international higher education institutions. Data analysis entailed both descriptive and inferential statistics. Correlational analysis of the results confirmed that factors such as management buy-in and the availability of Business Intelligence (BI) reports were positively related to effective strategic planning and vice versa. Similarly, a strong correlation was observed between the presence of reporting guidelines and strategic planning. Other factors that strongly emerged as being positively related to successful strategic planning include: consultation during the strategic planning process as well as visible and strong leadership.

**Keywords:** strategic planning, sustainability reporting, Higher Education Institutions (HEIs), Business Intelligence (BI), monitoring and evaluation, leadership, management

## **INTRODUCTION**

Strategy has been defined by Alfred (2006: 6) as 'the systematic way of positioning an institution with stakeholders in its environment to create value that differentiates it from competitors and leads to a sustainable advantage'. According to Porter (2011) organisations often mistake operational effectiveness for strategy. Whereas operational effectiveness can be used as a means of achieving an organisation's strategy, it is not really strategy. The end result of strategy is to ensure that an organisation chooses a distinct position that influences its choice of activities. A further distinction is also made between strategy and tactics. The latter often fail to address the big picture as they tend to be short-term in nature (Alfred, 2006).

According to Kim and Mauborgne (2011), strategies can be described as being either red ocean or blue ocean with the former representing all aspects of an existing operating environment, while the latter represents new opportunities that an organisation could pursue. Red ocean strategies are based on the structuralist paradigm or environmental determinism, whereby the organisation is at the mercy of external forces. By contrast, blue ocean strategies are based on the reconstructivist viewpoint, whereby actions and beliefs of players in industry determine the boundaries. Therefore, organisations may choose to pursue red ocean strategies, blue ocean strategies or both depending on intended outcomes.

Strategies are a product or outcome of strategic planning. Peng (2009: 10) states that strategy is a

combination of an organisation's intended and emergent activities and concludes that 'strategy is a firm's theory about how to compete successfully'. Therefore, strategic planning entails both formulation and implementation of strategy. Grant (2010) adds that, depending on the turbulence of the organisation's operating environment, strategic planning deals with both design and emergent planning. Through strategic planning, organisations determine their major goals and then develop policies and procedures geared at meeting set objectives (Nickels, McHugh & McHugh, 2008). Sevier (2003) points out that strategic planning in higher education should be about recognising the alignment between the university and its environment and should result in one organising principle around which the institution's activities should revolve. The essence of strategic planning is to align limited organisational resources with a clear destination (Seymour, 2011).

Ozdem (2011) opines that as a concept, strategic planning is an instrument that allows for the development of long-term plans in view of prevailing risks and opportunities and therefore concludes that strategic planning would breed efficiency. Focusing on the higher education sector, Hayward and Ncayiyana (2003) maintain that the purpose of strategic planning is to provide continuous examination and evaluation of an institution's strengths, weaknesses and resource requirements with a view to building effectiveness. In addition, strategic planning contributes to the restoration of operational effectiveness in situations characterised by anarchy in management.

Porter (2011) avers that strategy entails making trade-offs, which includes deciding what activities not to undertake and how to integrate and create a fit among the activities in an organisation without which sustainability and distinctiveness cannot be attained. Hayward and Ncayiyana (2003) support this view and conclude that organisations become more focused by making trade-offs. Porter (2011) further states that strategies that revolve around systems of activities are more sustainable than those built on individual activities.

The purpose of strategic planning in higher education is to enhance institutional effectiveness and improve management capability. Richards, O'Shea and Connolly (2004) observe that changes in the higher education landscape due to external influences have triggered a realisation that institutions need to use strategic and scenario-planning techniques to shape and re-think strategy in order to survive. The question that arises, therefore, is which factors influence the success of strategic planning in higher education?

## **LITERATURE REVIEW**

Strategic planning involves a number of steps that are carried out by means of various tasks. These tasks can be classified into key processes that constitute the strategic planning cycle. Strategic planning is an iterative process that requires organisations to develop a vision and set objectives which result in formulating a strategy. Strategies need to be implemented in order for the organisation to derive value. Grant (2010) states that the process is the most important part of strategic planning

Setting of a vision is one of the first and most important steps in the strategy process. This is underscored by Collins and Porras's (2011: 78) statement that 'vision provides guidance about what core to preserve and what future to stimulate'.

### *Factors that influence success in strategic planning*

The strategy making and implementation processes do not happen in a vacuum. A number of internal and external factors have a bearing on the strategy process. Based on results of a study revealing that 75% of employees rate their organisations poorly in execution, Neilson, Martin and Powers (2011) observe that the problem with many organisations lies with poor execution of developed strategies due to unclear decision rights, poor information flows and numerous structural changes. Based on their research, Mankins and Steele (2011) conclude that some organisations have little to show for the great effort put into strategic planning, as is evident from results of a survey which shows that only 63% of the planned

financial performance is achieved by organisations.

