

DOCUMENTOS DE INVESTIGACIÓN

Facultad de Administración

No. 152, ISSN: 2463-1892
Septiembre de 2017

Mission and Vision Statements of Universities Worldwide - A Content Analysis

Julián David Cortés-Sánchez



Universidad del
Rosario

**Mission and Vision Statements of Universities
Worldwide - A Content Analysis**

Documento de investigación No. 152

Julián David Cortés-Sánchez

Universidad del Rosario
Escuela de Administración
Editorial Universidad del Rosario
Bogotá D.C.
2017

Mission and Vision Statements of Universities Worldwide - A Content Analysis / Julián David Cortés-Sánchez. -- Bogotá: Editorial Universidad del Rosario, 2017. ix, 45 páginas. -- (Escuela de Administración, Documento de investigación; No. 152) Incluye referencias bibliográficas.

Planificación educativa / Educación superior -- Planificación / Declaración de la misión / Planificación estratégica / I. Universidad del Rosario. Escuela de Administración / II. Título. / III. Serie.

378.107 SCDD 20

Catalogación en la fuente -- Universidad del Rosario. CRAI

JDA

octubre 2 de 2017

Julián David Cortés-Sánchez

Corrección de estilo
Claudia Ríos

Diagramación
Fredy Johan Espitia Ballesteros

Editorial Universidad del Rosario
<http://editorial.urosario.edu.co>

ISSNe: 2463-1892

* Las opiniones de los artículos sólo comprometen a los autores y en ningún caso a la Universidad del Rosario. No se permite la reproducción total ni parcial sin la autorización de los autores.
Todos los derechos reservados.

Primera edición: Octubre de 2017
Hecho en Colombia
Made in Colombia

Contents

Introduction	7
I. Literature Review.....	9
A. Mission Statements	9
B. Vision Statements	16
II. Methodology	18
A. Data.....	18
B. Content Analysis	20
III. Results.....	21
A. Overall Analysis.....	21
B. Continents.....	22
C. Size	24
D. Focus.....	25
E. Research	27
F. Age Brand	28
G. Status	29
IV. Discussion.....	31
V. Conclusions.....	34
Acknowledgements	36
References.....	37
Annex.....	43
QS Classifications.....	43

Mission and Vision Statements of Universities Worldwide - A Content Analysis

Julián David Cortés-Sánchez*

Abstract

Mission and vision statements (MS and VS) are the most frequently used strategic planning tools. In the early 1980s, they were adopted by the higher education sector. Both tools are now crucial practices implemented in universities worldwide. Despite the broad literature on the topic, most of the results are restricted to national contexts and based on reduced samples with no open access digital data. This study used *Voyant Tools* to perform a content analysis of 338 MS and 291 VS from universities worldwide. The main results show a VS trend towards global influence, an overall push for research and teaching, an absence of quantitative elements, and no similarities between terms used by private firms and universities; MS tend to be longer than VS, but South American MS and VS tend to be longer and public universities focused on individuals (students) and private universities focused on processes (teaching).

Keywords

Mission statements; Vision statements; Universities; Content analysis; Higher education.

* Principal Professor, School of Management, Universidad del Rosario. M.Sc. in Interdisciplinary Development Studies, Universidad de Los Andes. Correo electrónico: julian.cortess@urosario.edu.co

Resumen

Las misiones y las visiones son las herramientas más usadas en la planeación estratégica. El sector de la educación superior adoptó su uso en los inicios de los años 80 y actualmente son prácticas cruciales implementadas en las universidades a nivel mundial. Si bien los estudios en este tema han avanzado sustancialmente, la mayoría de resultados están restringidos a contextos nacionales y están basados en muestras reducidas sin acceso abierto en formato digital. Este estudio elaboró un análisis de contenidos en 338 misiones y 291 visiones de universidades a nivel mundial, haciendo uso de *Voyant Tools*. Los resultados principales muestran una tendencia de las visiones hacia una influencia global, un clamor general por la investigación y la docencia, ninguna similitud entre los términos empleados en el sector privado y en las universidades; las misiones tienden a ser más largas que las visiones, hay ausencia de elementos cuantitativos; las misiones y visiones de Suramérica tienden a ser más largas y que las universidades públicas exhiben un énfasis en los individuos (estudiantes) y las privadas, en el proceso (enseñanza).

Palabras clave

Misión, visión, universidades, análisis de contenidos, educación superior.

Introduction

Mission and vision statements (MS & VS) are the most frequently used management tools for strategic planning on the planet (Bart, 2001a). Their main purpose is to answer three essential questions for any organization: *what is our business? what should it be? And, where do we want to be in the future?* Scholars on the topic had studied principally MS and VS optimal components, the internal/external factors that may shape them, and their relationship to behavior and performance in order to establish if MS and VS, do matter. Remarkable findings such as MS and VS comprehensive and key components analytical frameworks (Campbell, 1989; Pearce, 1982; Lucas, 1998; Tarnow, 2001); qualitative and quantitative performance evaluation frameworks (Baetz & Bart, 1996; Bartkus et al., 2005); and studies conducted on private (Duygulu et al., 2016), public organizations (Bart & Tabone, 1999; Hyndman & Eden, 2000) and NGOs (Patel et al., 2015). Additionally, MS and VS published in the Internet as public information and the improvements in content analysis software improved the not-returned physical mailing problem and the biased-manual content analysis (Bart, 1996a; Bart & Hupfer, 2004).

The engagement of the higher education sector in the use of MS and VS dates back to the early 1980s (Davies & Glaister, 1997; Kotler & Murphy, 1981). Scholars on the topic emphasized on the relation between MS content (Cochran & David, 1986), overall objectives (Firmin & Gilson, 2010) and their relation to institutional status (i.e. private or public) (Morphew & Hartley, 2006), and external factors (Seebe et al.2017). Regarding VS, literature is scarce, providing evidence on the differences between private and public universities' VS (Efe & Ozer, 2015).

Despite the developments mentioned, the literature on both MS and VS in universities disclose four gaps: absence of transnational studies; disengagement from the global-south; scarcity of attention on VS; and no discernible open access digital dataset for replications or further studies. Bearing this in mind, this study has three aims: to conduct a transnational study regarding MS and VS in universities by means of content analysis, to amplify the sample of previous studies, and to provide an open access digital dataset on MS and VS of universities worldwide.

After this introduction, we present a literature review. Later, we conduct a content analysis on 338 MS and 291 VS from worldwide universities ranked in the Quacquarelli Symonds' (QS) world university ranking from 2016. The software used was *Voyant Tools*. The analysis was conducted in groups of universities by continent, size, focus, research level, age brand, and status. Then, we discuss the results. Finally, we present the conclusions and limitations.

I. Literature Review

A. Mission Statements

The literature in English-language on both MS and VS can be divided into three strands: seminal, mainstream, and critical. The objectives of the seminal strand are twofold: to advance into a business purpose understanding, through philosophy and reflection, and to comprehend the relation between MS and performance. From a philosophical perspective, Jones (1960) proposed a framework as a decision-making guidance for businessmen and organizations composed by two ideas: the long-term goals and the sets of means to achieving these goals. Jones argued that an organization's *permanent goal* should be to *furthering the welfare of an organization's beneficiaries* (Jones, 1960, p. 95). The same year, Theodore Levitt gave birth to the strategy school of mission (Campell & Yeung, 1991). Levitt (1960) argued that several companies have the wrong business definition due to a narrow scope (e.g. Apple's core values and definition was not to be a company that produces computers but a company that produces high-tech products for people who passionately want to change the world). Moreover, Levitt sustained that a CEO: "must set the company's style, its direction, and its goals" (Levitt, 1960, p. 149). Afterwards, Drucker became aware of the importance of the MS in a business' strategic planning; however, he also became aware of its potential for misunderstanding (Drucker, 1973; Bartkus et al., 2000). To resolve this, Drucker argued that defining a MS was equivalent to answering the questions "what is our business and what should it be?" (Drucker, 1973). All these reflections lead to the first empirical studies in the 1980s, developed to analyze the content of several MS and its relation to performance. After analyzing the contents of a few corporate MS, Pearce (1982) suggested that eight key components could be identified: (1) target customers, (2) basic products or services, (3) primary markets, (4) principal technology, (5) concern for survival, growth, and profitability, (6) company philosophy, (7) company self-concept, and (8) concern for public image. By means of content analysis using Pearce's eight key components and the Fog Index for readability, Cochran and David (1986) concluded that MS should improve their readability and tone to maximize their organizational

image. Anticipating Campbell's (1989) reasoning on the importance of MS for organization to outperform those that do not have one (Figure 1), Pearce and David (1987) argued that higher performing firms have a comparatively more comprehensive MS regarding Pearce's (1982) key components, and that corporate philosophy, self-concept, and public image were essential components to include in a MS.

Figure 1. What is a mission?



Source: Campbell, 1989, p. 4.

