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RISK MANAGEMENT: A STRATEGIC APPROACH TO ENHANCE TVET COLLEGE MANAGEMENT

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–Abstract–

Technical and Vocational Education and Training [TVET] Colleges are of strategic importance through the Department of Higher Education and Training [DHET]. Colleges afford a form of education to advance skills development for industry, commerce and self-employment. Risk management was theorised and contextualised within the TVET College sector. According to the Republic of South Africa Continuing Education and Training Act 16 of 2006 as amended, TVET Colleges are required to implement internal audit and risk management functions. Based on this legislative requirement, research was empirically conducted in a case study within a TVET College in the eThekwini municipal region. The research aim was to determine whether the college sustained an efficient and effective system of risk management. Methodology followed was convergent parallel mixed methods approach using probability sampling from the target population; the sample drawn included an institutional management team, staff and student class representatives. Qualitative data was collected through semi-structured interviews and analysed through thematic and content analysis. Quantitative data was gathered through a survey and analysed for statistical reliability and validity through the Statistical Package for Social Scientists (SPSS). Data analysis was triangulated through mixed methods. The TVET

College was observed to be deficient in fulfilling the legislative requirement for risk management implementation as a key outcome. This further infers that service delivery to its primary client, the students, could be ineffective and inefficient having an adverse effect on teaching and learning. Notably, effective risk management had not been tested in the college prior to the research, making the study a valued contribution. It is recommended leadership of TVET institutions generate a risk management policy framework supported by active management structures enabled through an ethical risk culture. In conclusion, the research affirms that educational delivery of TVET Colleges can be enhanced through implementation of a dynamic risk management system.

Key Words: Ethical, leadership, risk management, service delivery, TVET College

JEL Classification: I 21

1. INTRODUCTION

According to the Republic of South Africa (RSA) White Paper for Post-School Education and Training (2013), South African Technical and Vocational Education and Training [TVET] Colleges are a national competency central to the conveyance of post-school education and training, and is an area of strategic significance in the Department of Higher Education and Training [DHET]. The context is TVET Colleges providing education and training to advance expertise for communities, industry, commerce, public sector and the country at large consisting of 50 multi-campus colleges with over 260 sites for education and training delivery. However, Moloi (2016) advances that, South Africa's establishments of higher learning are facing "major challenges". The emphasis is that these undesirable effects on the institutional objectives need to be mitigated, where risks are reviewed, managed and reported to relevant stakeholders. In conceptualising risk management, one can therefore, say that it is a pertinent focus area of strategic management that warrants attention for the TVET College sector. The units of analysis under discussion in the article focuses on risk management contextualised for the TVET sector, including TVET college management with a strategic focus. The rationale of the article is aimed at analysing risk management effectiveness as a relevant aspect within the TVET College sector.

2. IMPETUS FOR TVET COLLEGE RISK MANAGEMENT

TVET Colleges are legislated by the Republic of South Africa (RSA) Continuing Education and Training Act 16 of 2006 as amended. Since the TVET College is part of the South African public administration system, it is compelled to uphold the values, as stipulated in Section 195 of the Constitution of the Republic of South Africa, 1996. It is therefore, obliged to maintain a high standard of ethics and must be accountable in its decision-making and governance. According to section 195(1)(b), it is mandated to implement processes that are "efficient, economic and effective". According to the RSA Continuing Education and Training [CET] Act 16 of 2006 as amended, and specifically Chapter 5 section 25(1)(c) regarding the financial records and statements at public colleges, these colleges need to implement internal audit and risk management functions in accordance with the standards set out in the RSA Public Finance Management Act of 1999 [PFMA] (Act 1 of 1999 as amended). Concerning the RSA PFMA, section 38(a)(ii) general responsibilities of accounting officers play a significant role in risk management. In the case of the college, the rector must ensure that he/she sustains efficient, effective and clear systems of internal control, financial management and risk management. The RSA Public Sector Risk Management Framework (2010) also recommends that public service institutions develop a structure for risk management. However, the status in the TVET College reflects a gap in incorporating risk management as a strategic focus. Governance requirements of the TVET College compels the College Council to provide oversight on the college's risk position in search of its growth and opportunities, (RSA Handbook for Public FET Council Members, 2007). Based on the propositions of the CET Act as amended, including the PFMA and college council prescriptions, colleges are compelled to implement risk oversight and management functions.