Supporting literature also suggests that some organisations fail to realise their full potential as a result of poor forecasting. Mankins and Steele (2011) use the analogy of Venetian blinds to illustrate how organisations base their targets and benchmarks on previous years' performance figures, that are often understated or erroneous, resulting in year-to-year under-performance. Availability and access to information is a key factor in the implementation of strategies. Rational decision making is dependent on the availability of information. In a recent study, only 61% of employees had access to information in an organisation that was considered strong, as opposed to 28% in an organisation that was considered to be weak (Neilson, Martin & Powers, 2011). This view is shared by Mankins and Steele (2011) who warn that without early warning signals, the management in organisations risks making wrong decisions. Although Donaldson and Schoemaker (2013) caution that there are multiple factors associated with an organisation's ability to spot early warning signals, performance reporting on strategic plans is important to provide early warning signs. To this end, Sevier (2003) asserts that strategic planning should be supported by a monitoring and evaluation system. Communication is an equally important aspect in strategic planning.

Communication is a key ingredient in strategy execution and is closely allied to availability and access to information. Grant (2010) underscores the importance of communication by describing the *strategic process* as the dialogue that ensures the communication of knowledge and ideas and builds commitment and consensus. Studies support the view that communication is critical in the efficient execution of strategy (Peng & Littlejohn, 2005). Communications should include all stakeholder groups. Cowburn (2005) argues that challenges associated with implementing strategic plans relate to both the formulation and execution of the plans.

Kaplan and Norton (2011) advise that communication breeds commitment and accountability. Adopting an organisational strategic principle – an actionable phrase that summarises the essence of the strategy and communicates it throughout the organisation is advised. Although strategies may change, an organisational principle remains the same (Gadiesh & Gilbert, 2011).

Monitoring and evaluation capacity in the higher education institutions is greatly enhanced by the presence of reliable management information and the practice of continuous review and monitoring of data (Hayward & Ncayiyana, 2003). Kettunen (2010) adds that the capacity of organisations to adjust with agility to changes in the environment is key in their survival. Signals from the environment must pass through three filters – surveillance filter, mentality filter and power filter. The surveillance filter limits information to that which is within the scope of the organisation; the mentality filter introduces the risk of short-sightedness while the power filter introduces the risk of information not flowing through organisational levels and strong cultures.

Strategic plans are formulated and implemented in a world of uncertainties and risks. Enterprise-wide risks or systemic risks result from close interdependencies among various internal and external variables. Donaldson and Schoemaker (2013) state that systemic risks cannot be mitigated by mere internal controls or ex-post legislation and therefore require individuals to have access to information that enables pro-active monitoring to detect early warning signs.

Organisational systems and subsystems also play a role in strategy implementation processes. These interdependent subsystems comprise the whole organisational system. Schiefer (2002) summarises the organisational subsystems as being: strategic, technological, human cultural, structural and management. The interplay between the subsystems has a bearing on the attainment of strategic goals. Well-managed organisational systems and subsystems translate to organisational capabilities. Grant's (2010) model of resources and organisational capabilities describes these categories used to enhance organisational capabilities. The key enablers are strategic intent, organisational structure and management systems. Careful

planning for both human and financial resources is key in the strategy process, because resources are limited.

Organisations – independent of human and other resources – have their unique capabilities. Afuah (2009) defines capabilities as the organisation's ability to convert its resources to benefits, and states that creating and appropriating value from strategies requires resources and capabilities. An organisation's capability is influenced by three main factors – its resources, its processes and its values. Whereas processes are patterns of interaction, coordination, communication and decision making that employees use to translate resources into value-adding products and services, values relate to the standards by which priorities of what gets done are made (Christensen & Overdorf, 2011). Processes and values relate to organisational factors.

Resources are important factors in the success, or failure of any strategy. Without adequate resources, strategic plans are unlikely to yield results. Strategies require resources to design and implement and monitor. Organisational resources can be classified into four broad categories – human, financial, physical and intangible (David, 2007; Christensen & Overdorf, 2011). Tangible resources ensure that the operations of an organisation are enabled – an important element of strategy execution. Physical resources, also referred to as infrastructure, should be safe, healthy and encourage performance (Kaplan & Norton, 2011). According to David (2007), marketing, facilities, production and Information and Communications Technologies (ICTs) constitute the physical resources. Infrastructure is key in supporting organisational strategy.

The right mix of infrastructure for strategy development should be in place. It is often taken for granted that the available infrastructure is adequate and appropriate for supporting organisational strategy. Infrastructure is closely aligned to financial resources as it comes at a high cost. Higher education provision involves classrooms, seminar rooms, sports fields, common rooms, laboratories, technology and other facilities. It stands to reason, therefore, that HEIs should develop plans for infrastructure aligned to strategic plans. Intangible resources include aspects such as goodwill, intellectual property and the brand name. HEIs exist to create and disseminate knowledge and therefore intangible resources remain critical in the strategy execution processes. Human resources play a monumental role in strategic planning.