The objectives of the mainstream strand are threefold: to refine the methods of MS content analysis, to examine the MS relation/effect with performance; and to improve the sample limitations of the seminal-empirical studies. Christopher Bart is one of the most prolific scholars on this strand, and in MS topic in general. Bart and colleagues have chronologically established the following in a variety of studies: (1) ten MS categories (*i.e.* financial objectives, non-financial objectives, values, beliefs, philosophies, definition of success, number one priority, specific product definition, specific market definition, basis of competition, number of stakeholders mentioned, and stakeholders identified); (2) five key reasons to develop MS (*i.e.* to guide the strategic planning, to define the organization's scope of business operations/activities, to provide a common purpose/direction, to promote a sense of shared expectations, and to guide leadership styles); (3) the typical MS contains one financial objective (or none at all), one or two non-financial objectives, one value/belief/philosophy statement, the organization's

definition of success, the organization's number one priority, a definition of the organization's strategy and reference to one stakeholder (Baetz & Bart, 1996); (4) no significant difference between firms with and without mission statements (in terms of return on assets); (5) MS development process satisfaction was correlated with the employees' behavior influence (Bart & Baetz, 1998); (6) major differences between industrial sector MS and high-tech MS, and the high impact of MS in organization members' behavior (Bart, 1996a); (7) tenuous relationships between MS components and several financial measures in industrial and consumer goods firms (Bart, 1996a); (8) MS should be sufficiently general in their orientation; (9) quantitative objectives should be used in other documents/spaces; (10) financial objectives do not motivate employees and; (11) MS benefits are both emotional and psychological (Bart, 1997b); (12) MS components such as distinctive competence/strength, specific patients, unique identity and concern for satisfying patients showed a significantly positive correlation with performance in hospitals (Bart & Tabone, 1999); (13) MS components such as grand inspiration, benefactors, competitive orientation and business definition were positively related to various measures related to behavioral, financial performance and mission achievements; (14) hospitals' employees and society were largely absent; (15) MS are not independent from the institutional environment; (16) MS written as a narrative/history-telling can reach a broad audience and produce an emotional commitment to the organization (Bart & Hupfer, 2004); (17) the novelty of the corporate communication strategies by posting the MS in the world wide web (Bart, 2001a); (18) the validity of MS to measure and report intellectual capital components within organizations (Bart, 2001b); and (19) that MS awareness on both board and senior management is crucial to reinforce employees' commitment (Bart & Bontis, 2003).

Alongside this research agenda, several studies also contributed the following observations a restrained use of MS in the late 1980s in the US (Leuthesser & Kohli, 1997); a positive impact on the adoption of MS and its relation to performance in 304 public schools in the US by performing the first robust impact evaluation reported in the literature (Weiss & Piderit, 1999); weaknesses in the ability of UK public agencies to link objectives to targets developed during MS implementation (Hyndman & Eden, 2000); a growing MS implementation in SMEs in the UK, the "long term profit, survival and growth" component as their first content priority, and the CEOs positive

perception of the importance of a formal MS to improve performance (Analoui & Karami, 2002); a positive relation between MS and performance in firms in the multimedia domain in Netherlands (Sidhu, 2003); a positive relation between MS components as “rule of business” (e.g. be responsible to the society or to empathized in corporate values communications) and financial performance in firms from Europa, Japan, and U.S.A (Bartkus et al., 2005); a higher financial performance in firms that included eight of the nine MS components proposed by Pearce and David (1987) in US firms (Williams, 2008); firms with strong MS value their own organizational capital and tend to adopt policies to preserve it and that MS and its embedded policies contribute to better corporate performance in Japanese firms (Hitora et al., 2010); a trend to globalized influence/operations due to Internet, and “going green” in MS components in firms in the US (King et al., 2010) and Turkey (Yozgat & Karatas, 2011); the added value per employee was the only performance measure associated with the (non)existence of a MS (Dermol, 2012), and the predominance of five orientations as MS components (*i.e.* stakeholders, orientation towards stability, cooperation and innovation, and development and growth) both in firms from Slovenia (Babnik et al., 2014); a positive relation between MS and organizational performance moderated by affective commitment in NGOs from 30 countries (Patel et al., 2015); and that three MS components (*i.e.* survival, growth, and profit; philosophy and value; and public image) were the common independent variables that explained robustly high performance in Turkish SMES (Duygulu et al., 2016). Those findings appear to be diverse and intricate to synthesize. To clarify, Dasmidt et al. (2011) conducted a meta-analysis arguing that MS do matter and that they have a measurable association with financial performance (Dasmidt et al., 2011). Although, that meta-analysis only used 14 studies. (*e.g.* The most cited meta-analysis on *business, management and accounting* used 52 studies [Orlitzky et al., 2003]). Consequently: “[is it] Time to shelve the discussion? Not necessarily” (Dasmidt et al., 2011, p. 479).

The objective of the critical strand was to controvert the importance and usefulness of MS to organizational planning and performance. Ireland and Hitt (1992) listed nine reasons why companies might not employ a MS (*i.e.* no one would read it, too much effort/work, impractical, an academic exercise, do not need it, would reveal too much confidential information, lack of generalist skills to develop, operational matters come first, and comfort with the *status*

quo). However, this same study concluded that MS stimulate organization's members to engage in information conveyance and convergence processes and motivation. In point of fact, Bart (1997b) found statements regarding MS, such as: mission impossible, mission ambiguity, mission dissatisfaction, wrong mission, development process dissatisfaction, no influence over behavior, no involvement; and improper use. Overall: "the vast majority [of MS] are not worth the paper they are written on and should not be taken with any degree of seriousness" (Bart, 1997b, p. 12). Nevertheless, the bountiful evidence produced by Bart and colleagues after 1997 refute these anecdotes, as noted in the mainstream strand section. One of the few studies reporting showing no correlation between MS and performance was conducted by O'Gorman and Doran (1999); however, the study's sample was small (n=64) and it was conducted only in Irish SMES. In sum, the argumentative corpus of the critical strand is reduced to reflexive considerations in some cases and lacks on empirical evidence in other cases.

When focusing on MS in universities, a growing number of studies can be found that can essentially be located in the mainstream strand (Table 1). While the MS started to be considered as a cornerstone of the emerging *strategic planning for higher education* field in the 1980s (Kotler & Murphy, 1981), it was the work of Cochran and David (1986) one of the firsts to consider MS, its content, and its effect on corporate communications in business schools, as other studies were conducted afterwards on different types of "academic units" (e.g. see Orwig and Finney [2007] for AACSB accredited business schools; Langelotto et al. [2015] for extension master gardener programs; Fitzgerald and Cunningham [2016] for technology transfer offices; or Wedrich et al. [2012] for a department of ophthalmology). In the mid-2000s, studying the MS of universities began to receive more attention. The studies that followed were conducted primarily in the US and Germany. Their common objective was to understand the MS content and its effect on universities' identity and behavior, and their capacity to respond to the social, political, and economic environment.

The unvarying methodology was content/textual analysis. The mean of the samples was 89.6. Two of the concluding remarks gave an overall impression of sameness rather than distinctiveness in the MS analyzed (i.e. isomorphism) and a MS distinctiveness in cases where universities shared geographic-proximity to increase their differentiation in the local market.

Table 1 Recent literature in English-language on MS of universities

Year	Author(s)	Location	Objective	Methodology	Results
2006	Morphew & Hartley	US	To understand what institutions actually say in their MS and by exploring the relationship between its rhetorical elements and the institutional type.	Content analysis (n=300 private/public universities)	Institutional control (public vs. private) predicts MS components. A few elements appear more frequently than others (e.g. commitment to diversity). Prevalence of elements related specifically to “service”.
2008	Atkinson	US	To recognize patterns of taken-for-granted behaviors and to discuss if these static cultural-cognitive patterns serve to promote higher education ideology or work against discourses that promote organizational change and evolution	Network analysis of lexical patterns	University MS operate as cultural-cognitive indicators, or ideational indicators of group solidarity, shared beliefs, and human agreement.
2010	Firmin & Gilson	US	To identify overall objectives and how mission statements set the tone for institutional milieu.	Content analysis (n=107 member institutions of the Coalition of Christian Colleges and Universities)	The dominant MS components were education, Christian confession, service, society, life, and academics. There was relatively little attention to the distinctive nature of Christianity (e.g. Christ, faith, God, Bible).
2011	Kuenssberg	Scotland	To analyze what Scottish universities reveal about their MS in the challenging environment of higher education.	Textual analysis (n=20)	The MS convey an overall impression of sameness rather than distinctiveness and a lack of focus on some key areas (e.g. student’s experience)
2012	Kosmützky	Germany	To analyze for which mission statements have been introduced and what universities are stating in their mission statements.	Content analysis (n=42 public universities)	MS contribute to constructing corporate images. MS express the tasks that are set for them by German higher education law and supplement these missions with distinct images.
2013	Hladchenko	Germany	To determine how universities define themselves in order to be differentiated from other higher education institutions.	Content analysis (n=30)	The MS of universities must be developed in an open discussion with the participation of the university members. The most popular commitments of the MS were equal rights and opportunities for men and women, internationality, research and teaching unity, quality assurance, and interdisciplinarity.

