

An evaluation of the University of KwaZulu-Natal's online social media strategy using the Balanced Scorecard



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By

Student: Preshern Moodley (209516217)

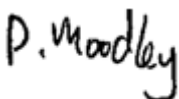
Supervisor: Professor Manoj Maharaj

2017

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Abstract

This study analyses the University of KwaZulu-Natal's (UKZN) online social media (OSM) strategy to determine how it is manifested, its effectiveness and whether the strategy is achieving its stated objectives. This analysis will provide an understanding of UKZN's strategic intent in using the OSM platform. The effectiveness of UKZN's OSM strategy from an external or student users' perspective and an internal or university's perspective was also investigated. The main OSM sites targeted in this study were Facebook and Twitter. The non-profit Balanced Scorecard framework proposed by Kaplan was the foundation of this study (Kaplan, 2010). This evaluation framework provides steps which can capture and measure the success of an organization's OSM strategy from a non-profit perspective.

While the literature points to studies analysing the OSM strategy of museums, the analysis of the OSM strategy of universities have not been studied in detail. This study is part descriptive and part interpretive. The research adopts a mixed methods approach using both quantitative and qualitative methods. A survey of UKZN students which detailed their experiences and use of the official and unofficial OSM accounts of UKZN was undertaken. Semi-structured interviews of key people who work on UKZN's OSM accounts, detailing their use of this platform from an internal perspective was also carried out.

The main findings showed that UKZN was not effectively communicating and engaging with students via UKZN's OSM accounts. The OSM strategy is part of the overall strategy of the University, but this strategy does not outline objectives, policies, governance, organisational structure and internal processes related to the OSM platform. The general objectives which are part of UKZN's strategic plan cannot effectively leverage OSM. There needs to be a specific OSM strategy which outlines objectives for this platform, how UKZN will achieve these objectives and measures to determine if these objectives have been achieved or not. Findings also showed that in some aspects students felt that the unofficial OSM accounts of UKZN were better when compared to UKZN's official OSM accounts. This study also revealed a low level of engagement on UKZN's OSM accounts relative to the size of its OSM community.

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List of Acronyms

BSC - Balanced Scorecard

OSM - Online Social Media

UKZN - The University of KwaZulu-Natal

Chapter 1: Introduction

1.1 Introduction

The adoption and use of online social media (OSM) by individuals to connect and communicate with each other is well established. For profit and non-profit, public and private organisations have also recognised the potential value of this medium. Universities are no exception.

The University of KwaZulu-Natal (UKZN) has official accounts on Facebook, Twitter, Instagram, YouTube and Google+. The University posts relevant information and campaigns using these official accounts. The OSM platform is leveraged to create an effective medium for two-way communication between UKZN and its students. This allows UKZN to communicate, interact and engage with students on a more personal level. This platform can play a significant role when there is a need to communicate critical information to students in a quick and effective way.

As of October 2017, UKZN has more than 102000 followers on Facebook and more than 18400 followers on Twitter. The effectiveness of this intervention can only be determined if suitable metrics are developed. Critical to the development of such a metric is an understanding of the underlying OSM strategy of UKZN. Additionally, whether this strategy is achieving its stated strategic objectives, an indication of how this strategy is manifested and the effectiveness of this strategy is important.

Therefore, by using the non-profit Balanced Scorecard (BSC) framework by Robert Kaplan, this research study investigates the OSM activities of UKZN (Kaplan, 2010). The BSC provides a performance measurement and evaluation framework which will help capture UKZN's strategic objectives for OSM, and determine if UKZN's OSM strategy is achieving these strategic objectives.

1.2 Background and Context

The University of KwaZulu-Natal has more than 46000 students and communicating with them was primarily through the use of emails and notice boards which encouraged one-sided communication. By leveraging OSM for communication, universities can take advantage of this platform's instant sharing nature for the rapid distribution of information and a many-to-many communication channel.

Online social media use was discussed in UKZN's strategic plan proposed in 2007. This plan was devised by the Executive Task Team, chaired by Professor JC Mubangizi, endorsed by the Senate and approved by the Council. The strategic plan was assessed at the end of 2016 in this study, with the University launching a new strategic plan in November 2017. As details are not clear at present, this study will concentrate on the 2007-2016 strategic plan.

The strategic intent for UKZN's OSM accounts was to be more engaging with its students. Additionally, it was important to provide two-way communication regularly with students in a more personal manner, encourage student participation, and monitor the changing needs of students. As of this writing, the University's OSM platform were mainly used as a communication channel.

A notice from UKZN advertised a marketing and OSM assistant position. The key responsibilities for the OSM assistant were outlined which were to manage and respond to all queries on OSM, post a minimum of 3 interactive posts per day on OSM which encourage student participation, and manage UKZN's online reputation at all levels (UKZN, 2017a). Additionally, the OSM assistant will have to monitor and engage, when needed, in brand associated conversations on OSM (UKZN, 2017a).

The University can also use OSM as an information-gathering tool. By utilising the features of OSM, the University can monitor what has been said about it online and take corrective measures if necessary. A research study across two Universities by Student Brands and World Wide Worx, showed up to 96% of South African students used Facebook and up to 70% of South African students used Twitter (WorldWideWorx & StudentBrands, 2013). Therefore, many students are leveraging this platform which can provide critical information to UKZN. This information will reveal any unknown issues relating to UKZN which have not been directly communicated or are not popular in mass media. With this information being from students and with the sender being known, it can be more trusted than other forms of media where the source is not known.

The unofficial OSM accounts of UKZN have also gained a significant amount of attention due to student protests. These unofficial accounts are created by users or students and have no affiliation with UKZN. As of October 2017, the popular unofficial OSM accounts of UKZN were "University of Kwazulu Natal Westville" with 180600 followers, "UKZN confessions" with 10200 followers and "UKZN PMB SRC 2013/2014/2015/2016/2017" with 15000

followers. These accounts have a variety of goals like allowing the posting of anonymous confessions and other unofficial accounts representing the various student groups of UKZN. With the recent 'Fees Must Fall' protests, these groups created significant awareness on the student protests at UKZN and facilitated discussions between students. The administrators and followers share information which allow users to gain an understanding of the issues being faced and for students to give their opinions on these issues.