Harvey (2004) places the responsibility of ensuring that there is adequate resourcing of functionaries that execute strategy on the management team. Staff required to implement strategic plans should be involved in the strategy process. Rapert, Lynch and Suter (2006) strongly recommend the inclusion of staff in organisational decision-making processes. Olson, Slater and Hult (2005) hold a contrary view and instead propose that top management should be responsible for decision making. This view is shared by Watson (1995) who states that although the strategic planning process is a platform for change and improvement, strategic planning, like a map, points to the destination but does not provide the vehicle. Therefore, for the change contained in a strategic plan to succeed, consensus must first be built at the level of execution. The choice of employee involvement and consultation is a management prerogative that should be exercised with wisdom and tact. The level and extent of staff involvement would differ depending on the nature of the organisation.

Capron and Mitchel (2010) underscore the importance of resources for strategy implementation and advise that resources can either be insourced or outsourced by organisations. Johnston, Abader, Brey and Stander (2009) conclude that cost is the most influential factor in determining how to acquire resources. Organisations often outsource with the objectives to access best practices; get exposure to additional skills; improve staffing flexibility; cost control; concern about the core business; in-house expertise; risk management and other legal factors. Insourcing is recommended for creating a pool of employees with a sense of belonging and responsibility who take pride in achieving organisational goals.

Organisations allocate financial resources to priorities during the budgeting process (Salmi & Hauptman, 2006). The management of financial resources as part of the strategy process should entail aligning budgets with strategic priorities. Kaplan and Norton (2011) warn that the misalignment of financial planning,

budget allocation and strategy can be a recipe for failure to achieve strategies. Therefore, they advocate the use of the Balanced Score Card as a Business Intelligence (BI) tool whose benefits include helping to align business processes and redirecting an organisation into implementing long-term strategies. Although there are few published reports on the successful application of the Balanced Score Card in higher education, Beard (2009) points to the potential by underscoring the view that financial results alone are insufficient to capture value-creating activities.

Leadership is one critical factor that influences the implementation of strategies. Organisational turbulence can also result from internal sources. The role of leadership comes into the spotlight. Poor leadership hampers good communications and undermines the quality of monitoring and assessment of strategic outcomes (Tromp & Ruben, 2010). Daniell (2006) suggests that a change in leadership introduces turbulence and affects the implementation of existing strategies. Kettunen (2010) points out that strategic dialogue and participation that should be mediated by the leadership are more important than the strategy document.

Leadership shapes and communicates the vision for the organisation as indicated by Pearce and Robinson (2003) who opine that effective implementation of strategy is a function of the role played by the leadership. Studies have shown the important role that a strong leader plays in defining a vision for an organisation (Mintzberg & Quinn, 2005). Studies also show that strategic goals are better achieved whenever an organisation's leadership support and commit to the transformation agenda (Kotter, 2011).

In higher education, Hayward (2008) states that the participation and support of the university leadership is critical in steering the strategic planning process. Institutions that recognise the diversity of their campus communities achieve better results in strategic planning. A participatory strategic planning process ensures broad input, mobilises support and gives the plan legitimacy. The traditional top-down approach to planning and decision making was not working and therefore stakeholder involvement had to be introduced in democratic South Africa.

The role played by leadership and management in setting the tone on aspects in the life of an organisation, such as communication, culture, team dynamics, commitment and excellence cannot be overemphasised. The interplay of a complex array of intra-organisational systems and subsystems sets the tone of the culture in an organisation and consequently influences the degree of attainment of organisational goals. The culture of an organisation can influence the efficacy of strategy implementation. Lasher and Sullivan (2004) argue that a positive organisational culture can rally the energies of employees towards strategy attainment. Wheelen and Hunger (2004) warn of failure in strategy implementation if the goals of the strategy and the prevailing organisational culture are not congruent. Grant (2010) summarises the factors needed for success in strategic planning as follows:

- use of goals that are consistent and long-term
- a profound understanding of the operating environment and an objective appraisal of available resources by strategic planners
- effective implementation systems and processes.

Both internal and external factors have a bearing on strategic planning in organisations. In strategic planning for higher education, there is a mutual relationship between external and internal environments. These factors have to be borne in mind, when embarking on strategic planning. A combination of resources (human, financial, tangible and intangible) and systems and subsystems in an organisation contribute to efficacy of strategic planning. Stakeholder involvement and consensus are key in the attainment of strategic planning goals – especially in higher education with a multiplicity of stakeholders.

### *Peculiarities in strategic planning in higher education*

As early as 30 years ago, Kotler and Murphy (1981: 470) admonished: 'If colleges and universities are to survive in the troubled years ahead, a strong emphasis on planning is essential'. Learner (1999) states that universities embark on planning for various reasons, including shrinking funding, growing demand for higher education and changing student demographics. According to a recent Ernst and Young Report (2012) the five megatrends poised to transform higher education include: competition for funding and markets, global mobility, democratisation of knowledge and access to digital technologies as well as integration with industry. Strategic planning is becoming indispensable to organisations that wish to survive in increasingly competitive environments.