3. THEORETICAL INSIGHTS TO RISK MANAGEMENT

The RSA Public Service Commission Report (2003) states that risk management is one of the constituents of the organisational control environment, which adds value to the overall efficiency of the control system. This integration of risk management is applied during strategic planning processes where risk is identified for key objectives of the business unit. The Global Risk Oversight Report (2017) however, reflects that organisations struggle to incorporate their risk management functions with strategic planning. Continuous changing of business environments creates risk exposure, which necessitates implementation of monitoring and review processes, aiming to foster improved service delivery to clients. According to Visser & Erasmus (2002), the strategic plan must be a basis for indication of key risk factors, both internal and external to the organisation that would affect achievement of strategic outcomes. With reference to these suggestions, it is discernible that the college needs to identify internal and external risks as part of strategic planning requirements. The management of risks or risk management is at the 'heart' of corporate governance and draws from corporate governance principles to make the right decisions to eliminate or minimise risks. Risk governance is described as "the manner in which directors are responsible to optimise and monitor risks in an organisation", (Rahim, Mahat, Nassir & Yahya, 2015). Authors Nundkumar & Subban (2018) refer to Williams (2017) who states that risk management is a "key element of corporate governance," and is a "foundation of an organisation's architecture for strategic and operational success".

Valsamakis, Vivian & du Toit (2013) define risk as a condition having elements of probability, loss, inaccuracies, adverse effect or impact and uncertainty. Risk management includes risk planning, risk assessment, risk handling strategies and risk monitoring. Young (2006) states that risk management aims to identify and establish a structured approach to the management of risks, which envisages achieving a risk management environment, cultural awareness, roles and responsibilities and a common understanding of organisational risk. Addison, Brown, Daffy, Storer & Young (2008) state that there are various sources of risks that may influence the business environment, such as external, financial and organisational risk. Hendrikse & Hefer-Hendrikse (2012) recommend scanning the risk environment, risk identification, risk assessment, risk control, risk monitoring and risk reporting as components of the risk management structure.

Jackson, Sawyers & Jenkins (2009) affirm that an organisation's policies, procedures, and organisational structure are a representation of the control environment, as part of the risk management environment. Valsamakis et al., (2013) state, "it is important to explicitly identify and embed a risk management culture for the organisation." Risk identification according to Young (2006), is the initial point of the risk management process. Alexander (2003) refers to risk identification as a risk map detailing which risks apply to any business, process or organisational unit. The Chartered Institute of Management Accountants [CIMA] (2002) emphasises that after operational risks have been identified, "an assessment of the possible impact and likelihood of occurrence" should be undertaken ranking risks. Reuvid (2005) in agreement with CIMA (2002) refers to risk assessment as a process to calculate the "probable" impact on businesses.

Risk control according to Young (2006) comprises activities intended for determination of eliminating or reducing reasons that may negatively affect strategic goals causing loss to organisations. Jackson et al., (2009) mentions that control activities are the most visible element of internal control within organisations, including the entity's policies and procedures aimed at risk reduction. Following risk control, Ile, Eresia-Eke & Allen-Ile (2012), risk monitoring is a process informing management of progress made and the manner in which desired outcomes were achieved. As an "early-warning" system, it tracks areas of attention where re-planning of processes can be executed to achieve desired objectives. According to Young (2006), the focal objective of operational risk monitoring is "evaluation of the effectiveness of the risk management process." In considering risk monitoring, risk reporting ensures that the key objective is communicating operational risk across all business areas, (Alexander, 2003). Creating reporting procedures and ensuring individuals observe such protocols is vital to risk reporting, as purported by Merna & Al-Thani (2005).

Therefore, a high performing organisation is associated with risks necessitating that management be aware of those risks and identify, monitor and control them, as cited by Badriyah, Sari & Basri (2015).

4. TVET COLLEGE MANAGEMENT STRATEGIC ELEMENTS

Leadership and ethics as enablers of the risk strategy can provide the inducement for effective TVET College management. Hughes, (2012) mentions that the leader uses technical abilities and skills to influence subordinates to focus on "delivery of results, understand the environment, be open to suggestions, think strategically, build new patterns and approaches whilst communicating the vision of change." Smit, Cronje, Brevis & Vrba (2011) emphasise that risk and decision-making is a major function of a leader. As a result, management's attitude to risk influences the strategy selection. Ritchie & Brindley (2009) comment that the advent of risk management has influenced management decision and control thereby prompting enterprise strategic judgements. Meyer (2012), positions that worthy strategies fail because of passive leadership in an organisation whilst Hughes (2012) recommends designing structures for internal accountability leads to better managerial performance and stakeholder confidence. Visser and Erasmus (2002) state that in order to achieve certain organisational objectives, strategic plans must contemplate critical risk factors, internally and externally, that may affect the realisation of strategic intentions. Kenosi (2016) states that effective leadership and an emphasis on integrity are the foundations to construct an operational risk management approach for the realisation of strategic performance.

