WORDS MATTER: CONTENT ANALYSIS OF HIGHER EDUCATION MISSION STATEMENTS IN ZAMBIA

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ABSTRACT

A mission statement (MS) is a widely used strategic tool in organisations. Higher Education Institutions (HEIs) declare intent in their mission statements. Despite being standard practice, little quantitative empirical research has been conducted on mission statements and most studies have a qualitative global north focus. This study conducts a content analysis of Zambian HEIs' mission statements through text mining in order to determine what are the key components of mission statements in Zambian HEIs. Utilising software (Voyant Tools©) differences and similarities in corpus (text) trends between 8 public and 37 private HEIs in Zambia revealed a distinct difference between Public and Private HEIs with the former emphasising research and consultancy while the latter focused on equipping students for professional roles.

Keywords: Mission statements, Content analysis, Higher Education

1.0 INTRODUCTION

The mission statement (MS) maintained a top-four position as the most widely utilised managerial tool worldwide between 1993 and 2017 (Rigby & Bilodeau, 2018). In higher education the MS is required: by accreditors; by organisational strategists; and by the public, all of whom scrutinise the document with different lenses. In guidelines aligned to the UNESCO framework of Higher Education Management, it was agreed by academics, ministry officials and HEIs leaders that the MS must be revised to reflect country, regional and global changes. In addition, HEIs are encouraged to develop strategic institutional plans to implement their mission statements (Farrant, 1996).

The MS was first introduced as an organisation's strategic tool in the 1970s by Peter Drucker. The first mission statements were brief, limited to three sentences and outlining what the organisation does, who they are, what they stand for as well as why the organisation exists (Drucker, 1974). Following the first MS study by Pearce and David the literature to date can be grouped into four themes namely: development; components; impact on staff and impact on the performance of an organisation (Alegre, 2018). This study will fall under the theme of MS components and in particular differences between public and private HEIs.

The MS has a long past yet a short empirical research history as it is "widely used in practice but poorly researched in theory" (Alegre, 2018). The majority of research is descriptive (Cortés-Sánchez, 2018) focusing on the global north countries especially the United States.

This has left a scarcity in international studies (Bartkus et al, 2000). Therefore, there remains little empirical insight on global south countries especially those on the African continent (Vasudeva & Mogaji, 2020).

A research gap in the quantitative content analysis of mission statement's corpus (text) patterns exists (Marquez, 2016). This examination of the corpus has recently gained quantitative focus aided by digital software that offers a new approach to MS theory and practice (David et al., 2014). Content analysis through text trends and patterns reveals the underlying unseen connections of various HEIs (Clark, 2012). This enables strategic differences between HEIs to be visible.

An MS is translated into comprehensive objectives that are actionable resulting in quantifiable performance by an organisation (Rigby & Bilodeau, 2018). MS research has avoided quantitative analysis with the majority opting for case study descriptive methodologies (Alegre, 2018). While qualitative research offers in-depth insight, the theorizing of MS similarities and differences requires large-scale quantitative analysis in order to test the significance of MS components (Seeber et al., 2019). Research focus on the global north has not only overshadowed international studies (Bartkus et al., 2000) but has led to no empirical discernment into African higher education mission statements (Vasudeva & Mogaji, 2020).

The majority of MS research focussed on sales are driven fields such as business, management and accounting has left the education field in the dark (Cortés-Sánchez, 2018). Therefore, there exists a gap to utilise modern innovative software such as Voyant Tools© to examine text and corpus patterns that would otherwise be difficult to achieve through human systematic analysis (Marquez, 2016). These innovative tools allow researchers to extract meaningful insight and develop novel hypotheses as data mining aids researchers in the process of description, estimation and prediction of their dataset (Larose, 2010).