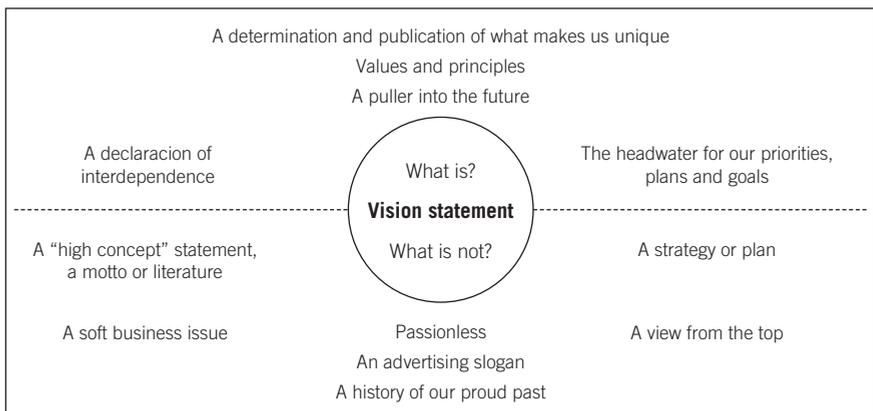
Year	Author(s)	Location	Objective	Methodology	Results
2014	Ellis & Miller	Jamaica	To analyze the MS component of a sample of universities of Jamaica.	Structured Word Identification and Frequency Totals (n=7)	Universities' MS had very little in common and do not reflect the principles and goals of Education for All (UNESCO).
2015	Kosmützky & Krücken	Germany	To analyze for which mission statements have been introduced and what universities are stating in their mission statements.	Combined discourse analysis, sequential analysis, and content analysis (n=110 universities and universities of applied science)	MS allow universities to position themselves in particular niches and competitive groups, in which group similarities are highlighted vis-à-vis to differences of other groups.
2015	Efe & Ozer	Turkey	To determine how do mission and VS of state and private universities differ in content, and if there are any differences reflective of propounded institutional aims.	Corpus-assisted discourse analysis (n=171 public and private/foundation universities)	The MS and VS are marked by a need for reassuring their legitimacy and the demands of a growing tertiary market. Economic, political, historical, and cultural backgrounds shape MS and VS.
2016	Hladchenko	Ukraine	To analyze how the universities interpret and respond to the changes in the institutional environment, claiming their organizational identity through MS after the Revolution of Dignity (2014).	Content analysis (n=46)	In the explored MS isomorphism can be traced, claiming both education and research.
2016	Deus et al.	Brazil	To investigate the mission statements from 30 leading Brazilian universities, evaluating the statements based on a sustainable model that involves an environmental management system, public participation and social responsibility, and sustainable education and research.	Content analysis (n=30)	Few universities have a MS with clear sustainability aspects in their mission statements.
2017	Seeber et al.	UK	To explore the factors affecting the content of universities' MS.	Contents analysis and regression models (n=123)	Universities choose claims that are plausible to external constituents and consistent with the values of internal members, they adopt claims similar to universities belonging to the same organizational form while differentiating from geographically closer universities in order to reduce competitive overlap.

Source: the author.

B. Vision Statements

In the seminal strand, Collins and Porras (1991), as Jones (1960) on MS, stated that VS consists of a guiding philosophy which includes purpose and core beliefs, and a tangible image. Lucas (1998) reflected, alongside Drucker (1973), on the *misunderstanding* of the importance of VS: “We’ve got vision, but we can’t see. That seems to be the situation in many companies” (Lucas, 1998, p. 23) and listed some of the anecdotal reasons to ignore a VS that he had obtained from managers (e.g. “too much trouble to incorporate everyone in the process”, or “we built our company on adversarial principles”). In addition, Lucas listed several reasons to have a VS (i.e. to guide, to remind, to inspire, to control, to liberate) and a first draft on what a VS is and what it is not (Figure 2). Later, Tarnow (2001) bets on “A recipe for mission and vision statements” using a unifying action declaration (UAD). A UAD is a short statement constructed to (1) suggest an action, (2) identify this action vaguely, and (3) include a social categorization. He also turned several VS previously published into UADS (e.g. from “Become the most customer responsive producer of automobile interior trim in North America” to “We trim interiors the way our customers want them” [Tarnow, 2011, p. 187]). Baum et al. (1998) reported the first empirical studies on the significant relationship between VS attributes, such as: (1) brevity, (2) clarity, (3) abstractness, (4) challenge, (5) future orientation, (6) stability, and (7) desirability or ability to inspire; and VS communication and venture growth.

Figure 2. What vision statement is versus what it is not.



Source: Lucas (1998, p. 25).

In the mainstream strand, Kirkpatrick et al. (2002) also found a significant relationship between VS and individual, unit, and organizational performance. When investigating similarities and differences between MS and VS on Swiss firms in different sectors, Ingenhoff and Fuhrer (2010) found a considerable similarity in statements' content as companies position themselves using their competitors as benchmark. The most frequently used MS and VS terms were: (1) sincerity, (2) excitement, (3) competence, (4) sophistication and (5) ruggedness. Additionally, Mansi et al. (2017) analyzed corporate social responsibility-related terms in MS and VS of enterprises in the public sector in India. The more frequent terms were: (1) safety, (2) security, (3) social responsibility, (4) ecology, (5) environmental up-gradation, (6) energy conservation, (7) awareness and (8) energy needs.

In the critical strand, Rahman (2009) argued that VS do not measure up to the standards prescribed in management literature because managers may need to deliberately depart from normative guidelines due to the changing context on the business sector and the market. Nevertheless, as in Ireland and Hitt (1992), that assumption lacks of empirical evidence.

When focusing on VS in universities, it was not possible to identify and construct a specific literature review as in Table 1 because of the availability of English-language studies. In sum, the literature reviewed on both MS and VS is substantial, but also reveals four gaps: the absence of transnational studies (e.g. Bartkus et al. [2005] and Patel et al. [2015]); a disengagement from the global South (e.g. Deus et al. [2016]); scarcity of attention on VS of universities (e.g. Efe & Ozer [2015]); and no discernible open access digital dataset for replications or further studies. Considering this, the present study has the following three objectives: (1) to conduct a transnational study regarding MS and VS in universities by means of content analysis, (2) to amplify the sample of previous studies, and (3) to provide an open access digital dataset containing the gathered MS and VS. This would therefore address the necessity expressed by the academic community for open access data to be made available for replication or further use and transparency (Open Science Collaboration, 2015).

II. Methodology

A. Data

The base dataset used to identify a feasible list of universities for the analysis was the 2016 QS world university ranking. This ranking evaluates universities based on six metrics: (1) academic reputation, (2) employer reputation, (3) faculty/student ratio, (4) citations per faculty, (5) international faculty ratio, and (6) international student ratio. Considering that both (1) and (2) metrics add up to 50% of the overall score and that both metrics are based on a survey completed by 70000 individuals in the higher education community and 30,000 employers, respectively (QS, 2017), universities without these assessments were not considered. Two research assistants explored each university’s website to locate their MS and VS. Only MS and VS in English or Spanish languages were considered. In consequence, the sample was reduced to 338 universities. Table 2 presents the number of universities by continent and MS and VS by country. Table 3 presents the number and percentage of the universities by size, focus, research, age brand, and status. A permanent link to the databases is available: (<https://goo.gl/h4gDtv>). The annex presents the description for each classification item.

Table 2. Number of universities by continent and number of MS and VS by country.

Key	Continent	# Universities.	Key	Country	# MS	# VS
EU	Europe	149 (43%)	UK	United Kingdom	48	46
			DE	Germany	19	8
			NL	Netherlands	12	11
			FR	France	11	6
			CH	Switzerland	8	8
			FI	Finland	7	6
			BE	Belgium	6	4
			DK	Denmark	5	4
			ES	Spain	5	3
			IE	Ireland	4	3
			SE	Sweden	4	6
			IT	Italia	3	1
			AT	Austria	2	1
			NO	Norway	2	2
EE	Estonia	1	1			

Mission and Vision Statements of Universities Worldwide - A Content Analysis

Key	Continent	# Universities.	Key	Country	# MS	# VS
EU	Europe	149 (43%)	PT	Portugal	1	0
			PL	Poland	1	0
			TR	Turkey	1	0
			GR	Greece	1	0
			CZ	Czech Republic	0	1
Sub-Total MS/VS					141	111
NA	North America	88 (25%)	CA	Canada	12	13
			US	United States	75	63
			Sub-Total MS/VS		87	76
AS	Asia	73 (21%)	HK	Hong Kong	6	6
			JP	Japan	13	11
			CN	China	13	11
			TW	Taiwan	8	8
			IN	India	7	7
			KR	Korea	7	6
			MY	Malaysia	5	5
			SA	Saudi Arabia	3	3
			IL	Israel	3	3
			SG	Singapore	2	2
			TH	Thailand	2	2
			ID	Indonesia	1	1
			KZ	Kazakhstan	1	1
			RU	Russia	1	0
LB	Lebanon	1	0			
Sub-Total MS/VS					73	66
OC	Oceania	26 (7%)	AU	Australia	19	21
			NZ	New Zealand	5	5
			Sub-Total MS/VS		24	26
SA	South America	9 (3%)	AR	Argentina	2	1
			BR	Brazil	1	1
			CL	Chile	2	2
			CO	Colombia	2	2
			MX	Mexico	2	2
			Sub-Total MS/VS		9	8
AF	Africa	4 (1%)	ZA	South Africa	3	3
			EG	Egypt	1	1
			Sub-Total MS/VS		4	4
Total #Universities		349 (100%)	Total # MS/VS		338	291

Source: the author based on QS (2016) and university websites.