Jackson et al., (2009) mention that managers undertake ethical decisions daily. Hoyle (2009) points out that ethics is a behaviour towards "accepted norms of right or wrong". Ethical problems arise in organisations for a variety of reasons and may lead to unethical behaviour such as falsifying documents. Gibson (2017) therefore, recommends that leadership must be committed as "champions of ethical values". The King Report emphasises ethical leadership, performance evaluation, strategic leadership, risk management and compliance risk governance, where responsibility of risk is the governance structure, as espoused by Hendrikse & Hefer-Hendrikse (2012). Further to this, Visser & Erasmus (2002) opine that risk can include "unethical conduct, financial loss, reputational loss or legislative non-compliance" that may avert attainment of business ambitions. Swanepoel, Erasmus & Schenk (2008) state that ethical conduct and professionalism is something that public officials must strive for in order to establish public confidence. Management is viewed as a key part of the organisational milieu significantly influencing operational and strategic functions where risk management initiatives are critical attainment factors for their application, (CGIAR, 2017).

Ethical conduct and leadership as considerations in risk strategy implementation for the enhancement of college management is thereby seen as a mechanism in addressing TVET challenges which are characterised by poor delivery of teaching, inferior management and administration of institutions, (Mpondomse, 2016).

5. RESEARCH AIM

The effectiveness risk management has not been tested in a TVET College environment in KwaZulu-Natal. The aim of the research was therefore, to ascertain whether the TVET College was implementing a progressive risk management strategy in accordance with standard practices, as may be found in the corporate sector. During the research process, college risk management practices were identified, and a comparison was made to the standardised corporate best practices with a view to test the effectiveness of the college's risk management function. The case study can therefore, be used as an instrument to contribute to 'best' practice in KZN TVET Colleges to improve business operations against the strategic goals of the TVET Colleges concerned. Based on the intentions of the RSA CET Act as amended and the RSA PFMA, colleges are required to implement risk management functions. Therefore, the research aim is determining whether the TVET institution sustains an effective system for risk management as a strategic approach to enhance TVET College management.

6. METHODOLOGY, DATA COLLECTION AND ANALYSIS

The research methodology applied was the convergent mixed methods where qualitative and quantitative data was collected and analysed separately. Thereafter, a comparison was undertaken of the both types of datasets checking for convergence or divergence of the data, (Creswell, 2014). The research design was a case study approach, which enabled the researcher to learn more about the college's risk implementation strategy. The case study involved fieldwork within the institution to investigate the natural circumstances of the organisation, as advanced by Welman, Kruger and Mitchell, (2008). A specific research design may involve "philosophical assumptions or worldviews" influencing the research process and relates to a set of beliefs guiding research action. Underpinned by the Pragmatic Worldview Philosophy, the mixed methods research design was used to generate primary data both qualitatively and quantitatively (Creswell, 2014).

Qualitative data was collected through semi-structured interviews [N=3] with senior management personnel where the researcher compiled notes and recorded interviews. Data was clustered into specific groups through thematic analysis thereafter interpreted for statistical significance. The thematic analysis comprised the preparation for data analysis, viewing the data, data coding, generation of description of themes, deciding theme presentation and finally an interpretation of the findings, (Creswell, 2014). Hsieh & Shannon (2005) comment that content analysis is applied to interpret sense from the content of transcript data involving counting and comparisons of keywords or content thereafter followed by an interpretation of the essential context. Secondary data was obtained by accessing documents and past records including the college's strategic plan, risk management, policies, procedures, monitoring and evaluation reports, monthly management reports, client satisfaction surveys and audit reports.

Through probability sampling and inferential statistics, quantitative data was gathered through a survey with questionnaires [N=79] distributed to operational management, staff and student components. The questionnaire measuring the identified research risk themes was divided into 6 sections comprising understanding the setting and control environment, risk identification, risk assessment, risk control, risk monitoring and risk reporting. The survey design affords a numeric narrative of attitudes, inclinations or opinions of a segment of a population, (Creswell, 2014).

a) Research analysis: Qualitative research used thematic analysis after semi-structured interviews with the senior management regarding the six risk management elements. The Statistical Package for Social Scientists (SPSS) version 24.0 was used for quantitative data analysis. Reliability and validity of data was tested using Cronbach's Alpha and Bartlet's Test of Specificity. Factor analysis was implemented to make credible sense through data reduction. Kaiser-Meyer-Olkin statistical assessments were applied to test the total significance of all correlations or associations of gathered data. To establish if there was a relationship between two or more variables, bivariate correlation was effected.