A number of challenges face strategic planning in universities. Organisations derive maximum value from strategic planning whenever the plans crafted are implemented. Cowburn (2005) laments the trend by which public sector organisations – including universities – formulate excellent plans, but fall short at the implementation stage. The problem, she argues, can be traced to content as well as structures and management of HEIs. For example, content is grossly undermined whenever objectives are not measurable. This problem is compounded whenever there are incoherent approaches to planning coupled with poor communication within the structures of management. Choban, Choban and Choban (2008) advise against strategic planning without clearly defined outcomes in higher education. They warn against the continued dominance of process variables instead of student learning and the impact on community-level variables as criteria for evaluating the success of strategic plans.

Strategic planning processes should be customised for higher education. Based on lessons learned from strategic planning in developing countries, Hayward (2008) warns that due to resource constraints and existing poor planning traditions at institutional and system levels, strategic planning poses manifold challenges in developing countries. Dooris, Kelley and Trainer (2002: 9) caution that 'Higher Education Institutions undergo quality assurance in one form or the other'. Birnbaum (2000) advises institutions to measure that which is valuable, lest they value that which is measurable. Furthermore, Birnbaum (2000) warns of the dangers of neglecting that which cannot be easily measured. Deming (1986) cautions administrators against focusing only on productivity indicators as productivity does not necessarily lead to improvement. Hamaker (2003) concludes that with clear strategy, strong communications, independent review and continuous improvement, the measurement of performance becomes easier.

## **RESEARCH METHODOLOGY**

### *Data collection methods and procedures*

Four separate self-administered online and paper-based questionnaires were sent out to four different groups of respondents. The questionnaires consisted of open-ended questions, as well as closed-ended questions in which a 5-point Likert scale was applied. The first questionnaire was sent to Registrars of universities in South Africa. Registrars are responsible for processes related to governance in South African HEIs. The second questionnaire was sent to individuals responsible for the management of information systems at all South African universities. Information management in the form of business intelligence reports on key aspects of an organisation's sustainability (sustainability reports) is key in strategic planning. A third questionnaire was sent to individuals responsible for information management at some international universities in mainly in North America and Australia. The fourth questionnaire was sent to deans of faculty, directors of school, heads of department and other managers responsible for strategy planning and implementation at the Nelson Mandela Metropolitan University (NMMU).<sup>2</sup> NMMU, developed a 10-year strategic plan through a consultative processes involving managers at all levels.

Ethics clearance for this study was obtained from the NMMU Ethics Committee. As the participation in the research was voluntary, consent to participate in the questionnaire survey was first sought from

each participant. The contact with the university participants was easily secured as the researcher is an employee of the university.

*Analytical methods and procedures*

All the captured data were verified. This means the data were checked and edited for logical consistency, for permitted ranges, for reliability on derived variables and for filtering instructions. After the data- cleaning exercise, the filtered data were then analysed. Various inferential statistical techniques were employed to determine relationships and differences between the indicators and demographic variables. A combination of descriptive and inferential statistics was used to analyse the quantitative data from each of the four surveys.

**RESULTS AND DISCUSSION**

The study covered a number of themes, among which was strategic planning in higher education. The questionnaires used in the surveys were designed to address the main research question which is: Which factors contribute to effective strategic planning in HEIs?

*Response rate of sample*

Table 1 shows the assessment the response rate attained in the study.

*Table 1:  
Response rate assessment*

<b>Survey and questionnaire Name</b>	<b>Number distributed</b>	<b>Number completed and returned</b>	<b>Response rate</b>
Governance practices in SA Higher Education (GPSAHE) Institutions	23	11	48%
Sustainability Reporting Practices (SRPHESA) in SA Higher Education	23	21	91%
Sustainability Reporting in International Higher Education (SRIHE)	70	35	50%
Sustainability Reporting Practices at the Nelson Mandela Metropolitan University (SRPNMMU)	65	41	63%
Totals	181	108	

As indicated in Table 1, a combined total of 108 number of respondents completed and returned their questionnaires, that is 63% (n= 108) of the respondents completed and returned the questionnaires. This formed the basis of the analysis presented on strategic planning in higher education.

*Planning period and status of strategic plans*

The GPSAHE survey showed that South African HEIs use either three-year or five-year cycles for strategic planning purposes. Forty-five percent (45.5%) of institutions use three-year cycles, while 54.5% use a five-year strategic planning cycle. These cycles are shorter than the planning cycle recommended in the reviewed literature. For example, Porter (2011) recommends that strategies should cover a decade, or longer because continuity promotes improvement in singular activities, while allowing an organisation to develop competencies required for its strategy. However, this is in line with the New Funding Formula

(NFF) of the South African Department of Higher Education which requires three-year rolling plans.

Respondents in the GPSAHE survey (n=11) were asked to indicate the status, in terms of approval, of Strategic Plans for their institutions. Table 2 shows the findings.