Table 3. Number and percentage of universities by size, focus, research, age brand and status

Metric	Key	Meaning	#Universities	%
Size	S	Small	12	3
	M	Medium	68	19
	L	Large	188	54
	XL	Extra-large	81	23
Focus	FC	Full comprehensive	97	28
	CO	Comprehensive	222	64
	FO	Focused	24	7
	SP	Specialist	6	2
Research	LO	Low	1	0
	MD	Medium	5	1
	HI	High	49	14
	VH	Very-high	294	84
Age Brand	5	>100 years	223	64
	4	50-100 years	79	23
	3	25-50 years	40	11
	2	10-25 years	7	2
	1	<10 years	0	0
Status	A	Public	297	85
	B	Private	51	15
		N/D	1	0

Source: the author based on QS (2016).

B. Content Analysis

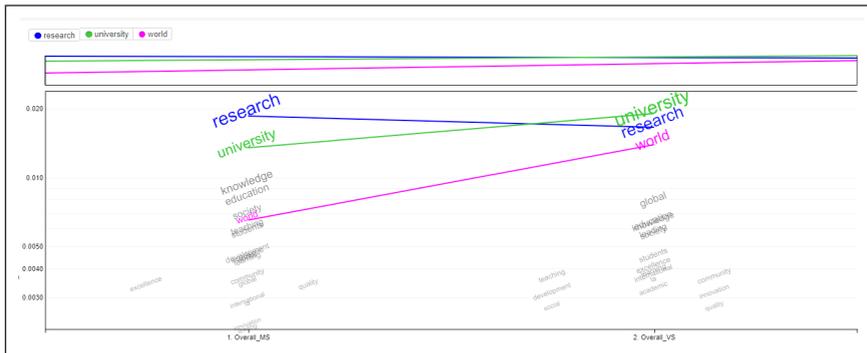
Voyant Tools was used for MS and VS content analysis. It is a web-based text reading and analysis environment that uses more than 20 visualization tools to analyze a text corpus. Version 2.0 was released in April 2016 and it has been used for researches published in peer reviewed journals (Boyle & Hall, 2016), book chapters (Sinclair & Rockwell, 2015) and proceedings (Prayoga & Abraham, 2017; Hermeneuti.ca, 2016).

III. Results

The results of content analyses include (1) terms ratio: a visualization that depicts the changes in the frequency of words included in a corpus where each analyzed group is represented in a vertical column with the highest frequency terms plotted, the bottom x-axis displays the group titles and the left y-axis displays the relative frequencies; (2) the average number of words per sentence; (3) and the most and the least frequently used words. Content analyses were conducted for both MS and VS in: (1) an overall worldwide analysis, (2) by continent, (3) by size, (4) by focus, (5) by research, (6) by age brand, and (7) by status. The discussion of these results is presented in the next section.

A. Overall Analysis

Figure 3 Terms ratio in MS and VS



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

Table 4 Average number of words per sentence and word frequency (Overall MS and VS).

Average number of words per sentence	Higher	25,9 (MS)
	Lower	24,3 (VS)
Most frequently used words	Research	376
	University	341
	World	210
	Knowledge	167
	Education	156

Continue

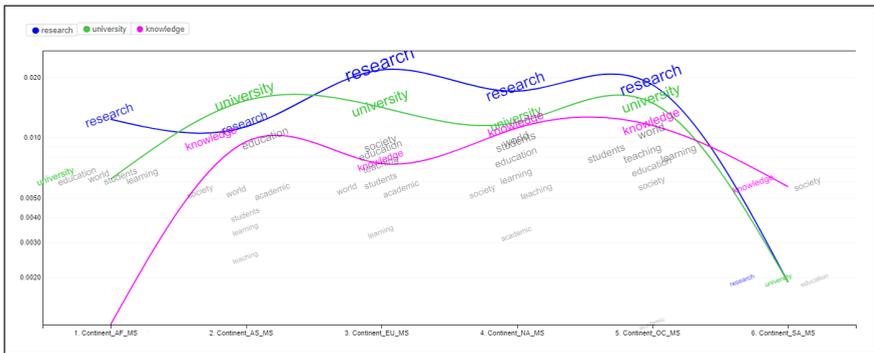
Average number of words per sentence	Higher	25,9 (MS)
	Lower	24,3 (VS)
Most frequently used words	Society	134
	Global	115
	Students	110
	Teaching	104
	Learning	87
Least frequently used words	Enterprising	5
	Preservation	5
	Respect	5
	Heritage	6
	Lifelong	7
	Reputation	10

Source: the author based on QS (2016) and university websites.

B. Continents

Mission Statements

Figure 4. Terms ratio for MS - Continents



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

Table 5 Average number of words per sentence and word frequency in MS – Continents

Average number of words per sentence	Higher	33,1 (SA)
	Lower	23,3 (EU)
Most frequently used words *	Research	251
	University	195
	Knowledge	132
	Education	118
	Society	98

Mission and Vision Statements of Universities Worldwide - A Content Analysis

Average number of words per sentence	Higher	33,1 (SA)
	Lower	23,3 (EU)
Least frequently used words **	Nation (AS)	10
	Graduate (NA)	11
	Human (AS)	13
	Faculty (NA)	14
	Scientific (EU)	12
	Academic (UE)	31
	Teaching (EU)	41

Source: the author based on QS (2016) and university websites.

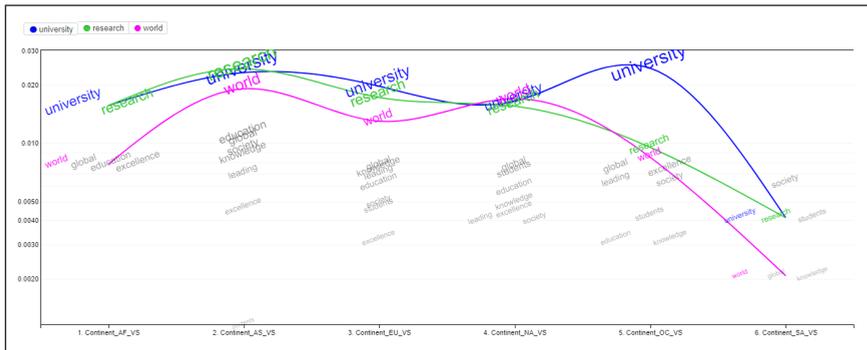
Notes:

*Only the *most frequently used words* analysis is shown here because it had the same results in both MS and VS in all samples.

**The *least frequently used words* analysis presents those words and the sub-sample where they belong (e.g. of Europe [EU] or small universities [S]).

Vision Statements

Figure 5 Terms ratio for VS – Continents



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

Table 6 Average number of words per sentence and word frequency in VS - Continents.

Average number of words per sentence	Higher	32,2 (SA)
	Lower	20,2 (AS)
Most frequently used words	Research	160
	University	184
	World	134
	Education	61
Least frequently used words	Land (NA)	5
	Engineering (EU)	5
	Nation (NA)	11

Continue

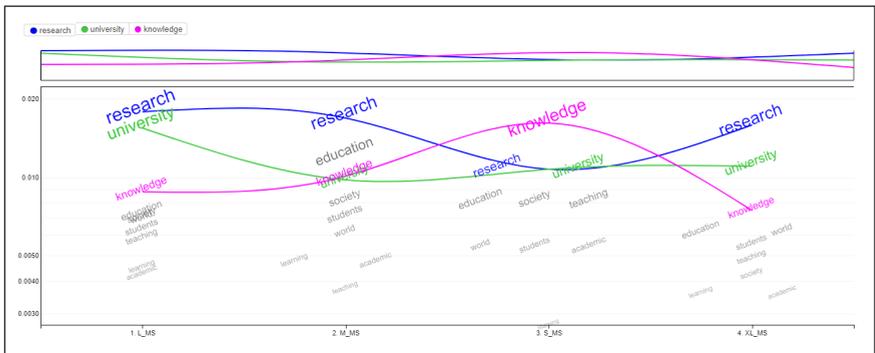
Average number of words per sentence	Higher	32,2 (SA)
	Lower	20,2 (AS)
Least frequently used words	Design (AS)	8
	Public (NA)	10
	Learning (NA)	17
	Leading (EU)	28

Source: the author based on QS (2016) and university websites.