b) Reliability of Statistics: Here the two most important aspects of precision are reliability and validity in research. Reliability is computed by taking several measurements on same subjects. Cronbach’s Alpha is used to evaluate “reliability or internal consistency” of test items, and where a reliability coefficient of 0.70 or higher is considered as “acceptable” as maintained by Tavakol & Dennick (2011). Reliability scores for all risk themes statistically analysed in the case study exceeded the recommended Cronbach’s Alpha value of 0.70 thereby indicating a high degree of acceptable and consistent scoring. This therefore, suggests reliable data generated leading to accuracy and significance of inferences and conclusions drawn on implementation of the risk management strategy in the college.

c) Factor Analysis: Factor analysis is a statistical technique whose main goal is data reduction to identify associations among variables as described by Yong & Pearce (2013). Matrix tables are preceded by a summarised table reflecting results of Kaiser-Meyer-Olkin [KMO] and Bartlett's Test of Sphericity, as statistical assessments for the overall significance of all correlations or associations in the correlation matrix. According to Heilig (2013), the requirement is that Kaiser-Meyer-Olkin Measure of Sampling Adequacy should be greater than 0.50 and Bartlett's Test of Sphericity less than 0.05. In all instances, conditions were satisfied allowing for the factor analysis procedure. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy value was greater than 0.50 and the Bartlett's Test of Sphericity significance value was represented less than 0.05. This was considered significant as the analysis of risk variables for operational risk produced reliable and valid data. This enabled accurate inferences concerning necessity for risk management implementation in the college.

6.1 Quantitative analysis and risk strategy themes

This section presents an analysis of the quantitative scoring patterns of respondents [Operational Managers, Staff and Student components], per variable and section regarding risk strategy implementation. To determine whether the scoring patterns per statement were significantly different per statement between the groups, a Kruskal Wallis test was done.

a) Understanding the Setting and Control Environment of Risk: Kruskal Wallis p-values show that there are significant differences for 8 of the 12 statements and responses that were dis-similar from the respondents. This represented a variation regarding perceptions of the statements from respondents.

b) Risk Identification: The Kruskal Wallis p-values show that there are significant differences between all sub-themes. The means for Management are highest for all variables whilst that of the Students are low for all means.

c) Risk Assessment: Kruskal Wallis p-values show that there are significant differences between all sub-themes. There are varied means amongst the respondents regarding all statements for this risk theme. Four of the six variables have the highest means for Management.

d) Risk Control: Kruskal Wallis p-values show that there are significant differences for four of the six sub-themes. The mean for Management is highest concerning awareness of controlling risk whilst the mean for the Students are all low. The mean scores for Staff show consistent values.

e) Risk Monitoring: Kruskal Wallis p-values show that there are significant differences for all six sub-themes. Management means were high while there is consistency in the means of Staff. Student scores are the lowest due to them being unaware of risk processes in the college.

f) Risk Reporting: Kruskal Wallis p-values show that there are significant differences for all five sub-themes. The mean score for Management concerning "meeting discussions of risks" is the highest since it is the responsibility of management to have meetings and discussions where operational challenges are addressed.

From preceding discussions, the following findings are put forward:

- Risk A has significant differences among respondents concerning eight of its twelve sub-themes indicating varying perceptions of what risk management is including the environment.
- Risk B found all five statements have significant differences among respondents meaning that there was no clear idea of how risks may be identified in the organisation.
- Risk C revealed significant differences among all respondents of the six sub-themes indicating risk assessment remains a challenge for the college.
- Risk D had noteworthy differences among respondents in four of its six sub-themes highlighting gaps in having control over the risks.
- Risk E had substantial differences in all six of its sub-themes among respondents demonstrating risk monitoring is an identified gap.
- Risk F showed all five sub-themes have vital differences among respondents indicating reporting on risks is cause for concern.

This translates to 34 of the 40 or 85% of the sub-theme reflecting significant differences among survey respondents, providing differing opinions on their perceptions of the six risk strategy themes. These variances in opinions again calls for a common orientation to risk management.

6.2 Integration of quantitative and qualitative data

Interviewees' responses [SM] were recorded in terms of research questions posed. Their responses are analysed and compared to the responses from the survey respondents comprising Staff, Students and Operational Managers [OM]. An analysis between **quantitative and qualitative data** was undertaken, comprising 18 questions representing critical risk activities for risk strategy implementation. It was observed only four of the 18 key risk activities relating to the six research objectives were found to be adequately implemented. Furthermore, five of the 18 key risk activities were not being implemented while eight activities were weak in implementation, further suggesting weaknesses in the risk strategy for due consideration by the college.