This study will contribute to the sparse collection of MS content analysis studies on HEIs. It will be the first study utilising content analysis on Zambian HEIs and offering insight into differences between public and private HEIs. HEIs strategists and their accreditors will gain valuable insight into these differences. Additionally, the open access database of the Voyant Tools© software will allow access to the MS dataset for Zambia which will set the path for future comparisons and replications regionally and internationally.

The following research questions guided this study:

1. How do mission statement components differ between public and private HEIs in Zambia?
2. How are Zambian HEIs in Zambia grouped according to mission statement content. Are there differences between public and private HEIs?

2.0 LITERATURE REVIEW

2.1 Mission Statement Origin, Definition and Purpose

The mission statement is defined as a central document that is the driver of operations and ethics of an organisation (Toh, 2017). An MS is also known as a creed statement, statement of beliefs, statement of business purpose and statement of philosophy (Bayrak, 2020). Stating an organisation's current state it outlines the reason for the existence (Babnik et al., 2014). In the field of education, it will outline an HEI's profile, state its aims, beliefs, objectives as well as the direction the HEI intends to take (Guimarães et al, 2020). HEIs' mission statements are widely known to include matters in research, teaching, and public service (Scott, 2006).

It is suggested that an MS is a key communication tool targeting stakeholders in order to publicly state an organisation's identity (Peyrefitte & David, 2006). Peyrefitte & Davids' study evaluating 4 industries found that the MS components included depended on each industry's unique pressures. An MS is said to have four objectives. It firstly sets the tone for the organisation's direction and secondly provides scope for controlling this direction. Thirdly, it helps staff members to make decisions that will be aligned to the organisation's MS. Lastly, it provides a shared motivating purpose for all staff (Bartkus et al., 2000).

The MS was first introduced in 1974 by Peter Drucker consisting of a three-sentence structure that must answer the following four questions: what does the company do?; what does the company stand for?; who is the company?; and why does the company exist?. Since its introduction academics have attempted to show the significance of the MS in HEIs with mixed results. Davis et al (2007) found that the ethical content in an MS has a significant influence on the perceived character traits of students. The usefulness of mission statements has been critiqued citing it may be a mere checklist requirement for accreditation purposes with many having similar format if not identical components (Ketterer, 2015; Bartkus, 2000). It is argued that an MS does not always reflect what the organisation exhibits (Alegre, 2018). A study conducted in Ghana found that staff members were unaware of the existence of their HEI mission statement (Ganu, 2013). However, neither critiques nor advocates have unequivocally proved that an MS helps or hinders an organisation's performance (Sridhar, 2007).

The most prolific work on the components of mission statements is by Pearce and David (1987) outlining eight key components namely: specification of target customers and markets; identification of principal products and services; specification of the geographic domain; identification of the core technologies; expression of commitment to survival, growth, and profitability; specification of key elements in the company philosophy; identification of the company self-concept; and identification of the firm's desired public image. In 1989 a ninth component (concern of staff) was added following a study by David in a content analysis of 75 services and manufacturing organisations. This study will check the presence of these five components in Zambian HEIs with a keen interest in differences between public and private HEIs.

Another contemporary study carried out by Ackoff (1987) outlined four components that focused on how an organisation maintained its competitive edge in its field. The study stated

that in order for an MS to be useful it needed to include measurable objectives, state organisation's differentiation from others in the field, define its core business as well as how the organisation satisfies its stakeholders.

A 21st-century study attempted to shift the focus from U.S mission statements. The study by Bartkus (2004) analysed U.S, European and Japanese organisations and found that regional differences existed with the U.S and European mission statements mentioning stakeholders more frequently than their Japanese counterparts. Japanese mission statements mentioned the stakeholders "investors" and "employees" less frequently than their counterparts. Barkus' study outlined eight components of mission statements namely: Industry; Target customer; Geographic scope; Values and philosophy; Motivation (societal benefits and excellence); Distinctive competency; Future orientation; and Financial objectives.

2.2 Higher Education Mission Statement Studies

HEIs began to construct formal mission statements in the 1980s as the "invisible hand" guiding all facets of the organisation as a key strategic tool (Kotler & Murphy, 1981).