Therefore, the focus of this study will be to assess and understand UKZN's OSM strategy. It is also important to assess if UKZN's OSM strategy is achieving its stated strategic objectives and determine how this strategy is manifested. The effectiveness of this OSM strategy from an internal or University's perspective and an external or student users' perspective is also important. Additionally, the unofficial OSM accounts of UKZN will help in understanding the effectiveness of this strategy from an external perspective. The target groups of this study will be UKZN's students and key people who work on UKZN's OSM accounts. Finally, an understanding will be gained of how far information can reach on OSM, how fast this information travels on OSM and its effects on UKZN's students.

1.3 Problem Statement

The University of KwaZulu-Natal uses its OSM accounts to promote activities that are taking place, provide information to its online followers, and according to its strategic plan be more engaging with students.

While UKZN's strategic documents point to being more engaging with students, it is not clear if this has been achieved or not. As of October 2017, UKZN had less followers on its Facebook account when compared to the unofficial Facebook group called "University of Kwazulu Natal Westville" which had significantly more followers. This indicates that UKZN was not as successful compared to this unofficial Facebook account in attracting students and potentially engaging with them. Looking at the official and unofficial OSM accounts related to UKZN, showed that there were many more students posting on the unofficial accounts when compared to the official accounts. Additionally, posts by UKZN on its official OSM accounts had minimal engagement relative to the size of its audience. However, there was substantially more engagement on the unofficial OSM accounts of UKZN. This could be due to UKZN not correctly leveraging its OSM strategy or its OSM accounts. Therefore, it is important to assess this OSM strategy to gain a better understanding of where the University is successfully

leveraging OSM and where it is failing to leverage OSM. This can also establish if UKZN is achieving its objectives for this platform.

An assessment of UKZN's OSM strategy is necessary. To accomplish this, it is important to establish metrics related to OSM which show how effectively UKZN is using this platform. These metrics will determine how effective is UKZN when engaging with students, providing information to its students, and promoting activities taking place at the University. By gaining first hand responses from students can show UKZN where students felt the official OSM accounts weren't as good compared to the unofficial OSM accounts. While the assessment of OSM strategy from the students' perspective has been established, it is also important to assess this strategy from the University's perspective as well. This can show how UKZN is internally leveraging OSM by showing staff's experiences and training related to OSM, while also showing how OSM is supported by UKZN's internal processes.

The University of KwaZulu-Natal's Facebook and Twitter accounts had a large number of followers. While UKZN uses these accounts to post information and interact with students, there is limited knowledge on UKZN's OSM strategy, how this strategy is manifested, how effective is this strategy, and if this strategy is achieving its stated objectives. Therefore, the overall purpose of this research study is to assess the OSM activities of UKZN and gain an understanding of the OSM strategy being used. By assessing this strategy, an understanding can be gained of how UKZN operates on OSM and reveals the strategic objectives to be achieved when using this platform. Other aspects looked at are examining students' awareness and use of these OSM accounts to show the effects of UKZN's OSM strategy on them. Assessing the key people who work on UKZN's OSM accounts can show how the OSM strategy is being internally leveraged and reveal the internal OSM initiatives.

The assessment of UKZN's OSM strategy, which is critical to this study, will use the BSC framework. This evaluation framework can assess UKZN's OSM strategy and help in answering the proposed research questions. The BSC also allows for the assessment of this strategy from an internal and external perspective.

1.4 UKZN's OSM Strategy

It was found through analyses that UKZN's OSM strategy was part of the overall strategy for the University. Looking at UKZN's strategic plan, revealed some objectives related UKZN's OSM accounts. Additionally, some objectives were detailed in a notice for an OSM assistant

position to work on UKZN's OSM accounts (UKZN, 2017a). Data gathered from interviews also revealed that UKZN's OSM strategy was part of its wider strategy. A more detailed OSM strategy is important as it can outline the capabilities of staff, and the tools and technologies UKZN has related to OSM. Additionally, it will outline the internal processes supported by OSM, governance related to OSM, OSM specific policies, and organisational structures related to OSM. Overall, a more detailed OSM strategy can help UKZN achieve its mission and vision on OSM, and measure the value of its OSM initiatives.

1.5 Research Objectives

The main aim of this research study is to determine if UKZN's OSM strategy is achieving its stated strategic objectives. The use of secondary objectives will help achieve the main aim of this study.

The secondary objectives include understanding UKZN's OSM strategy, determining how this OSM strategy is manifested, and determining the effectiveness of this strategy. Another key objective of this study is understanding how effectively UKZN leverages the OSM platform. Therefore, it is important to assess UKZN's OSM accounts, the student who use these accounts, and the key people who work on these accounts. To address these research objectives, a primary research question and three sub research questions are proposed.

1.6 Research Questions

1.6.1 Primary Research Question

How is UKZN's online social media strategy achieving its stated objectives?

1.6.2 Sub Research Questions

1. What is the online social media strategy used by UKZN?
2. How is this online social media strategy manifested?
3. How effective is this online social media strategy?
 - 3.1 from University's perspective,
 - 3.2 and from the student users' perspective?

1.7 Significance and Importance

This research expands on the knowledge of whether UKZN's OSM strategy is achieving its stated strategic objectives. Further, this study expands upon the OSM strategy UKZN is leveraging, how this strategy is manifested and its effectiveness. To future researchers, this study can provide information on how UKZN leverages OSM and its OSM strategy. Additionally, this research provides others with the knowledge on the effectiveness of UKZN's OSM strategy from the University's and student users' perspective.

1.8 Theoretical Framework

The BSC framework by Dr Robert Kaplan and Dr David Norton is used to interpret the data obtained (Kaplan & Norton, 1996a). Specifically, the non-profit BSC framework which was modified by Dr Robert Kaplan (Kaplan, 2010). This framework was used by organisations that wanted to measure success in more than just financial statements. Therefore, this framework is used to measure factors which create value for an organisation and to measure its direct influencers to succeed (Kaplan & Norton, 1996a). The BSC framework provides many benefits when an organisation wants to align its vision and strategy to its business activities, and when an organisation wants to measure its performance against its strategic objectives (Kaplan & Norton, 1996a).