C. Size

Mission Statements

Figure 6 Terms ratio for MS – Size



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

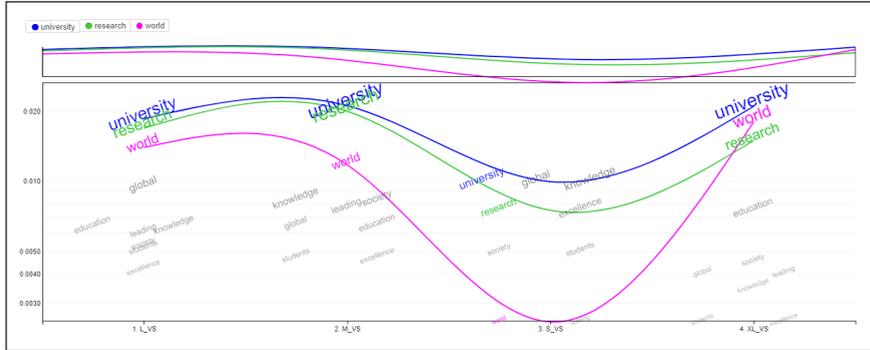
Table 7 Average number of words per sentence and word frequency in MS – Size

Average number of words per sentence	Higher	27,5 (L)
	Lower	24,8 (M)
Least frequently used words	Workforce (S)	2
	Government (M)	3
	Identity (M)	3
	Philosophy (M)	4
	Welfare (M)	6
	Open (L)	10

Source: the author based on QS (2016) and university websites.

Vision Statements

Figure 7 Terms ratio for VS – Size



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

Table 8 Average number of words per sentence and word frequency in VS - Size

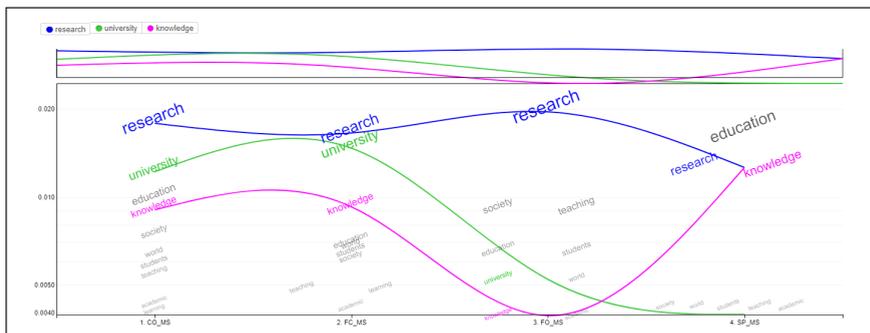
Average number of words per sentence	Higher	25,1 (S)
	Lower	21,8 (M)
Least frequently used words	Workforce (S)	1
	National (M)	6
	Industry (M)	7
	Intellectual (L)	8
	Collaboration (L)	8
	Education (M)	11

Source: the author based on QS (2016) and university websites.

D. Focus

Mission Statements

Figure 8 Terms ratio for MS – Focus



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

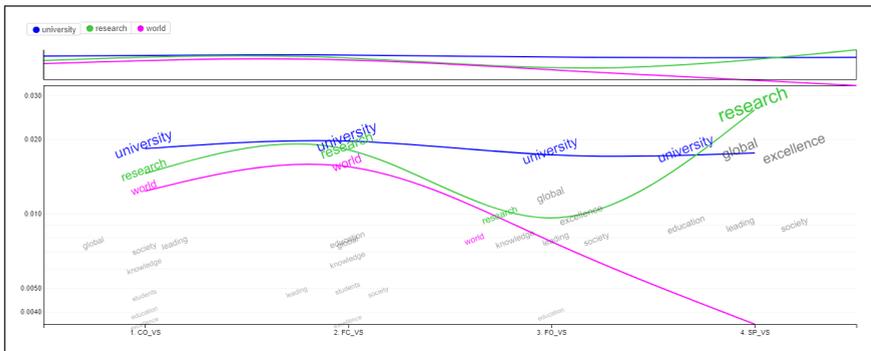
Table 9 Average number of words per sentence and word frequency in MS – Focus

Average number of words per sentence	Higher	29,8 (SP)
	Lower	24,0 (FO)
Least frequently used word	Business (FO)	5
	Human (CO)	11
	Communities (CO)	12
	Learning (CO)	18
	Learning (FC)	45

Source: the author based on QS (2016) and university websites.

Vision Statements

Figure 9 Terms ratio for VS – Focus



Source: the author based on QS (2016) and universities' websites, and processed by *Voyant Tools*.

Table 10 Average number of words per sentence and word frequency in VS - Focus

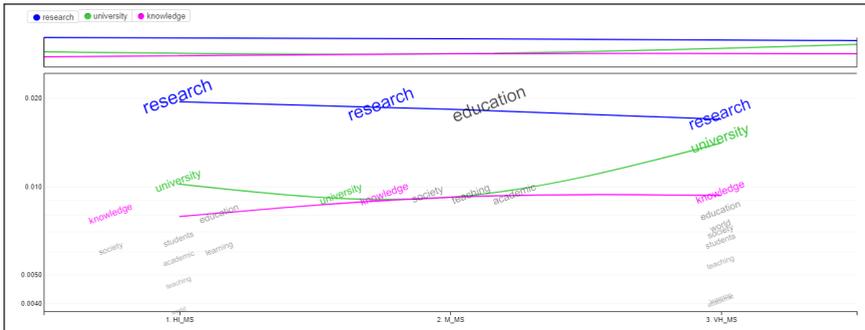
Average number of words per sentence	Higher	27,4 (FO)
	Lower	22,7 (CO)
Least frequently used words	Industrial (SP)	1
	Integrative (SP)	1
	Contemporary (FO)	2
	Producing (FO)	2
	Debate (FO)	2
	Students (FC)	30

Source: the author based on QS (2016) and university websites.

E. Research

Mission Statements

Figure 10 Terms ratio for MS – Research



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

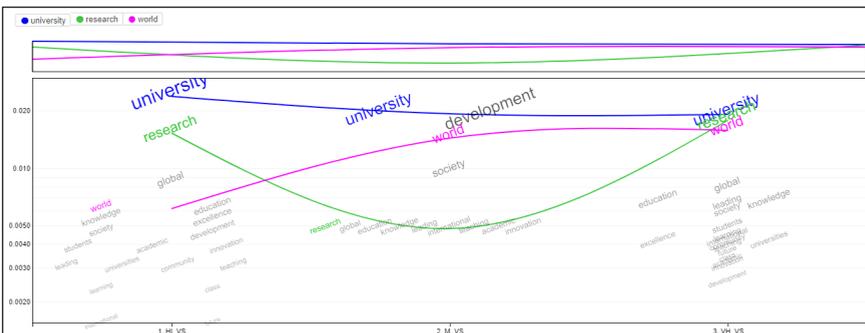
Table 11 Average number of words per sentence and word frequency in MS - Research

Word average per sentence	Higher	36,3 (M)
	Lower	25,8 (VH)
Least frequent words	Development (HI)	9
	Learning (HI)	13
	Students (HI)	16
	Nation (VH)	19
	Technology (VH)	25

Source: the author based on QS (2016) and university websites.

Vision Statement

Figure 11 Terms ratio for VS – Research



Source: the author based on QS (2016) and university websites, processed by *Voyant Tools*.

Table 12 Average number of words per sentence and word frequency in VS - Research

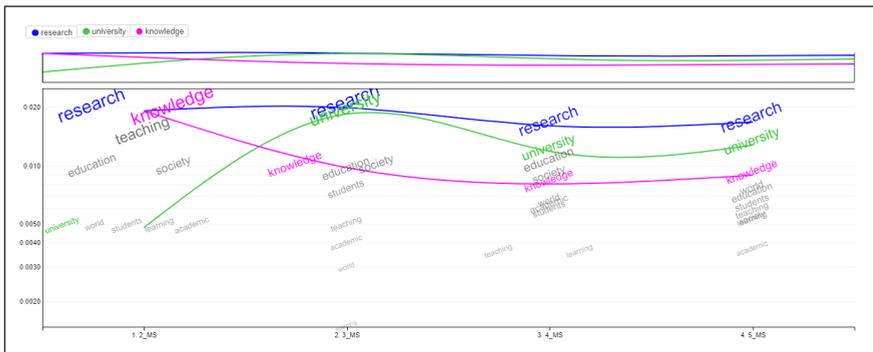
Average number of words per sentence	Higher	34,7 (M)
	Lower	23,3 (HI)
Least frequently used words	Management (M)	3
	Excellence (HI)	7
	Nation (VH)	15
	Technology (VH)	16
	Students (VH)	38

Source: the author based on QS (2016) and university websites.