*Table 2:  
Approval of Strategic Plans and use of a reporting framework for HEI*

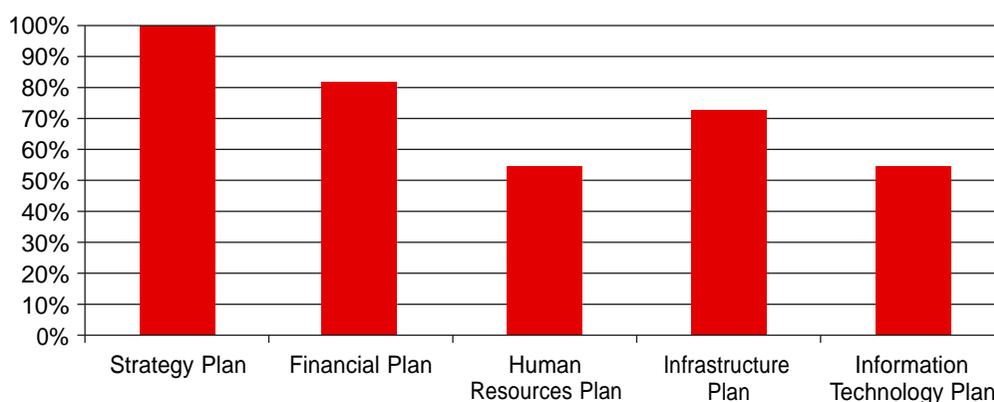
<b>Statement</b>	<b>Mean</b>	<b>Minimum (Min)</b>	<b>Maximum (Max)</b>	<b>Standard deviation (SD)</b>
The University Council has approved the current strategic plan	4.27	2	5	0.90
There is lack of a sector specific (Higher Education) reporting framework	3.36	1	5	1.21

Table 2 shows the results that the majority of institutions have their strategic plans approved by the University Councils. This is in line with recommendations of governance best practices. One of the functions of a Board is to set the strategic direction of the organisation (Institute of Directors, 2009)

## PLANS AND REPORTS PRODUCED BY HIGHER EDUCATION INSTITUTIONS

Universities produce a number of plans and reports as part of internal management requirements, or in compliance with regulations. The GPSAHE survey indicated that in addition to Faculty Plans and Academic Plans, universities produce other plans such as the Financial Plan (80%), Human Resources Plan (55%), Infrastructure Plan (73%), and ICT Plan (55%) as indicated in Figure 1.

Figure 1:  
Plans produced by South African universities – GPSAHE survey



All respondents indicated that strategic plans are produced by their institutions. However, some universities indicated that they do not have Human Resources and Information Technology plans. This is a matter of concern, especially in light of the significant role that Human Resources and Information Technology play in HEIs.

Financial Management Plans are fairly well established in institutions, and it was not surprising that 80% of participants confirmed this. Infrastructure plans which are required by the Department of Higher Education, as a prerequisite for releasing funds for infrastructure seem to be well established in South African universities. These results may be an indication that there is a lack of, or poor integration of plans resulting in functional units or departments producing plans that do not link with other plans. Although Information Technologies are sometimes mentioned in Infrastructure plans, the focus is not comprehensive enough as intended in recommendations of the King III report (Institute of Directors, 2009).

Respondents in the GPSAHE survey were also required to rate the importance of reports that should be produced by their institutions. The results in Table 3 indicate that respondents consider reports such as the Financial Report, Strategic Plan Performance Report, the Academic Report and the Integrated Sustainability Report to be very important.

Table 3:  
Importance of reports produced in South African Universities – GPSAHE survey

Name of report	Mean	Min	Max	SD
Financial Report	4.55	4	5	0.52
Annual Report (containing Strategic Planning performance)	4.36	3	5	0.67

Name of report	Mean	Min	Max	SD
Academic Report	4.18	3	5	0.87
Integrated Sustainability Report	4.00	3	5	0.94

The results in Table 3 above show that respondents in the GPSAHE survey attach importance to all reports produced. The Financial Report and the Annual Report were rated as most important – perhaps because they should be produced in accordance with regulations. However, it is encouraging to note that respondents attach importance to Integrated Sustainability Reports. In terms of importance, the respondents ranked Integrated Sustainability Reports last out of the four plans. Academic Reporting is second-last. While Financial Reporting is important, this result may point to an over-emphasis on it, while not considering whether the money is spent well on the academic project. The strategic plan could cover all these plans and therefore provide a holistic picture of the institution's performance.

#### *Mechanisms for Monitoring Strategic Plans at Universities*

Respondents were asked to identify the means through which their institutions monitor performance against the targets set in the strategic plan. The surveys show that there are various mechanisms for monitoring progress in the implementation of strategic plans. Respondents in the GPSAHE, SRIHE and SRPNMMU surveys indicated that their institutions use budget monitoring - 85.7% (n = 11) 73.3% (n = 35) and 77.1% (n = 41) respectively. However, unlike in the GPSAHE survey, results in the SRIHE and SRPNMMU surveys show relatively low percentages in the use of employee performance management and monitoring of strategic plans. Unlike the GPSAHE and SRPNMMU surveys, most respondents in the SRIHE survey selected the Annual Report as their means of tracking performance.

From the SRPNMMU survey, 51.4% (n = 41) of respondents agree that there are reports on the performance against targets set in the strategic plan. However, 81% (n = 11) of GPSAHE respondents indicate that institutions report on achievement of targets in strategic plans. This difference could be further evidence that internal communication regarding the implementation of strategic plans is not adequate. Table 4 shows the results.