The BSC framework was used by Elena Villaespesa to analyse and evaluate the OSM strategy of the art museum Tate UK (Villaespesa, 2015). This study provided a basis for adopting this evaluation framework to assess a University's OSM strategy from a non-profit perspective.

The non-profit BSC framework provides steps and perspectives which helped analyse the OSM strategy of UKZN. These steps provide a systematic way of answering the primary and sub research questions of this study. The BSC framework and its link to OSM strategy is detailed in Chapter 3.

1.9 Overview of Chapters

Chapter 1: This chapter contains the introduction to the study. An overview of the research study and the processes which will be followed throughout this study is also detailed.

Chapter 2: The literature relating to factors around UKZN's OSM strategy is discussed in this chapter. A discussion around OSM, the value of OSM to students, and the relation between universities and students is detailed. Additionally, universities and OSM, and OSM strategy are also discussed.

Chapter 3: The research methodology and the BSC framework used in this research study is explained. The link between the research questions, the research instruments, and the steps in the non-profit BSC are detailed.

Chapter 4: The methods described in Chapter 3 to analyse and interpret the data gathered are shown here.

Chapter 5: The steps in the BSC are completed to assess UKZN's OSM activities and create a BSC for UKZN. This chapter utilises the data gathered to draw interpretations which answered the primary and sub research questions. This chapter ends by providing contributions of the study, limitations, delimitations and recommendations for future research.

1.10 Overview of Chapter

This chapter outlined the background and context of the research. The research objectives of this study are then shown, with specific research questions being detailed. Finally, an overview of the University's OSM strategy was provided, followed by the research questions and objectives. The non-profit BSC framework was introduced as it is fundamental to this study.

Chapter two will discuss the extant literature supporting this research.

Chapter 2: Literature Review

2.1 Introduction

Advances in technology have changed the world we live in. This is especially true with the Internet and mobile technologies which have completely changed how information is exchanged and people communicate. These technologies have linked the world together in a way that did not previously exist. An early application using the Internet as a mail communication platform saw the Internet evolve from a purely scientific and military tool to a platform used by all. The constant evolving nature of the Internet has also allowed the communication platform to evolve.

The online social media (OSM) platform has changed the way people connect and interact with each other over the Internet. This platform's efficient and effective nature of communicating has gained popularity and it now has many users. These users are leveraging this platform frequently throughout the day to connect with people from all over the world. Previously finding and connecting with people on the Internet was limited as there was no effective platform. The OSM platform overcame this limitation by creating online communities which allowed an easy way to find and connect with each other.

There are approximately 2.2 billion users of OSM on the Internet, with these figures expected to grow due to mobile devices and the increasing use of mobile OSM (Statista, 2016). The biggest OSM site is Facebook and it has approximately 1.59 billion monthly active users throughout the world (Statista, 2016). Mobile users had a substantial presence on this site, with 1.03 billion users accessing the site daily using a mobile device (Protalinski, 2016). It was shown that the average Facebook female user had 166 friends while a male user had 145 friends (Smith, 2016a). The average time these users spent online were more than 50 minutes per day (Smith, 2016b). This shows that there are many users on OSM, there are a growing number of mobile users on OSM, and they are on OSM for a large amount of time.

Young adults were defined as being between the ages of 18-29 years old (PewResearch, 2014). These adults are the biggest users of OSM, with approximately 90% of them using this platform (Perrin, 2015). This young adult age group also coincides with the 18-24 years old age group of university students. Therefore, many universities like UKZN leverage multiple OSM platforms.

When universities leverage OSM, it is important to have an OSM strategy to achieve the strategic objectives for this platform. The intentions for OSM and requirements from staff who work on OSM are outlined by UKZN. However, there needs to be a more detailed OSM strategy which outlines UKZN's strategic objectives, governance, policies and organisational structures for OSM. Additionally, how this OSM strategy has manifested, the impact of this strategy on students, and how staff use UKZN's OSM accounts is not known.

2.2 Online Social Media

2.2.1 The Web

The Internet connects computers throughout the world to create massive networks that communicate with each other (Beal, 2017). The world wide web or the web provides a way which can allow the access of information over the Internet (Beal, 2017). Web 1.0 is the first iteration of the web, and is considered to be a one-to-many platform which involves the sharing of information from the source to multiple viewers (Beattie, 2011).

Web 2.0 is an evolution of Web 1.0 and it can now be considered a many-to-many platform (Beattie, 2011). The main concept of Web 2.0 is many-to-many content, with users leveraging the web to setup websites and blogs to share their user generated content which encourages interaction by viewers (Beattie, 2011). Web 2.0 emphasises usability and interoperability, and it can be characterised by collaboration, interaction, pervasive network connection, and better communication mediums (Haughn, 2015). One significant difference with Web 1.0 is that initially users were posting on websites and this was simply viewed by other users or downloaded (Haughn, 2015). With Web 2.0, users give comments on the nature and scope of the content that was posted (Haughn, 2015). Web 1.0 was seen as being more static, with Web 2.0 being more dynamic when content is posted (Haughn, 2015). The development of Web 2.0 packages allow users to easier leverage this platform and require little experience to setup (Haughn, 2015).

Online social media fits under the evolution of Web 2.0 which revolves around being easy to use and encouraging user generated content (Beattie, 2011). Online social media leverages the concept of Web 2.0 although referring to it as Web 2.0 is incorrect (Beattie, 2011). Instead OSM is considered a Web 2.0 innovation as it allows collaboration in the sharing of content across networks (Beattie, 2011).

2.2.2 Types of Media

Media is defined as any means of mass communication which involves the transmission of information to many (Danesi, 2008). Traditional forms of media focused on communicating information from a source to an audience or having a one-way communication relationship (Hogan & Quan-Haase, 2010). Examples of this type of one-way communication is the radio, television, newspapers and magazines (Danesi, 2008). It is difficult for the audience to provide feedback on the information received from this type of media as it is one way. To provide feedback the audience will need to use another communication medium. This form of media is not effective when wanting two-way communication, especially when the source communicates to a large audience. Therefore, this form of media has a clear difference between the content producer and audience, with the audience being more of a passive receiver of information (Hogan & Quan-Haase, 2010).