F. Age Brand

Mission Statement

Figure 12 Terms ratio for MS –Age brand



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

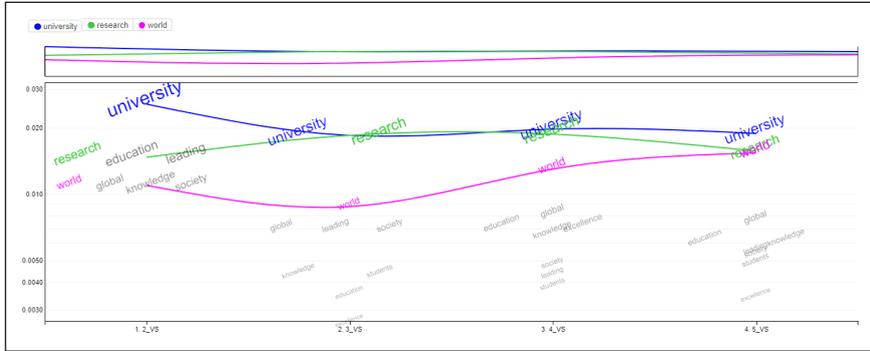
Table 13 Average number of words per sentence and word frequency in MS – Age brand

Average number of words per sentence	Higher	29,7 (4)
	Lower	23,2 (2)
Least frequently used words	Cultivating (4)	4
	Regional (4)	7
	Scientific (3)	8
	Inquiry and Discover (5)	10

Source: the author based on QS (2016) and university websites.

Vision Statement

Figure 13 Terms ratio for VS –Age brand



Source: the author based on QS (2016) and university websites, and processed by *Voyant Tools*.

Table 14 Average number of words per sentence and word frequency in VS – Age brand

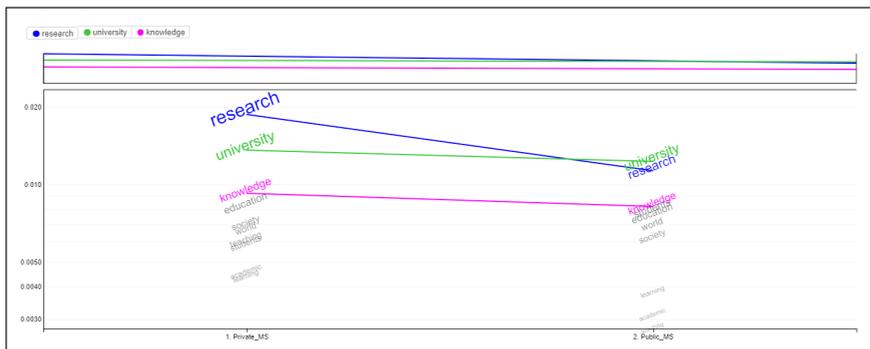
Average number of words per sentence	Higher	25,3 (5)
	Lower	20,7 (3)
Least frequently used words	Discovery (5)	5
	Students (5)	30
	Excellence (4)	15

Source: the author based on QS (2016) and university websites.

G. Status

Mission Statements

Figure 14 Terms ratio for MS – Status



Source: the author based on QS (2016) and universities' websites, and processed by *Voyant Tools*.

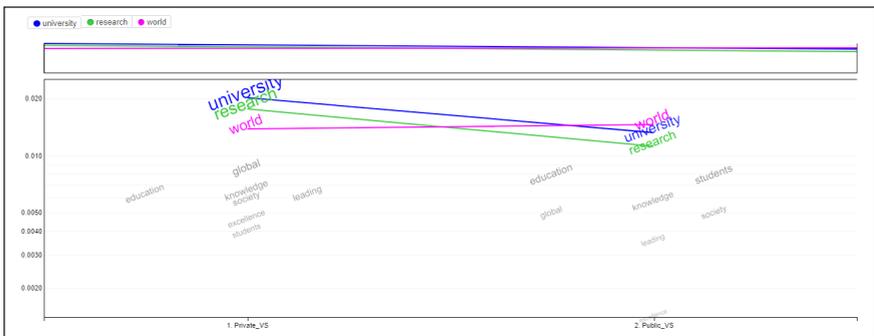
Table 15 Average number of words per sentence and word frequency in MS – Status

Average number of words per sentence	Higher	28,2 (Public)
	Lower	25,9 (Private)
Least frequently used words	Pledges (Public)	3
	Sustainable (Private)	15
	Internationally (Private)	19
	Business (Private)	23
	Economic (Private)	29

Source: the author based on QS (2016) and university websites.

Vision Statements

Figure 15 Terms ratio for VS – Status



Source: the author based on QS (2016) and universities' websites, and processed by *Voyant Tools*.

Table 16 Average number of words per sentence and word frequency in VS – Status

Average number of words per sentence	Higher	25,2 (Public)
	Lower	24,1 (Private)
Least frequently used words	Transformative and unparalleled (Public)	2
	Recognized (Private)	14
	Technology (Private)	16
	Science (Private)	19
	Outstanding (Private)	22

Source: the author based on QS (2016) and university websites.

IV. Discussion

The overall MS and VS analysis indicates that the five most frequently used terms were ‘research’, ‘university’, ‘world’, ‘knowledge’ and ‘education’, and the five least frequent terms were ‘enterprising’, ‘preservation’, ‘respect’, ‘heritage’, and ‘lifelong’. There is a need for self-awareness by the universities, namely, to be mentioned as themselves in their MS and VS (i.e. company self-concept [Pearce, 1982]). The word frequencies of ‘knowledge’, ‘education’ and stakeholders (‘society’ and ‘students’) was higher in MS, as noted by Firmin and Gilson (2010) regarding *society*, and by Hladchenko (2013) regarding *research* and *teaching*. The analyzed VS showed that universities sought a role in the *world*, as global universities, as argued by King et al. (2010). A defined trend for organizations to globalize their influence and operations through the Internet was also shown. Considering the terms established by Ingenhoff and Fuhrer (2010) and Mansi et al. (2017) on private organizations’ VS, there were no discernible similarities observed between the terms used by private companies and universities. (With exception of ‘competence’ with three mentions, ‘environmental’ with seven, and ‘awareness’ with two). These findings support the overall conclusion argued in the literature review (Table 1), namely, the overall sameness rather than distinctiveness in MS and VS in universities (Kuenssberg, 2011), particularly in claiming *education* and *research* (Hladchenko, 2016).

MS tend to be longer than VS. Considering Campell (1982), a comprehensive MS should describe the organization’s *strategy, purpose, values, standards* and *behaviors*. Based on that MS, a VS can provide drive for the future use of these previously stated terms (Lucas, 1998). For instance, the UCLA’s MS is “to create, disseminate, persevere and applicate the knowledge for the betterment of our global society”; in contrast, its VS is “to make a difference in the world”. There was a remarkable change from a MS that mentioned explicitly a strategic course of actions (*create, disseminate, persevere and applicate the knowledge*] and an important stakeholder [*global society*) towards a worldwide/global and shorter VS, as noted by Tarnow (2011) and Bart (1997b), regarding the necessity of a MS to be sufficiently general in their orientation. The only quantitative objective found in both MS and VS, was ‘years’ (e.g. the University of Manchester’s

VS: “To be one of the leading universities in the world by 2020”) with no mention of a specific quantity of students enrolled or papers published, which supports Bart’s (1997b) claim.

MS and VS analyses by continent shows four noteworthy findings. First, the longest MS and VS were from universities in South America, and the shortest were from Europe and Asia, which concurs two results identified by Bart and Hupfer (2004): that MS are dependent from their institutional or, in this case, geographical environment, and that some MS are written as a narrative/history-telling to reach a broadly audience and cultivate an emotional commitment to the organization. For instance, the VS of the Universidad Pontificia Católica de Chile is:

A university that transmits, through its work, the commitment with its founding mission and a deep Catholic identity. That in its corridors, courtyards, classrooms, in the messages we deliver on a daily basis, in the relationship we have with our students, academics, professionals, administrators and society as a whole, the spirit that inspires and illuminates us.

On the other hand, when comparing MS and VS from Europe and Asia, examples such as: “London’s global university” and “Leading the way to the future” showed off their brevity. Brevity can be considered as a virtue and a proven attribute that affects an organization’s performance and internal image (Baetz & Bart, 1996; Baum et al. 1998; Cochran & David, 1986). Second, the least frequently used terms in both MS and VS were formation-related terms (*teaching* and *learning*). Third, the only continent that maintains a consistent commitment towards *education* in both MS and VS was Asia, however, ‘students’ was a term virtually overlooked in their VS. This results support Efe and Ozer’s (2015) conclusion on the importance of economic, political, historical, and cultural paths in shaping MS and VS processes, considering the abysmal differences on historic and economic institutions between global-North and global-South regions (Acemoglu, 2003; Acemoglu, Johnson, & Robinson, 2005; Acemoglu & Robinson, 2012).

Four remarkable findings were observed in MS and VS analyses by size. First, as foreseen, extra-large, large, and medium-sized universities developed a research priority while small universities emphasized *knowledge*. Second, the next priority in MS of medium-sized universities was *education*. Hence, medium-sized universities can be seen in a transition phase from being knowledge-based towards being research-based

universities. Third, the notable priority in VS of small universities, over *research*, *stakeholders* or *excellence*, was to become *global*, as considered in the overall analysis. Fourth, *collaboration* is a term barely mentioned in this *globalization* process. A joint effort scenario is not a priority explicitly expressed in VS, today or in the future. In contrast, ‘cooperation’ was one of the predominant concepts identified in Slovenian organizations’ MS (Babnik et al., 2014). Furthermore, a formal inclusion of the term ‘research’ in the MS or VS is irrelevant. Over the past 45 years, the production of knowledge has been dominated by groups, not by individuals (e.g. the average number of authors per paper increased from 1.9 to 3.5) (Wuchty et al., 2007).