*Table 4:  
Mechanisms for monitoring the implementation of Strategic Plans at Universities*

Monitoring Mechanism	GPSAHE (n=11)	SRIHE (n=35)	SRPNMMU (n=41)
Regular reports on performance against targets in institutional plans such as the strategic plan	81.0%	66.7%	51.4%
Budget monitoring	85.7%	73.3%	77.1%
Employee performance management	81.0%	40.0%	45.7%
Achievements contained in the annual report	61.9%	80.0%	71.4%

Participants in three surveys (SRPHESA, SRIHE AND SRPNMMU) were asked to rate their estimation of the importance of information contained in strategic plans to various identified stakeholders. Table 5 reports the results.

*Table 5:  
Importance of strategic planning information to identified stakeholders*

Stakeholder	SRPHESA (n=21)		SRIHE (n=35)		SRPNMMU (n=41)	
	Mean	SD	Mean	SD	Mean	SD
Current and prospective employees	3.48	1.08	3.96	0.88	3.89	0.90
Current students	3.05	1.28	3.83	1.03	3.34	1.11
Prospective students	2.81	1.33	3.61	1.16	3.00	1.06
Alumni	2.81	1.17	3.30	1.18	3.00	1.14
Donors	3.33	1.15	3.52	1.34	3.91	0.98
Local community	2.52	0.98	3.00	1.27	3.09	1.09
Service providers	2.90	0.83	2.96	1.36	2.83	1.20
Government regulators	3.48	1.17	3.74	1.32	4.23	0.91

Information contained in the strategic plans was seen to be of importance to all identified stakeholders, albeit at different levels. Current and prospective employees, donors, government regulators and prospective students were identified as the stakeholders most in need of information about institutional Strategic Plans with mean scores of 3.48, 3.96 and 3.89 for the SRPHESA, SRIHE and SRPNMMU surveys respectively. The opportunity to attract prospective students as well as to inform the community could be lost if attention is not given to providing information about the strategic direction of an institution. In the SRIHE survey, service providers were rated as least in need of strategic planning, while current and prospective employees, donors, government regulators and prospective students were identified as the stakeholders most in need of information in strategic plans. This is consistent with the SRPHESA and SRPNMMU scores.

A notable difference is that the SRPHESA survey shows that the local community, prospective students and Alumni are rated low with regard to requiring information on strategic plans. This finding indicates that HEIs are potentially missing opportunities to engage with important stakeholders in the higher education value chain, as indicated by Pathak and Pathak (2010). In addition, the results confirm the work by Merkel and Litten (2007) in which stakeholders in higher education together with their reporting requirements are identified. Strategic Planning is closely linked with Sustainability Reporting. In the GPSAHE, SRIHE and SRPNMMU surveys, respondents rated their agreement with statements on the importance of strategic planning in the Sustainability Reporting (SR) requirements. Table 6 shows the findings.

*Table 6:  
Linking Strategic Planning and Sustainability Reporting requirements*

Statements	GPSAHE (n=11)		SRIHE (n=35)		SRPNMMU (n=41)	
	Mean	SD	Mean	SD	Mean	SD
Strategic planning is aligned to the budgeting processes	3.33	1.20	3.44	0.92	2.85	1.21

Statements	GPSAHE (n=11)		SRIHE (n=35)		SRPNMMU (n=41)	
	Mean	SD	Mean	SD	Mean	SD
The prioritisation of resource allocation is guided by the strategic plan	3.22	1.24	3.44	0.98	3.03	1.03
The strategic planning process is consultative and relevant stakeholders contribute in the strategy formulation	3.86	1.06	3.47	0.80	3.03	0.87
There is lack of a sector specific (Higher Education) reporting framework	3.60	1.10	3.39	0.98	4.38	0.70
The university should have reporting tools to monitor the implementation of its strategy plan	4.10	0.94	4.06	0.73	4.18	0.70
Sustainability Reporting will greatly be enhanced if reporting is done on the institutional strategy plan	4.10	0.94	3.82	1.01	3.60	0.88
The university has identified its information sources and information users for purposes of reporting	2.86	1.01	3.17	0.92	2.91	1.14

Respondents from the GPSAHE and SRPNMMU surveys with mean scores of 2.86 (Registrars) and 2.91 (Faculty and HODs) respectively, concur with the statement that the university needs to identify information sources and users. This supports the recommendations for data warehousing and BI architecture proposals by Shin (2002) and March and Hevner (2007). Respondents in the SRPNMMU survey indicated that they are familiar with their institutions' strategic plan better than with the other plans such as the Academic Plan, Research and Equity Plan, Financial Plan, Research Plan, Transformation and Equity Plan and Departmental Annual Plans, developed at the university showing a mean score of 3.60 on familiarity with the strategic plan (NMMU Vision 2020) does not correspond with the low percentage (54%) score on mechanisms for tracking performance using the Annual Report as shown in Table 7. This implies that the NMMU has more challenges in reporting on progress made in implementing its Strategic Plan as opposed to managers being familiar with the Strategic Plan.