Media is described as being two-way if it supports the direct communication between two people or a group of people (Hogan & Quan-Haase, 2010). This two-way media is also more interactive as communication is supported both ways by using the same communication medium (Hogan & Quan-Haase, 2010). An example of this form of media is email and telephone. The source conveys information and it is received by specifically addressed people who can respond using the same medium (Hogan & Quan-Haase, 2010).

Online social media is a new type of media, and it combines the traits of one-way media and two-way media to encourage interaction. Similar to one-way media a source can broadcast information to a wide audience (Hogan & Quan-Haase, 2010). However, like two-way media this wide audience can now interact and actively respond to this content through the medium in which the information was originally sent (Hogan & Quan-Haase, 2010).

2.2.3 What is Online Social Media?

Online social media has become very popular and by leveraging the Internet it is a successful electronic communication platform which uses websites for social networking and microblogging (Kane, 2013). This platform encourages the communication and interaction between users online in a convenient and quick manner. Users can find each other on OSM, while creating online communities in which they share information, media, ideas and personal outlooks with each other (Kane, 2013).

The growth of OSM has provided an efficient and effective way in which many people can connect throughout the world. Users of OSM can now connect and keep up to date with their friends and family with very little effort. The limitations of interacting with people across the world are also resolved when this platform is used.

Online social media is also leveraged as an effective content sharing platform, with many users sharing high amounts of information on OSM. Traditionally email was used as a content sharing platform, with users sending emails to friends and family on content they had found online (Beattie, 2011). Online social media creates an online community which connects people throughout the world in an easy manner. This simplifies the sharing of content to a user, by clicking a button and this content being shared to many OSM users (Beattie, 2011). The reach of this information is much further than traditional forms of communication as it can be instantly shared to many users throughout the world. Therefore, this platform is an interactive online community where information can be exchanged, people can communicate and collaborate, and meet others in a better manner than ever before.

Online social media was accessed through the use of a personal computer which required an electrical source and an Internet access point. With advances in technology, there are many mobile devices which are handheld and have a built-in power source. Due to this, many people are now moving away from the traditional personal computer and are now buying these mobile devices which can be used on the go. It was said that in 2016 almost 63% of the population had a mobile device and that in 2018 there were 4.57 billion mobile device users (Statista, 2018). With the increasing number of mobile device users, many OSM sites have developed and leveraged mobile solutions. Many of these OSM sites have developed mobile websites but with the increasing number of smart devices, the need for mobile applications was important. These mobile applications have unique features which utilise smart mobile devices. Features like notifications allow real time engagement on OSM by decreasing the response so users engage more on OSM (Beese, 2016). Therefore, these users can access OSM from anywhere in the world by using their mobile devices while still being engaging.

Strong content is a contributor to the many goals of OSM marketing and is key when wanting to leverage OSM algorithms (Cook, 2015). Algorithms use behaviour patterns and the personal data of its users to determine which content is relevant to them (Barbu, 2014). For organisations it is important to leverage these algorithms to generate the most amount of reach and influence

possible (Cook, 2015). However, organisations will never know exactly what these algorithms are as they are usually kept a secret.

Online social media has three elements of self-promotion which are promoting a brand to an audience, value-adding through creating a positive reaction, and interaction through two-way conversation with users online (Stokes, 2014). While organisations can create content for its users on OSM, there is a lot of other content which is shared on this platform as well. Therefore, content needs to grab the audiences' attention by overcoming the other content on OSM. Overall, to leverage OSM algorithms as effectively as possible, UKZN needs to create strong content on OSM. The content shared on UKZN's OSM accounts must have a degree of self-promotion, add value to students while also encouraging interaction. Additionally, UKZN can benefit from creating content that targets its students to ensure its content gains traction on its OSM accounts.

2.2.4 Popularity of Online Social Media

There are many popular OSM sites which have millions of users throughout the world. Currently the biggest OSM site is Facebook with 2 billion users throughout the world (Henderson, 2018). Other popular OSM sites were Twitter with 320 million users, LinkedIn with 300 million users, Google Plus with 300 million users and Instagram with 400 million users (Smith, 2016b). The popularity of OSM varies between the different age groups of users on OSM. The most popular age group across OSM sites are between the ages of 18-29 years old, with 88% of people in this age group indicating they use some form of OSM (Smith & Anderson, 2018). The 18-29 year old age group has 81% of online users on Facebook, 64% of online users on Instagram, 34% of online users on Pinterest and 40% of online users on Twitter (Smith & Anderson, 2018).

The popularity of OSM can be attributed to the opportunity to meet people, ease of use, instant sharing nature and being cost effective (Fita, 2012). Online social media allows users to meet new people from around the world, with access to millions of profiles on this platform (Fita, 2012). Previously chat rooms were used to meet new people although you may have not known the people with who you were interacting (Fita, 2012). Using profiles overcame this limitation on OSM, with people sharing information about themselves so users know with who they are interacting (Fita, 2012). The ease of being able to communicate and interact with others on OSM, makes the experience enjoyable and many users return to use this platform (Fita, 2012).

These OSM are easy to navigate and require little knowledge of the Internet which helps users connect with other users in an easy manner (Fita, 2012). By utilizing the Internet, information can be shared instantly to many users. Additionally, with no subscription fee, users are free to use the platform when they choose.

While having many users on OSM can be considered successful, the frequency in which they access these sites can be considered more significant (SeekVisibility, 2016). Many users join these OSM sites but a number of them barely frequent these sites, with some not using them again. Therefore, being an active user can be considered more important as these users are more engaging and share more information, while keeping constant traffic to these sites (SeekVisibility, 2016). The most amount of time spent daily across OSM is by the 18-29 year old age group (Ciuffetelli, 2018). Users spent 58 minutes per day on Facebook, 53 minutes per day on Instagram, 35 minutes per day on Snapchat and 3 minutes per day on Twitter (Ennis-O'Connor, 2019).

The large amount of time spent daily on OSM can also be attributed to the use of mobile devices. Facebook revealed that 1.57 billion users accessed the site from a mobile device, with this user base growing more than 20% over the past year (Protalinski, 2016). For the first time in OSM history, Facebook surpassed over 1 billion active users who access the site daily from a mobile device (Protalinski, 2016). Mobile users have easier access to this platform, and therefore they frequent these sites more than the average user and are more engaging. Facebook users are regarded as being the most engaging, with 70% saying they use Facebook daily and 45% using it multiple times a day (Duggan & Lenhart, 2015). Overall, mobile users can be more engaging by posting more information, sharing more information, and viewing more information on OSM.