In the focus group sample, the focused universities developed a MS with defined priorities such as *society*, *teaching*, *education* (as in the comprehensive group) and *students*. In the VS of the specialist group, as in small universities, the priority was *research*, *global*, and *excellence*. Considering that the sample is composed primarily (98%) of universities in both groups: high and very high research, the analysis of research groups is essentially the same as in the overall analysis.

Sixty-four per cent of universities in the sample are over 100 years old. This study has no longitudinal evidence on the components evolution of MS and VS but one can safely assume that the oldest were early to use terms such as ‘research’, ‘knowledge’ and ‘world’, and their younger counterparts used these terms as a point of reference and adopted them by default. However, the younger universities (10-50 years-old) frequently used terms regarding stakeholders (‘society’ and ‘students’), ‘teaching’ and ‘education’, which were, actually, the least frequently used terms among the most frequently used terms, as observed by Babnik et al. (2014) in Slovenian firms.

The status of the majority of universities is public (85%). When their MS and VS were compared with the private sector and putting aside the terms *research*, *university* and *knowledge*, the highest priority term for public universities was ‘students’. Still, ‘teaching’ is a more noticeable term in the private sector than in the public sector. The private sector noticeably focuses on *process* while the public sector focuses on *individual(s)*. In addition, the private sector has a noticeable interest in the *society*. Conversely, the public sector is interested in the *community*.

V. Conclusions

Both MS and VS are ubiquitous strategic planning instruments adopted worldwide. They determine the actual purpose and future course of action for organizations, and the related internal or external processes. The extensive literature on both MS and VS shows a discernible consensus on the importance of coordinating and measuring organizational performance, public or internal image, employee behavior and commitment, and value creation, among other factors. Despite this advancement, most studies were conducted at a national level by private organizations located in the global North. When focusing on universities, the literature emphasized MS content analyses at the national level with reduced samples and virtually no major concerns about VS. The study considered this focus and conducted one of the few transnational researches on MS and VS in universities using content analysis. Therefore, the sample of previous studies was amplified to provide an open access digital dataset on the MS and VS of universities worldwide for replication or further studies.

The main findings of the study were: (1) as in the private sector, the universities showed a necessity for self-awareness or mentioned themselves on their MS and VS; (2) an overall emphasis on society and students (stakeholders) and a general focus on research and teaching in the MS; (3) a trend towards a global influence/presence in the VS; (4) with the exception of competence, environment and awareness there were no discernible similarities in terms between private organizations and universities, which are two totally different parties separated by a large gap; (5) MS tend to be longer than VS; (6) the absence of quantitative elements in both MS and VS, except for the variable years in a few observations; (7) MS and VS from South American universities tended to be longer than their counterparts from Europe and Asia; (8) MS and VS from Asia maintain a consistent emphasis on education; (9) small universities prioritized knowledge over research; (10) collaboration was barely mentioned, although the pre-eminence of research and the dominance of groups over individuals in knowledge production is a more effective external effect than a formal mention in universities' MS and VS; (11) the "youngest" universities tend to use more of the least frequently used terms in the top ten most used terms: i.e. society, students, teaching and education; (12) public universities emphasized individuals, i.e. students, and private universities

emphasized process, i.e. teaching. University planning offices can use these results and the digital database to construct a global outlook on MS and VS trends or uncommonly used terms to define the purpose of their university and future course of action, embrace an overall isomorphism, or seek a distinctive strategy to differentiate their institution from others. In addition, this research can be used by strategic planning scholars to conduct regionally or nationally focused studies.

The limitations of this study are the samples of some regions. Considering that the mean sample of MS studies was 89.6, this study used a sample almost four times larger. Although, the African (4) and South American (9) samples were not significant compared with European (141) or North American (87) samples. Thus, further studies should consider a more-inclusive ranking in research databases than the QS world university ranking.

Acknowledgements

The author would like to thank to Valeria Andrea Rodriguez-Moreno and Manuel Ricardo Rodriguez-Garzon for their research assistance, and to Myriam Liliana Rivera-Virquez for her advice.

References

- Acemoglu D. (2003). Root causes: A historical approach to assessing the role of institutions in economic development. *Finance and Development* 40(2): 26-30.
- Acemoglu D., Johnson S. and Robinson J. (2005) The rise of Europe: Atlantic trade, institutional change, and economic growth. *American Economic Review* 95(3): 546-579.
- Acemoglu D. and Robinson J. (2012). *Why nations fail: The origins of power, prosperity, and poverty*. New York: Crown Publishers.
- Analoui F. and Karami A. (2002). CEOs and development of the meaningful mission statement. *Corporate Governance* 2(3): 13-20.
- Atkinson T. (2008). Textual mapping of imitation and intertextuality in college and university mission statements: A new institutional perspective. *Semiotica* 172: 361-387. <https://doi.org/10.1515/SEMI.2008.104>
- Babnik K., Breznik K., Dermol V. and Sirca N. (2014). The mission statement: organizational culture perspective. *Industrial Management & Data Systems* 4(612-627): 114.
- Baetz M. and Bart C. (1996). Developing mission statements which work. *Long Range Planning* 29(4): 526-533.
- Bart C. and Baetz M. (1998). The relationship between mission statements and firm performance: an exploratory study. *Journal of Management Studies* 35(6): 0022-2380.
- Bart C. and Bontis N. (2003). Distinguishing between the board and management in company mission: Implications for corporate governance. *Journal of Intellectual Capital* 4(3): 361-381.
- Bart C. and Hupfer M. (2004). Mission statements in Canadian hospitals. *Journal of Health Organization and Management* 18(2): 92-110.
- Bart C. and Tabone J. (1999). Mission statement content and hospital performance in the Canadian not-for-profit health care sector. *Health Care Management Review* 24(3): 18-29.
- Bart C. (1996). High tech firms: Does mission matter? *Journal of High Technology Management Research* 7(2): 209-225.
- Bart C. (1996a). The impact of mission on firm innovativeness. *International Journal of Technology Management* 11(3/4): 479-493.

- Bart C. (1997b). Industrial firms and the power of mission. *Industrial Marketing Management* 26: 371-383.
- Bart C. (1997b). Sex, lies, and mission statements. *Business Horizons* 40(6): 9-18.
- Bart C. (2001a). Exploring the application of mission statements on the World Wide Web. *Internet Research* 11(4): 360-369.
- Bart C. (2001b). Measuring the mission effect in human intellectual capital. *Journal of Intellectual Capital* 2(3): 1469-1930.
- Bartkus B., Glassman M. and McAfee B. (2000). Mission statements: Are they smoke and mirrors? *Business Horizons* 43(6): 23-28.
- Bartkus B., Glassman M. and McAfee B. (2005). Mission statement quality and financial performance. *European Management Journal* 24(1): 86-94.
- Baum J., Locke E. and Kirkpatrick S. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology* 83(1): 43-54.
- Boyle M. and Hall C. (2016). Teaching Don Quixote in the digital age: Page and screen, visual and tactile. *Hispania* 99(4): 600-614.
- Campbell A. (1989). Does your organization need a mission? *Leadership & Organization Development Journal* 10(3): 3-9.
- Campbell A. and Yeung S. (1991). Creating a sense of mission. *Long Range Planning* 24(4): 10-20.
- Cochran D. and David F. (1986). Communication effectiveness of organizational mission statements. *Journal of Applied Communication Research* 14(2): 108-118.
- Collins J. and Porras J. (1991). Organizational vision and visionary organizations. *California Management Review* 34: 30-52.
- Dasmidt S., Prinzie A. and Decramer A. (2011). Looking for the value of mission statements: A meta-analysis of 20 years of research. *Management Decision* 49(3): 468-483.
- Davies S. and Glaister K. (1997). Business school mission statements—the bland leading the bland? *Long Range Planning* 30(4): 594-604.
- Dermol V. (2012). Relationship between mission statement and company performance. *Scientific Annals of Economics and Business* 59(1): 321-336.
- Deus R. M. Battistelle R.A.G. and Silva G.H.R.D. (2016). Sustainability insights from the mission statements of leading Brazilian Universities. *International Journal of Educational Management* 30(3): 403-415.