*Table 7:  
Extent of familiarity with institutional and departmental plans – SRPNMMU survey*

<b>Name of Plan</b>	<b>N</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>SD</b>
NMMU Strategic Plan (Vision 2020)	41	3.60	2	5	0.91
NMMU Academic Plan	41	3.03	1	5	0.90
NMMU Research and Innovation Plan	41	2.97	1	5	1.01
NMMU Financial Plan	41	2.49	1	5	1.09
NMMU Human Capital Management Plan	41	2.09	1	5	0.84
NMMU Transformation and Equity Plan	41	2.63	1	5	1.19
Respondent's School/Department/Division's Annual Operational Plan	41	4.51	1	5	0.82

The findings in Table 7 from the SRPNMMU survey indicate that whereas most respondents are familiar with their departmental or divisional annual plans, a sizeable number of managers are not familiar with other important institutional plans such as reflected in the low mean scores for the Financial Plan (2.49), Human Capital Management Plan (2.09), and Transformation and Equity Plan (2.63). Respondents were also asked to rate the perception of the university's strategic planning process from a number of perspectives.

Respondents in the SRPNMMU survey rated statements regarding their experience with the process of developing and implementing NMMU's strategic plan (Vision, 2020) and alignment between departmental plans and Vision 2020. Table 8 reports the results.

*Table 8:  
Perspectives on Vision 2020 – SRPNMMU survey*

<b>Statement</b>	<b>N</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>SD</b>
The requirements for reporting on NMMU Vision 2010 are well understood	41	2.34	1	4	1.00
The process of developing Vision 2020 was consultative and inclusive	41	3.43	1	5	0.92
Vision 2020 is too high-level for reporting	41	2.71	1	5	1.09
Department key activities included in Vision 2020	41	2.26	1	4	0.95
	41	3.31	1	5	0.90
	41	2.06	1	5	1.07

Department on track in meeting Vision 2020 targets

Feedback on progress with implementing Vision 2020 given.

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The low mean result of 2.34 and 2.06 relating to understanding reporting requirements for and receiving progress reports on Vision 2020 respectively indicate that the requirements for reporting on strategic plans are either not available or have not been communicated. This may account for the perception that there is no feedback on the implementation of the strategic plan of NMMU. This finding agrees with the work of Kaplan and Norton (2011) who identify feedback and learning as one of the processes which ensure that strategic objectives are linked to long-term goals. Hayward and Ncayiyana (2003) also allude to the importance of feedback in strategic planning. In the same SRPNMMU survey respondents identified factors that undermine intentions of reporting against performance of the strategic plan. Table 9 reports the results.

*Table 9:*

*Factors that undermine reporting on performance against strategic plan targets – SRPNMMU survey*

<b>Factors</b>	<b>N</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>SD</b>
Lack of clearly defined reporting metrics and standards for reporting	41	3.71	2	5	0.94
Use of many reporting sources and lack of information integration	41	4.06	2	5	0.89

Factors	N	Mean	Min	Max	SD
Lack of awareness of Vision 2020	41	3.97	2	5	1.00
A disconnect between strategy development and implementation	41	4.12	1	5	1.01
Lack of Management buy-in and support	41	3.55	1	5	1.15

The results in Table 9 underscore the importance of the factors that have been identified as having an influence on the implementation of Strategic Plans. These include: presence of clear reporting metrics (Van den Brink & Van der Woerd, 2004); poor strategy implementation (Neilson, Martin & Powers, 2011); and lack of integration of reporting information (Chou, Tripuramallu & Chou, 2005).

Overall, respondents underscored the importance of Sustainability Reporting in the successful implementation of Vision 2020. The availability of a Strategic Planning Framework for implementation of NMMU's strategic plan could be a factor that contributes to results indicated in Table 10. As is evident from the mean score of 2.56 in Table 10, respondents in the SRPNMMU survey did not agree with the statement that implies that it is not easy to report on strategic plans. This confirms the view shared by Donaldson and Schoemaker (2013) who caution that although there are multiple factors associated with an organisation's ability to spot early warning signals, performance reporting on strategic plans is important to provide early warning signs. In addition, Sevier (2003) asserts that strategic planning should be supported by a monitoring and evaluation system.

*Table 10:  
A case for Sustainability Reporting for the NMMU – SRPNMMU survey*

Factors	N	Mean	Min	Max	SD
Through reporting on Vision 2020, NMMU will achieve targets quicker	41	3.61	2	5	0.99
Vision 2020, like all strategic plans, is a document that is not easy to report on	41	2.56	1	5	0.91
Most information that is to be reported on is available, albeit in different format	41	3.61	1	5	0.88
A framework is needed for Sustainability Reporting at the NMMU	41	4.29	3	5	0.78

Table 11 shows the results of the Analysis of Variance (ANOVA) between the three surveys (SRPHESA, SRIHE and SRPNMMU) that focused on stakeholders that consume information. Questions around this focus area featured in the SRPHESA, SRIHE and SRPNMMU surveys. This covered the following aspects:

- stakeholder information requirements
- role of stakeholders in the strategic planning process
- role of stakeholders in information processing.