One of the first MS studies on HEIs to utilise the Pearce and David framework (borrowed from the business sector) analysed 93 public, private and secular HEIs in the United States. The findings showed that only 7 out of 9 components from Pearce and Davids were found. The 7 components present were: targeting clientele; products; geography; commitment; philosophy; self-definition; and public image (Newsom and Hayes, 1991). These 7 components present concurred that the business sector framework of mission statements applies in higher education. (Newsom & Hayes, 1991. Public HEIs found geography as the most important component while private and secular HEIs found public image as key.

While previous studies carried out a qualitative approach, recent advancement in analytical software has seen an emergence of quantitative studies that have allowed larger datasets to be analysed. Kosmützky and Krücken (2015) studied the mission statements of 110 German HEIs concluding that HEIs formed clusters each in a unique competitive niche that had similarities in three areas: image, founding conditions and subject profile. This meant that the visual image used in the MS depended on the founding era of the HEI with four clear clusters namely: classical universities formed in the 19th century; technical schools upgraded to universities; reform universities; and highly specialised universities. The subject profile clusters meant that HEIs would highlight any disciplinary specialisation in the MS. The most stable area determining which cluster a university fell into was the founding condition. This condition drove finding aligned with that of a study by Efe and Ozer (2015).

Analysis of 151 HEIs mission statements in the United Kingdom revealed that a balance between external and internal stakeholders' expectation has to be struck (Seeber, 2019). Additionally, while HEIs in the country may have similarities, those that share close geographical proximity emphasis is placed in MS to differentiate themselves from their neighbours in order to minimise competitive overlap.

Brexit analysis of the clusters in mission statements of the top 250 HEIs in the world found that four clusters existed namely "Education Philosophies", "Strategic Orientation", "Social Responsibility" and "Values to Stakeholders".

The most recent content analysis of 36 mission statements of African HEIs was carried out utilising thematic analysis by Vasudeva & Mogaji (2020). In the thematic analysis, the academic must repeatedly read the mission statements in order to familiarise themselves with the content. This study utilised a qualitative analytical software tool using an independent data coder. This study then identified the five MS components utilised by Arias-Coello, et al. (2018) namely: Who are we?; What do we do?; How do we do it?; For whom do we do it?; and How do we differentiate ourselves from other universities?. This study strayed away from the use of the 9 components of Pearce and David (1987) that is commonly utilized in other studies due to being outdated. However, the study did acknowledge that the use of the five components still required empirical validation. The purpose to gauge African HEIs strategic intent and marketing found three common themes of teaching, research, and service to society.

2.3 Public Versus Private Heis

A study by Morphew and Hartley (2006) on MS differences between private and public HEIs in the U.S. found that the elements included in an MS depended on the type of Institution. The study identified and coded over 118 unique MS components. While components such as diversity were common across institution types, the study found distinct differences between public and private HEIs. Public HEIs emphasised the service to the local community more frequently while private HEIs focused on their academic offering. The study however pondered the hypothesis of regional MS similarities which they did not focus on.

Another U.S. focused analysis by Wang et al. (2007) utilised the city of Texas HEIs looking at MS differences between HEI offering a 2-year college degree and those offering a 4-year University degree. This study identified 15 themes. Following the identification of the themes, significance testing was carried between the two-degree types for each theme. Eight of the fifteen showed statistical significance.

Another complementary study on private versus public HEIs carried out by Marquez (2016) analysed 206 mission statements and found that institutions differentiate themselves in their market. Public institutions utilized words that conveyed the characteristics of being common, certain, insistent, and complex compared to their counterparts (private institutions).

A mission statement is an instructional tool helping stakeholders know which activities conform to the organisation's imperatives and which do not (Morphew & Harley, 2006). This inspires the staff to act accordingly. Firmin and Gilson (2009) analysed the components of 107 mission statements from HEIs of the Coalition of Christian Colleges and Universities (CCCU) in the U.S. and found that the frequency of themes such as "Christianity", "Service" and "Education" was prevalent.