- Drucker P. (1973). *Management: task, responsibilities, practices*. New York: Harper & Row.
- Duygulu W., Ozeren E., Isildar P. and Apolloni A. (2016). The sustainable strategy for small and medium sized enterprises: the relationship between mission statements and performance. *Sustainability* 8(7): 698.
- Efe I. and Ozer O. (2015). A corpus-based discourse analysis of the vision and mission statements of universities in Turkey. *Higher Education Research and Development* 34(6): 1110-1122.
- Ellis J. and Miller P. (2014). Providing higher education in post-modern times: What do university mission statements tell us about what they believe and do? *Research in Comparative and International Education* 9(1): 83-91.
- Firmin M. W. and Gilson K. M. (2010). Mission statement analysis of CCCU member institutions. *Christian Higher Education* 9(1): 60-70.
- Fitzgerald C. and Cunningham J. A. (2016). Inside the university technology transfer office: mission statement analysis. *Journal of Technology Transfer* 41(5): 1235-1246.
- Hermeneuti.ca (2016). Voyant Facts. Available at: <https://goo.gl/zq938e>
- Hirota S., Kubo K., Miyajima H., Hong P. and Park Y. (2010). Corporate mission, corporate policies and business outcomes: Evidence from Japan. *Management Decision* 48(7): 1134-1153.
- Hladchenko M. (2013). Mission statement —A component of the strategic management of university (on the example of German universities). *New Educational Review* 31(1): 229-240.
- Hladchenko M. (2016). The organizational identity of Ukrainian universities as claimed through their mission statements. *Tertiary Education and Management* 22(4): 376-389.
- Hyndman N. and Eden R. (2000). A study of the coordination of mission, objectives and target in UK executive agencies. *Management Accounting Research* 11(2): 175-191.
- Ingenhoff D. and Fuhrer T. (2010). Positioning and differentiation by using brand personality attributes: Do mission and vision statements contribute to building a unique corporate identity? *Corporate Communications* 15(1): 83-101.
- Ireland R. and Hitt M. (1992). Mission statements: importance, challenge and recommendations for development. *Business Horizons* 35(3): 34-42.

- Jones M. (1960). Evolving a Business Philosophy. *Academy of Management Journal* 3(2): 93-98.
- King D., Case C. and Premo K. (2010). Current mission statement emphasis: Be ethical and go global. *Academy of Strategic Management Journal* 9(2): 71-87.
- Kirkpatrick S. A., Wofford J. C. and Baum J. R. (2002) Measuring motive imagery contained in the vision statement. *Leadership Quarterly* 13(2): 139-150.
- Kosmützky A. and Krücken G. (2015). Sameness and difference: Analyzing institutional and organizational specificities of universities through mission statements. *International Studies of Management and Organization* 45(2): 137-149.
- Kotler P. and Murphy P. (1981). Strategic planning for higher education. *The Journal of Higher Education* 52(5): 470-489.
- Kuenssberg S. (2011). The discourse of self-presentation in Scottish university mission statements. *Quality in Higher Education* 17(3): 279-298.
- Langellotto G. A., Moen D., Straub T. and Dorn S. (2015). The first nationally unifying mission statement and program standards for extension master gardener programs at Land-Grant Universities. *Journal of Extension* 53(1).
- Leuthesser L. and Kohli C. (1997). Corporate identity: The role of mission statements. *Business Horizons* 40(3): 59-66.
- Levitt T. (1960). Marketing myopia. *Harvard Business Review* July/August: 45-56.
- Lucas J. (1998). Anatomy of a vision statement. *American Management Association International* 87(2): 22-26.
- Mansi M., Pandey R., and Ghauri E. (2017). CSR focus in the mission and vision statements of public sector enterprises: evidence from India. *Managerial Auditing Journal* 32(4-5): 356-377.
- Morphew C. C. and Hartley M. (2006). Mission statements: A thematic analysis of rhetoric across institutional type. *Journal of Higher Education* 77(3): 456-471.
- O’Gorman C. and Doran R. (1999). Mission statements in Small and Medium-Sized Businesses. *Journal of Small Business Management* 37(4): 56-66.

- Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science* 349(6251): 943.
- Orlitzky M., Schmidt F. and Rynes S. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies* 24(3): 403-441.
- Orwig B. and Finney R. Z. (2007). Analysis of the mission statements of AACSB-accredited schools. *Competitiveness Review* 17(4): 261-273.
- Patel B. Booker L., Ramos H. and Bart C. (2015). Mission statements and performance in non-profit organizations. *Corporate Governance* 15(5): 759-774.
- Pearce J. and David F. (1987). Corporate mission statements: The bottom line. *Academy of Management Executive* 1(2): 109-116.
- Pearce J. (1982). The company mission as a strategic tool. *Sloan Management Review* Spring/1982: 15-24.
- Prayoga T. and Abraham J. (2017). Health capability: The representation of IoT in health domain among Jakartans. In: 2016 International Conference on Advanced Computer Science and Information Systems, ICACISIS 2016, pp. 103-110.
- QS Intelligence Unit (2016). QS Classifications. Available: <https://goo.gl/466QAB>
- QS Intelligence Unit (2017). QS world university ranking methodology. Available at: <https://goo.gl/wV43Sd>
- Rahman M. (2009). Why strategic vision statements won't measure up. *Strategic Direction* 25(4): 3-4.
- Seeber M., Barberio V., Huisman J. and Mampaey J. (2017). Factors affecting the content of universities' mission statements: an analysis of the United Kingdom higher education system. *Article in Press*.
- Sidhu J. (2003). Mission statements: Is it time to shelve them? *European Management Journal* 21(4): 439-446.
- Sinclair S. and Rockwell G. (2015). Text Analysis and Visualization: Making Meaning Count. In: *A New Companion to Digital Humanities*: 274-290.
- Tarnow E. (2001). A recipe for mission and vision statements. *IEEE Transactions on Professional Communication* 44(2): 138-141.
- Wedrich A., Langmann G., Klug U., Langmann A., Faschinger C., Wohlfart C., ... Hödl R. (2012). Development and implementation of a mission statement at the University Department of Ophthalmology Graz. *Spektrum Der Augenheilkunde* 26(4): 212-220.

- Weiss J. and Piderit S. (1999). The value of mission statements in public agencies. *Journal of Public Administration Research and Theory* 9(2): 193-223.
- Williams L. (2008). The mission statement: A corporate tool with a past, present, and future. *Journal of Business Communication* 45(2): 94-119.
- Wuchty S., Jones B. and Uzzi B. (2007). The increasing dominance of teams in productivity of knowledge. *Science* 319(5827): 1036-1039.
- Yozgat U. and Karatas N. (2011). Going green of mission and vision statements: Ethical, social, and environmental concerns across organizations. *Procedia Social and Behavioral Sciences* 24: 1359-1366.

Annex

QS Classifications

All the information presented in this annex was obtained from QS Intelligence Unit (2016).

- Size: Based on the (full time equivalent) size of the degree-seeking student body. Where an FTE number is not provided or available, one will be estimated based on common characteristics of other institutions in the country or region in question.

	Size	Student
XL	Extra Large	>30,000
L	Large	>=12,000
M	Medium	>=5,000
S	Small	<5,000

- Subject Range: four categories based on the institution's provision of programs in the five broad faculty areas used in the university rankings. Due to radically different publication habits and patterns in medicine, an additional category is added based on whether the subject institution has a medical school.

	Focus	Faculty area
FC	Full comprehensive	All 5 faculty areas + medical school
CO	Comprehensive	All 5 faculty areas + medical school
FO	Focused	More 2 faculty areas
SP	Specialist	2 or 1 faculty areas

- Age: since 2011, five age bands based on supplied foundation years.

	Focus	Faculty area
5	Historic	Over 100 years old
4	Mature	50-100 years old
3	Established	25-50 years old
2	Young	10-25 years old
1	New	Less than 10 years old

- **Research Intensity:** our levels of research activity evaluated, based on the number of documents retrievable from Scopus in the five-year period preceding the application of the classification. The thresholds required to reach the various levels are different dependent on the institution pre-classification on aspects 1 and 2.

	Research Intensity
VH	Very high
HI	High
MD	Medium
LO	Low

Since their introduction for the 2009 table the QS Classifications have met with mixed feedback – positive feedback for the concept and the supporting research, and, on the contrary, with less positive feedback for the notation used. In the 2010 table we have implemented a dramatically simple and transparent notation introducing three columns —one for each of the above metrics.

The intention was not to infer a hierarchy —the ranking exists for that purpose—, XL is not a fundamentally preferable classification to S, nor is it intrinsically preferable to be FC, but it is to qualify the subject institutions by broad type with a view to making ranking results more contextually relevant to their increasingly broad audience. For clarity purposes, the Research Intensity above is simplified —clearly smaller institutions ought to produce less research than larger done.

Research	Focus	XL	L	M	S
VH	FC	13000	10000	5000	2500
HI	FC	4000	3000	1500	750
MD	FC	750	500	250	100
LO	FC	0	0	0	0
VH	CO	7000	5000	2500	1250
HI	CO	2000	1500	750	400
MD	CO	400	250	100	50
LO	CO	0	0	0	0
VH	FO	3500	2500	1250	650
HI	FO	1000	750	400	200
MD	FO	150	100	50	50
LO	FO	0	0	0	0
VH	SP	2 x mean for specialist areas			
HI	SP	1 x mean for specialist areas			
MD	SP	0.5 x mean for specialist areas			
LO	SP	0	0	0	0