2.2.5 The Features of Online Social Media

Online social media has a lot of features that can be leveraged. The features like pictures and videos have much more of an impression when leveraged in posting content (Corliss, 2012). Text can become tedious to read but by enhancing posts with pictures and videos makes the post more appealing to viewers (Corliss, 2012). Key information in these pictures and videos are conveyed to users in a much better manner which can have more of an impact when viewed (Balm, 2014). The unique feature like the 140-character limit on Twitter also makes posts more appealing to users as well. By limiting these characters and using pictures can ensure that posts

convey information in a clear and concise manner (Corliss, 2012). These OSM features get the information to users in a more effective way which can have a greater impact on users.

There are many unique OSM sites which are based on specific features. By utilizing these features can change the way users interact and communicate with each other on OSM. Features like hashtags on Twitter have become popular in society, with users leveraging them across other popular OSM sites. These hashtags mark the topic of interest when users post on OSM and provides an easy way of referencing this information. The information becomes easier to find and access when users are searching for relevant information. Another successful site that implements hashtags is Instagram, with this site focusing on pictures and hashtags to communicate with users. The popularity of hashtags has pushed its use outside of OSM, with many now leveraging this in advertising campaigns. Hashtags also create awareness in media on specific trends from around the world. The widespread adoption of hashtags has created an effective method of referencing information being shared on OSM.

Integration features link the different OSM sites and allow the information to be shared across them in an easier manner. Up to 52% of online users leverage multiple OSM sites (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). These users frequent Facebook the most and this site can act as a “home base” for them (Duggan et al., 2015). Facebook has integrated with Twitter which allows information to be more easily shared across both of these sites. Integration allows users to easily leverage the many different OSM sites, with each site having a unique audience. This allows the posting of information on one site and the automatic sharing on other sites to reach a greater audience.

This integration also expands to the registration process of OSM sites. With Facebook having more users than any other OSM site, it allows other OSM sites to register and login using your Facebook credentials. This allows easy registration on these sites as users will not have to keep entering their information. Overall, this integration can attract more users while also allowing easier information sharing across sites.

2.2.6 The Value of Online Social Media

Online social media at its core can be seen as connections and relationships between organisations and people (Nair, 2011) Similarly, OSM can be seen as important in creating relationships and connections between universities (organisations) and students (people). Additionally, OSM applications can create new ways in which organisations can communicate

with people (Culnan, McHugh, & Zubillaga, 2010). While many organisations like UKZN adopt OSM, there are many challenges when organisations need to measure and achieve value on OSM. It was found that despite the widespread adoption of OSM, one-third of respondents have expressed that these applications have yet to show any measurable internal or external benefits in organisations (Culnan et al., 2010). Value is said to not come from how the OSM platform is used, instead it comes from how organisations leverage this platform (Culnan et al., 2010). Online social media has many useful applications beyond just distributing content as it enables the formation of online communities for organisations like UKZN. These organisations gain value from these online communicates as it allows users to create content and regularly engage with organisations (Culnan et al., 2010).

Online social media is considered new to the business world and OSM investment should be measured (Nair, 2011). However, how much organisations spend on OSM and how long it uses OSM depends on how effective it finds OSM (Gilfoil & Jobs, 2012). Many organisations want to get onto OSM although just having a desire to be on OSM to expand its current media is not sufficient (Nair, 2011). It is important that OSM is part of the larger strategy of an organisation (Nair, 2011). A presence on OSM does not guarantee users will view and engage with an organisation's OSM pages as a presence does not always create value (Culnan et al., 2010). With UKZN having a presence on OSM and engaging meaningfully with students being a strategic goal, it is important for UKZN to achieve this by creating online communities. The University of KwaZulu-Natal having only a presence on OSM does not guarantee students will engage or that value will be created. Instead UKZN must create interactive communities on OSM which encourage engagement and create value for students.

Organisations fail to realise that OSM is not like other forms of media which are outreach platforms and only have the organisation communicating to the audience (Nair, 2011). It is a completely new platform which supports the back and forth communication between the organisation and the audience. Staff at UKZN have specified that OSM was an extension of the current media platforms, with this platform being used to share content with its OSM community. The University of KwaZulu-Natal needs to effectively leverage the many features of OSM as this platform is a new type of media which allows one-to-one communication between UKZN and students. Posting content and having an OSM presence are not enough to effectively leverage this platform to engage with students.

For organisations to effectively implement OSM, it is important to make “mindful decisions” regarding first adoption, build online communities, and learn from the content generated from users (Culnan et al., 2010). OSM initiatives must also be launched at internal and external levels of an organisation to ensure successful implementation (Gilfoil & Jobs, 2012). Additionally, adoption of OSM by organisations must be guided by five elements. These are: choose a good platform to use and describe how to use it, ensure OSM governance as OSM is similar to existing ecommerce applications, identify metrics which measure value, ensure all applications are always available, and manage the risks (Culnan et al., 2010). With UKZN adopting OSM, the University needs to choose a good platform to use which aligns with its culture, the brand and its objectives. It is also important for UKZN to implement governance for OSM as there are similarities between OSM governance and existing ecommerce applications. One of the most important aspects in OSM implementation involves OSM measures, in specific non-financial return on investment measures related to OSM initiatives (Gilfoil & Jobs, 2012). The University of KwaZulu-Natal should also identify metrics which measure value like the number of active members on its OSM accounts, instead of just the number of followers on these accounts. Ensuring these applications are always available is also important which allow active participants to create a viable online community. Finally, UKZN must also manage the new risks related to OSM. Due to staff and students creating content and staff interacting with users on OSM, it is important for UKZN to implement OSM policies.