After analysing the **quantitative data**, 34 of 40 or 85% of the sub-theme variables had significant differences amongst the surveyed respondents, who provided different variations on their perceptions of statements comprising the six risk strategy themes. This infers there is a lack of consensus amongst respondents regarding their responses. This was representative of significant variations in mean values of respondents on the establishment of a college risk culture, which has a Kruskal Wallis p-value of 0.000. Varied responses were reflected where respondents scored differently regarding their awareness of the college risk strategy, corroborating why 85% of the responses varied significantly amongst the respondents. Quantitative data analysis by means of survey cross-tab analysis, the Kruskal Wallis Test and correlation tests consistently supported the suggestion that risk management implementation is ineffective and inefficient in the college. Though the college has a Quality Management System, management meetings, a functional Audit and Risk Committee and a generated risk register, the six research themes raise concerns in the identified gaps from a common orientation of what constitutes a risk to understanding the environment in which risks unfold including vulnerabilities. Further concerns were ineffectiveness and inefficiency of the risk strategy implementation, as established from conflicting responses received in both qualitative and quantitative data.

These six research risk strategy themes were useful in identifying the extant of risk preparedness of the TVET College, and in examining units of analysis as identified in the study. Research findings provide avenues of concern relating to the risk management strategy for the TVET College. This has the implication that according to the RSA CET Act 16 of 2006 as amended, namely Chapter 5 section 25(1)(c) where colleges need to implement internal audit and risk management functions, the college in this case study has been observed to be somewhat lacking in fulfilling this legislative requirement. This further infers service delivery to its primary client as students could be affected, whilst the level of efficacy of risk oversight and management raises concerns.

6.3 Supplementary observations

Content analysis was undertaken examining secondary sources of information such as policies and procedures, management meeting minutes and process documents. It was established, that there are no records for risk management policies and procedures at the college, leaning on a governance lack. However, the college has a functional Audit and Risk Committee that meets and reports risk management progress to the college council. This affirms that the college has a functional governance role regarding risk management. The college management undertook an exercise to collectively identify and rate college risks resulting in the generation of the college's risk register.

7. STRATEGIC RECOMMENDATIONS

The research study created a significant opportunity for the improvement of TVET College risk strategy implementation. Research generated could possibly be used to inform other TVET institutions on successful risk strategy application. Findings from the research further confirm the principles of good corporate governance emphasising ethical leadership, risk management and compliance in risk governance. An efficiency rate of 17% is attributed to the risk management strategy of the college given that concerns raised in the aim of the study was fulfilled. Risk is perceived to be "contextual and dynamic" where "organisational, cultural and attitudinal" facets must be considered as put forward by Andreeva, Ansell Harrison (2014). For the college to improve its risk management process, the following strategies are strongly recommended: The college needs to generate a risk management policy incorporating critical elements of policy objectives, risk terminology, a legislative framework for policy implementation, what risk measures and controls need to be implemented, clarification of roles and responsibilities, and importantly, a communications and reporting framework. Emanating from the development of the risk policy, the institution needs to generate risk management procedures enabling the policy to be implemented effectively. Moreover, an organisational structure to facilitate the risk strategy needs to be considered. The college must generate a program to promote the risk management culture within the organisation to ensure stability and sustainability of the risk strategy. These recommendations, as advocated by Blunden & Thirlwell (2010) would ultimately lead to cost-effective risk-taking and business optimisation.

8. CONCLUSION

In conclusion, TVET Colleges need to implement systems that are "effective, efficient and economical" as proposed by the CET Act as amended, including the RSA PFMA and section 195(1)(b) of the RSA Constitution to ensure effective service delivery. Research findings revealed that the TVET College implements risk management processes contrary to these principles in legislation. It can be concluded, that the leadership of TVET institutions generate a risk management policy framework supported by active management structures enabled through an ethical risk culture. Consequences for non-implementation of a vigorous risk management function will exacerbate poor student pass-rates, maladministration and an incapability to accomplish strategic college determinations. This view is reinforced by Moloi & Adelowotan (2018) remarking that failure of a TVET College to recognise their risks could "threaten their ability to render appropriate educational services." It is envisaged that future research opportunities be undertaken through a comparative study to measure the effectiveness of risk strategy implementation amongst all TVET Colleges in KwaZulu-Natal with a view to obtaining a longitudinal and provincial overall perspective on risk implementation. TVET Colleges therefore, are vital for delivery of post-school education and training, thereby contributing to alleviation of the "triple challenge" of unemployment, poverty and inequality that currently besets the country.

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