2.4 Content Analysis

Text mining in the field of social sciences is sparse but it allows for the quantitative analysis of qualitative datasets (Hetenyi, 2019). Historically human content analysis required a lengthy complex process of coding qualitative datasets after the academic immersed themselves in the text (repetitive reading). It also required another set of researchers for validity and reliability to confirm appropriate coding. Modern-day content analysis however is aided by software that allows for large volumes of text (corpus) to be analysed (Hokkanen, 2019).

Innovative content analysis software tools such as Voyant Tools© allow for large corpus examination and themes to be seen that would not be possible through the human review (Wagner 2019). Simply put, Voyant tools© and similar software analyse corpus usage, diversity, densities and correlations. Corpus that are vital words such as nouns, verbs, adjectives, and adverbs will be analysed by Voyant Tools© while corpus that are not vital such as conjunctions, prepositions and common words such as "the" and "a" can be excluded in the analysis by adding them to a "StopWord" list. Voyant tools© produces visualizations that allow the style of writing to be deciphered (Jockers, 2015).

A global content analysis of 248 mission statements from six continents utilising Voyant Tools© showed the global trend of research is at the cornerstone of most mission statements. Other frequently used words found included "knowledge", "students", "education" and "university".(Cortés-Sánchez, 2018). Representing 83% of the mission statements sampled, public HEIs focused on "students" while their private HEIs counterparts focused on "education". Another noticeable difference is that public HEIs focused on the local community while private HEIs on global perceptive. This aligned with findings of Kosmützky and Krücken (2015) that observed clusters of HEIS each in a unique competitive niche with MS similarities. This is not aligned however to the findings of Efe & Ozer (2015) that MS components are market-driven.

Bayrak (2020) carried out the most recent global content analysis to date with a content analysis of 227 mission statements spanning five continents. Utilising the software SAS Enterprise Miner to carry out text mining in order to determine the key terms and themes. The findings showed that "research", "knowledge " and "education" as the most frequent terms globally. In African HEIs the terms "research" and "education" were the most frequent terms and the themes seem to suggest that African universities are focusing on academic readiness and skill development to mould their students to be productive citizens. Bayrak found through cluster analysis that while all five continents had emphasised serving the community, African HEIs "focus on encouraging innovations, scientific research and development, and improving and enhancing the society through education".

3.0 METHODOLOGY

3.1 Data

The Higher Education Authority (HEA) was established under the Higher Education Act No. 4 of 2013 to regulate HEIs in Zambia. The list of registered HEIs was retrieved from their website (https://www.hea.org.zm/index.php). Utilising this list the Universities' websites were explored in order to retrieve their mission statement. An additional University was

included as it is not governed by the HEA but is a quasi-public HEI that exists under an enactment (Act No 5 of 1998). This particular HEI was included as a public HEI. The inclusion criteria of the missions statement dataset was that only mission statements in English and those distinctly titled as "Mission" or "Mission Statement" would be captured. Universities that had multiple HEA listings (due to their multiple campuses) had their mission statement only included once in the dataset. Table 1 displays the distribution of the mission statements according to the type of HEI.

Table 1 - Distribution of the mission statements according to the type of HEI

	Number of Higher Education Institutes (HEIs)		
	Total	Mission Statement Found	No Mission Statement Found
Private HEIs	58	37	21
Public HEIs	9	7	2
Other	1	1	0
Total	**68**	**45**	**23**

The methodology utilised for each research question is outlined below.

Research Question One: How do mission statement components differ between public and private HEIs in Zambia?