It was found that there were four guidelines for effectively using OSM by organisations like UKZN. These were the need for coordination to promote using OSM, looking at the risks in the beginning, creating procedures to process unstructured messages and communication, and learning how to use internal OSM applications (Culnan et al., 2010). It is important for there to be co-ordination by linking UKZN’s OSM accounts on UKZN’s website which promote using OSM and builds its OSM communities. The University of KwaZulu-Natal must acknowledge and manage the risks related to OSM as these can pose legal problems for the University. Detailed policies for OSM need to be created for staff and students which entails appropriate content and communication on UKZN’s OSM accounts. There must also be procedures and rules of how to handle unstructured messages on UKZN’s OSM accounts. The University also needs to learn how to effectively leverage OSM internally and externally as interacting online with its users and staff is important.

In conclusion, UKZN just having a presence on OSM was not enough to effectively engage with its online community. For UKZN to achieve its goals on OSM, it is important to leverage a more detailed OSM strategy.

2.3 The Correlation between Universities and Students

Before looking at why universities want to leverage the OSM platform, it is important to first understand students' expectations and perceptions of universities to draw inferences on how universities can leverage OSM. A study by the Quality Assurance Agency aimed at understanding students to develop better relationships, making sure sectors were more prepared in understanding student engagement, investigating the impact of policies on students' views, and getting a better understanding of how perceptions vary across students (Kandiko & Mawer, 2013). The first major finding were that students need to meet clear benchmarks across the four learning environments of organisational (course structure and timetabling), interpersonal (engagement and staff support), academic (attitude towards students and lecturers' knowledge), and instrumental (physical spaces and computers) (Kandiko & Mawer, 2013). Resources and facilities were important to students, as a university that failed to provide an effective learning environment to students were failing its mandate (Kandiko & Mawer, 2013). Students valued feedback opportunities and an open process for evaluation, while wanting a more personalised education experience like meeting staff and other students (Kandiko & Mawer, 2013).

Students valued one-on-one interactions with the university for a better learning experience, and wanted to be part of a community to feel a sense of belonging (Kandiko & Mawer, 2013). Students also noted that they wanted more interaction with other students and more interaction with staff (Kandiko & Mawer, 2013). The importance of engagement in the university environment to fulfil students' expectations has been established, with OSM being able to fulfil these expectations.

With the expectations and perceptions of students now being understood, their needs will be looked at to understand how universities need to support them and enable students to undertake their studies in a good manner. Ways to support students in a more effective manner were providing advice and information to them, initiatives to encourage more student support, improve the delivery of programmes to aid a wider set of commitments, and initiatives to understand the needs of students (Newson, McDowall, & Saunders, 2011). The emergent themes from the data which were key to support students were timeliness of information and

communication from universities, and clear information and communication from universities (Newson et al., 2011). Additionally, students felt it was important that universities were more flexible in terms of delivery of course work and provisions for student support systems (Newson et al., 2011). Staff described the importance of availability outside of work through a 24/7 virtual support and response system (Newson et al., 2011). It was found that support communication between students and staff were viewed as a complete community (Newson et al., 2011). Looking at the study of “Understanding the support needs of mature students” it can be seen that the student-staff relation was important for students with them needing staff to be more helpful and supportive (Newson et al., 2011).

2.4 Universities and Online Social Media

The use of OSM by Universities requires little thought. The 18-24 year old University student demographic are extensive users of the OSM platform (Klamm, 2011). The adoption rates of students using the OSM platform were 76% of them with college or graduate degrees and 70% with some form of college education (Perrin, 2015). With young adults being the biggest users of OSM, the majority of students aged between 18-24 years old, and 76% of students using this platform, students can be considered as some of the biggest users of this platform. A recent study showed that 100% of universities that were surveyed in the United States of America, have a presence on OSM (Klamm, 2011). With many of the key population leveraging OSM and universities already having a presence on OSM, universities have no choice but to integrate OSM into its strategies and communication plans (Klamm, 2011).

With many universities like UKZN now leveraging the OSM platform and providing instruments to access OSM, more students can now access the platform. Universities found feedback was important in higher education to improve students’ learning experiences (Mamoon-Al-Bashir, Kabir, & Rahman, 2016). Many lecturers still use the traditional way of providing feedback which did not satisfy students in improving their learning experiences (Mamoon-Al-Bashir et al., 2016). Instead lecturers need to use modern technology for providing feedback to help students improve learning experiences (Mamoon-Al-Bashir et al., 2016). With feedback and evaluation being important to students and universities, OSM can provide real-time feedback to universities like UKZN. Online social media can aid in providing a more personalised learning environment between universities and students as this platform supports one-on-one interaction. Additionally, with UKZN stating the importance of engaging

with students in its strategic plan, having a more personalised learning experience can influence student engagement.

Information and communication are done instantly through OSM without being intrusive as students need to login to the platform to receive information. Additionally, students looking for information can view the University's OSM accounts when convenient. The information is also clear as it is directly shared from the university to the students, with there being minimal misinformation being shared as the source is known (Karsenty, 2009). Online social media can support the flexibility that is needed by students as it makes access to support and course work more convenient (Newson et al., 2011). Staff share information instantly to students through OSM and are online after hours to provide support to students. Students simply need to login to the relevant OSM platform to access the course work or ask for advice from staff at any time via the instant messaging abilities of OSM. Finally, OSM can support the student-staff relations which were seen as being important (Newson et al., 2011). Online social media provides an effective platform for one-on-one communication and support, can aid students by creating an interactive and supportive online community which encourages a more personalised sense of engagement (Newson et al., 2011).

2.4.1 Why Students use Online Social Media?

Students using OSM has been covered in many studies throughout the world. One survey has assessed student applicants from the different regions in the world on their use of this platform. The general consensus throughout the survey is that students leverage this platform primarily "to keep up to date" (Bridgestock, 2013). Up to 38% of students in Africa share this consensus as they leverage this platform to "keep up to date" with their friends and family (Bridgestock, 2013). The second most popular reason, with 32% of students expressing this, was for "useful connections" (Bridgestock, 2013). These students connect with other online accounts which can benefit them, for example students connecting with their University's official OSM accounts (Bridgestock, 2013). Twenty four percent of students use OSM as they "find it interesting" and 6% use it "to have their say" (Bridgestock, 2013). Additionally, it was shown that students felt that having a sense of belonging at university was important (Kandiko & Mawer, 2013). Online social media can be leveraged to create a sense of belonging for students as this platform allows more interaction and personalised engagement with users in online communities.