*Table 11:  
ANOVA - Importance of strategic planning information to stakeholders*

Survey Group	Means	N	SD		
SRIHE	3.50	35	0.85	<b>ANOVA</b>	
SRPHESA	3.05	21	0.84		
SRPNMMU	3.41	41	0.74	<i>F</i>	<i>P</i>
<b>Combined surveys</b>	<b>3.34</b>	<b>97</b>	<b>0.81</b>	<b>1.97</b>	<b>0.1470</b>

Table 11 indicates that there is no significant difference ( $P < 0.05$ ) between the three groups in sub-theme T1a in terms of the average score relating to the importance of information on strategic plans to various stakeholders and role players in higher education. All identified stakeholders should be kept abreast with information on the progress with implementing the Strategic Plan. This is in line with the view that organisations are multi-functional value-adding entities that fulfil socio-economic functions on behalf of various stakeholders (Ulrich & Fluri 1995). In addition, Suchman (1995) warns that the information provided to stakeholders influence the outcome of strategies. Responses from the SRPHESA, SRIHE and SRPNMMU groups were analysed. Table 12 shows the results.

*Table 12:  
ANOVA – Factors that undermine monitoring of strategic plans*

Survey Group	Means	N	SD		
SRIHE	3.24	35	0.82	<b>ANOVA</b>	
SRPHESA	3.45	21	0.63		
SRPNMMU	3.62	41	0.8	<i>F</i>	<i>P</i>
<b>Combined surveys</b>	<b>3.47</b>	<b>97</b>	<b>0.77</b>	<b>1.49</b>	<b>0.232</b>

The results from this analysis show that there is no significant difference ( $P < 0.05$ ) between the responses obtained from the three surveys on factors that undermine monitoring of strategic planning in the breaking away of the culture of trust to one of performance measurement. Some respondents bemoaned the multiplicity of formats sought for the same information.



Figure 2:  
Information culture across surveyed groups

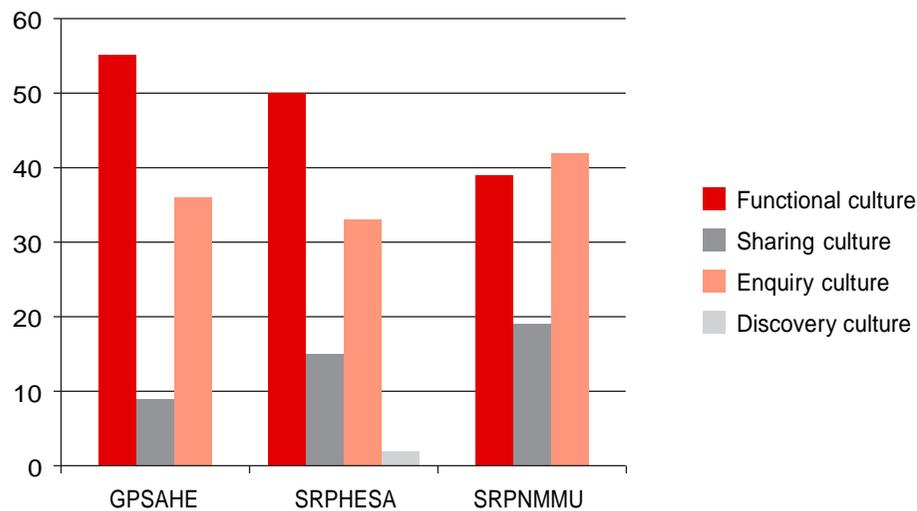


Figure 2 shows that the surveyed HEIs have strong functional information cultures. The information discovery culture is low and therefore corroborating the finding that BI capability is low at the presentation level.

## CONCLUSION

Factors influencing strategic planning in higher education are not unique to South African HEIs. Strategic planning processes are key in entrenching sustainability reporting practices in HEIs and vice versa. Results from the surveys show that the following factors influence strategic planning in HEIs:

- Monitoring and evaluation of strategic plans key to successful implementation
- Communication, stakeholder consultation and the role of institutional leadership in driving the strategy process
- Setting up reporting standards for monitoring and measuring of performance
- Access to quality and timely information for decision making
- Alignment and harmony between strategies and plans at different levels within a Higher Education Institution
- Reporting on progress made with implementing strategic plans.

Based on the analysed results, the following managerial implications come to the fore:

- HEI should beware not to overemphasise financial reporting and neglect environmental and social dimensions of reporting.
- Other institutional plans at HEIs should be integrated and harmonised with the strategic plans.
- HEIs should investigate the information requirements of all stakeholders and put plans in place to disseminate the same. This entails identifying information sources and users as well as developing acceptable reporting metrics.
- Communication between the different levels of management should be improved in order for information to flow across institutions.
- Stakeholder involvement is key in the success of strategic planning and Sustainability Reporting

*Limitations of the study and recommendations for further work*

The scope of the study placed emphasis on the role of Information and Sustainability Reporting. The effectiveness of current monitoring and evaluation of strategic plans in Higher Education Institutions should be further explored. In addition, there is a need to develop criteria to determine success or otherwise in strategic planning in South African Higher Education institutions.

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