Method: Cirrus tool of Voyant Tools© produces word clouds with visualisations according to word frequency. Most frequent words are placed at the centre of the cloud and appear larger in size. The colour of the words and their absolute position is not significant therefore should you resize or reload the words may appear in a different position. Corpus Terms and Summary tools will provide output data such as the most frequently used terms. Collocates tool of Voyant Tools© produces a count of the words that appear next to each other frequently (Wagner, 2019; Hokkanen, 2019).

Research Question Two: How are HEIs in Zambia grouped according to mission statement content. Are there differences between public and private HEIs?

The Voyant Tools© corpus for the two datasets can be viewed utilising the following links.

Zambia Public HEIs:

https://voyant-tools.org/?corpus=45c07dfa1a089257c79f4dd3c301f85a

Zambia Private HEIs:

https://voyant-tools.org/?corpus=5c500e7c9019e30ceac6fe0bb3722e8e

4.0 RESULTS AND DISCUSSION

According to David (2013), A mission statement should not exceed 250 words. Both the public and private HEIs of Zambia meet this guideline. The average word count for public HEIs 20.25 while private 40.76 words. The Cirrus tool results show that the public HEIs mission statement top 5 most frequently used words are "research", "provide", "consultancy", "development" and "education". While private HEIs top 5 words are "education", "university", "students", "quality" and "provide". These results suggest public HEIs focus is macro-level development of the country. The results for private HEIs emphasize their goal to produce professional students ready for their respective market-driven fields. Figure 1 displays the Cirrus of public HEIs and Figure 2 the Cirrus of private HEIs.

Figure 1: Public HEIs Cirrus

Figure 2: Private HEIs Cirrus

The collocates tool results show that the strongest collocate for Public HEIs are the terms "research" and "consultancy" with a count of 3. The strongest results for Private HEIs are the terms "quality" and "education" with a count of 8. These results further exhibit Public HEIs

emphasis on services tailored to practical industry application and development while Private HEIs focus on providing education equipping students with relevant professional skills.

Table 2: Public HEIs Collocates

Term	Collocate	Count (context)
research	consultancy	3
teaching	research	3
consultancy	research	3
research	services	2
research	quality	2
provide	driven	2
health	order	2
health	contribute	2
education	research	2
consultancy	services	2
consultancy	quality	2
driven	provide	2
contribute	health	2

Table 3: Private HEIs Collocates

Term	Collocate	Count (context)
quality	education	8
education	provide	6
provide	quality	6
provide	education	6
education	quality	5
education	sciences	3
education	provider	3
quality	provide	3
personal	professional	3
relevant	quality	3
professional	personal	3

The Links results for Public HEIs show their focus on strategy of research and consultancy as well as education philosophy to be a provider of quality education. Private HEIs however show focus on their education philosophy and value to stakeholders such as students. Private HEIs cluster around the word "University" exhibits the Pearce component "identification of the company self-concept". Both types of HEIs are exhibiting the clusters identified in a study by Breznit (2014) of "Education Philosophies", "Strategic Orientation", "Social Responsibility" and "Values to Stakeholders". These distinct clusters seen in Zambian HEIs are similar to studies such as Marquez (2016) and Morphew and Hartley (2006) who both saw differences between Public and Private HEIs.
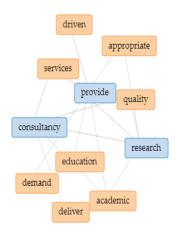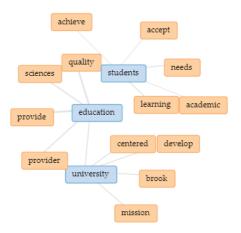
Figure 3: Public HEIs Links

Figure 4: Private HEIs Links

5.0 CONCLUSION

Contrary to Kosmützky and Krücken (2015) Zambian HEIs are yet to form disciplinary specialisation clusters in their mission statements due to the relatively young age of most HEIs in the country. However, the distinction between Public and Private HEIs is clear in their mission statement components. Following this study further research is needed to investigate if these distinctions are also evidently using other parameters such as the size of HEI, location or types of academic offering.

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