2.4.2 Opportunities of using Online Social Media

The unique traits of OSM provide many opportunities for Universities. These traits are external initiatives for communicating with students and internal initiatives for internal communication with staff. One of the benefits for universities using OSM is that information can travel fast to its many student users from around the world. This information is shared by universities and it is populated onto the OSM feeds of students who follow them. Even if a student does not follow their University's OSM accounts, this information can still reach them due to the sharing and collaborating nature of OSM. Students can view information shared by their University and then re-share this to their online followers, allowing the information to reach many more people on OSM.

Universities can also leverage the rating and commenting features on these OSM sites. When universities post on OSM, users can rate if they "like" or "dislike" the information that was shared. Facebook in particular allows users to rate a post with a variety of emoticons which represent the emotions users feel towards the post. This can give Universities a general idea of how the information being shared was perceived by its online followers. Many OSM sites like Facebook and Twitter also allow the commenting on posted content. This allows universities to get in-depth feedback on what was posted which can encourage participation and interaction on OSM in the future. Overall, the OSM platform provides in-depth analytical data. This type of data is very valuable when leveraged by universities as it shows the impressions and engagement of each post which has been made. Universities can assess how many views, likes, shares, replies and email shares these posts get. This can give universities an understanding of which posts appeal more to students than others. Therefore, universities can leverage this data when implementing its OSM strategy.

Universities can take advantage of the many users on this platform to showcase student and faculty work (Lavrusik, 2009). This can also attract potential students from all over the world. The accomplishments of students and faculties can be posted to official OSM accounts, with many people being able to engage with these posts. When new students are looking for potential universities, they can search on OSM to see the accomplishments and praise shared on the OSM platform.

Online social media creates a way for universities to connect and keep up to date with alumni. With the popularity of OSM, there are many alumni using this platform which makes

connecting with them easier. This can allow alumni to post their experiences and success which encourages potential students to follow the same path. Reconnecting with alumni can increase the University's exposure and increase the overall search engine optimization value (Ridley, 2016).

Universities can use OSM to effectively post critical information to its student followers. This information can be instantly shared via OSM which needs immediate attention of students. This is especially important when universities need to communicate emergency notifications to students and provide critical updates. Due to the daily use of OSM, critical information can potentially reach more students in a better manner over other forms of communication like email.

The internal use of OSM at universities can provide many benefits like allowing better internal communication between the university and staff. Many universities leverage an intranet to update and share content through poorly designed repositories which encourage one way communication (Playle, 2011). Universities have now started to explore opportunities to internally integrate OSM (Playle, 2011). The use of OSM supports communication across faculties when there is a need for the quick exchange of information, when lecturers need to share resources, and to communicate updates with seminar groups (Playle, 2011). To be successful when internally leveraging OSM, there is a need to understand the University's culture and have clear objectives (Playle, 2011). Universities fail when using OSM for internal communication because the organisation is not aligned with this platform (Playle, 2011). Universities inefficiently use resources and tools because these are not influenced or supported by its vision and objectives (Playle, 2011).

2.4.3 Challenges of using Online Social Media

Leveraging OSM can provide many benefits to universities although there are many challenges when leveraging this platform as well. The first challenge looked at relates to the rapid distribution of information. When universities use OSM, the information shared to students can usually be more trusted as the source of this information is known (Karsenty, 2009). However, when students share information on the official OSM accounts of universities, this information can be incorrect without them knowing. This is due to the fact that some of the information being shared by students is through word of mouth, with the originality of this information being in question before it is shared on this platform (Gligorijevic, 2013). This information can

be incorrect and the sharer can unknowingly pass this false information to many on OSM, with many people viewing and sharing this information as well (Gligorijevic, 2013). This creates challenges when universities leverage OSM to create online communities and when sharing critical information to students. If this information is initially false and passed to students, they can share this on OSM which can potentially reach many more students (Swain, 2011). Therefore, the management of this information by universities is important to avoid these challenges. By actively monitoring what information is being shared online, universities are able to take corrective measures before false information can reach and influence many students (Power, 2015).

Knowing how and when to respond is another challenge faced by universities when using OSM. When students ask questions on OSM, it is better to reply as quickly as possible to the original post. However, with OSM encouraging interaction between students, it can seem rude for universities to proactively respond between the conversation of two users (Swain, 2011). A way to overcome this rudeness is to encourage other students to engage in this conversation as well. Some Universities have corrected this by priming students to actively join these conversations and appropriately correct people if necessary (Swain, 2011). Other universities solves this predicament by hiring a team of official student bloggers who are not moderated or paid, instead giving prizes to the most frequent blogger (Swain, 2011). They write honest positive and negative posts which are more authentic and important in the generation of OSM (Swain, 2011). Responding to students must also be done in pleasant manner as this response can be viewed by other users on OSM which can affect the University's image. Keeping responses simple and unbiased can allow the response to effectively convey the information to students. An example of this is when an applicant at the Warwick University tweeted "Oh, no. I hear the University of Warwick is closing, what am I going to do?" (Swain, 2011). A simple and quick response of "We're still here, honest" by the University, managed the situation before the news spread to many people and created rumours (Swain, 2011).

Therefore, managing these challenges on OSM can allow a university to effectively leverage OSM. Having dedicated personal to actively manage and take corrective measures on its OSM accounts, can overcome these challenges to create a good image and maintain the reputation of the University.

2.4.4 Unofficial Accounts on Online Social Media

While universities leverage official OSM accounts, there are many unofficial university accounts created by users or students. One third of institutions in India are on OSM and one fourth of the them have unofficial accounts on this platform (Tripathi, 2016). Unofficial accounts on OSM pose many concerns for universities in regards to branding and security (Tripathi, 2016). These unofficial accounts often mislead students in thinking they are official accounts and share incorrect information with students who aren't aware. Universities must take control or remove these unofficial accounts, to limit the potential risk of sharing statements which look official (Tripathi, 2016).

Unofficial Facebook accounts are also created when users “check in” to the university they are visiting. The “check in” feature on Facebook is leveraged by users who are at the University’s location. These unofficial OSM accounts are being used by many users, sometimes without the university even knowing they even exist. Additionally, when a user finds a University’s page and it is hardly used, they can wonder how up to date is the university in other parts of the organisation (Thogmartin, 2016). With the use of OSM being so significant at present, the lack of activity by universities on OSM, which act as a first impression, can influence users in a negative way (Thogmartin, 2016).

Unofficial accounts can become an issue for potential students of universities. While these unofficial OSM accounts might have good intentions, the information shared on them can sometimes not align well with the University’s brand (Swain, 2011). This can influence potential students in a negative manner towards the university. With the official university accounts on OSM, there are controls and checks which can authenticate and ensure the information being shared is accurate (Moore, Cottrell, & Chambers, 2018). While on the unofficial OSM accounts, there are little to no checks and the information shared can be inaccurate (Moore et al., 2018). Unofficial OSM accounts can have a significant number of followers, and the information shared can reach and influence many unaware student users.

Unofficial OSM accounts are seldom moderated, while official accounts have dedicated staff who monitor and manage these accounts (Moore et al., 2018). When there is little or no moderation on these accounts, it allows users to post any type of information they want (Moore et al., 2018). This can create conflict if users share controversial content that other users do not

agree with. This can affect the University's environment and hamper the collaborative learning experience of universities.

Unofficial OSM accounts which aren't managed by universities is a missed opportunity for them. However, users can still leave reviews and ratings of the university on these unofficial OSM accounts. These are important as it is on a first-hand basis from users and provides the university with critical feedback on its performance. Positive reviews give the university feedback on its good performance, while negative reviews give the university an opportunity to take corrective measures to rectify the problem (Thogmartin, 2016). By not commenting at all, shows students that the university does not know what is being said about them on OSM or that the university doesn't care (Thogmartin, 2016).

2.4.4.1 Benefits of Unofficial OSM Accounts

With there being many risks associated with unofficial OSM accounts, there are also benefits when students join these accounts. The interaction and collaboration on these unofficial accounts, can sometimes be more than on the University's official accounts. This can be due to students not being encouraged to interact or students being concerned about expressing themselves on these official accounts (Fagioli, Rios-Aguilar, & Deil-Amen, 2015). On the official OSM accounts, the information shared by students can be reviewed by official staff employed by the university. While on the unofficial OSM accounts, students can feel free to speak their mind and express themselves with no concern that it is reviewed by the university.

These unofficial OSM accounts sometimes share accurate information in a faster manner than the official OSM accounts (Hagar, 2013). While the official accounts have to go through a process before it can share information, users on these unofficial accounts can just share this information (Hagar, 2013). The information can leak before it is officially published and with the many forms of media that students use, it can reach the unofficial OSM accounts before the official OSM accounts (Hagar, 2013).

Another benefit of the unofficial accounts is the collaboration between similar students which is encouraged. While many unofficial OSM accounts have students from the university, creating more specific groups can allow better interaction and collaboration between students with similar interests (Clements, 2015). For example, students can create specific unofficial OSM accounts for a course they are taking at the university. Only relevant students who share

a common trait are encouraged to share, interact and collaborate information on these accounts (Clements, 2015).

2.5 The University of KwaZulu-Natal

The University of KwaZulu-Natal is based in the province of KwaZulu-Natal in South Africa. The University is divided into 5 different campuses which are geographically located throughout KwaZulu-Natal. The campuses are Edgewood, Howard College, Medical School, Pietermaritzburg and Westville. The University has more than 49100 registered students as of October 2017, with many of these students falling under the 18-24 year old age group.

The University of KwaZulu-Natal use of OSM was proposed in the strategic plan developed in 2007 which was later revised in 2012 (UKZN, 2012). A key aspect of this strategic plan involves engaging meaningfully with students. Two-way communication regularly with students was seen as important to engage with students in a more personal manner, promote student participation in decision making and assess any changing needs of students (UKZN, 2012). Therefore, by utilizing OSM, UKZN intends on achieving the strategic goals proposed in its strategic plan.

A notice posted on February 2017 advertised a marketing and OSM assistant position. This notice detailed key responsibilities which the assistant would have to fulfil on the OSM accounts of UKZN. The noticed stated that for OSM a high level of autonomy is needed. Some key responsibilities for UKZN's OSM accounts were:

- Respond and manage all queries on UKZN's OSM accounts which must be done throughout the day on a daily basis.
- Post a minimum of three posts per day which are interactive and encourage students to participate.
- The online feedback and analytics platform of each OSM site is to be visited frequently which advises campaign activities for the future. This is to be done at least once a week.
- Ensure there is close coordination between all relevant departments, like events and marketing, on a daily basis to craft textured campaigns.
- Draft reports on the statistics for each OSM account when needed by managers.

- Ensure the online presence of UKZN is maximised by implementing strategic, creative and tactical online marketing activities to use a higher level of interactivity for community members and students on OSM.
- Monitor and engage, when needed, in brand related conversations on OSM (UKZN, 2017a).

The University of KwaZulu-Natal has official Facebook, Twitter, YouTube, Instagram and Google+ accounts. These accounts are used to communicate and interact with students in an easier manner. The University also uses OSM to promote activities that are taking place, provide information to its online followers and be more engaging with students. The University frequently posts this information on its OSM accounts, with many students being able to view and share this information.

UKZN has established a following on OSM with many more following daily. Majority of these followers on UKZN's OSM accounts are current students as well as alumni.

2.5.1 UKZN use of Online Social Media

The University of KwaZulu-Natal can use OSM in many ways which can benefit them. By taking initiatives like interacting and communicating with students can effectively portray a good image of UKZN. With how OSM has changed the way information is being shared, people can actively seek this information. When new students are looking for information on where to study, they can view what has been said about UKZN on OSM and assess how the university engages with students. These new students see first-hand encounters between UKZN and students which can influence their decision on studying at this university. Therefore, a good reputation on OSM can potentially attract many new students and post graduate students from across the world.

When leveraged in business continuity planning, OSM can improve upon crisis communication and strengthen a University's resilience (Power, 2015). By preparing a university for a worst-case scenario, OSM can play a vital part in communicating to many students in real time (Power, 2015). Communication on OSM is more efficient and effective when compared to emails and notice boards which are also used. With OSM, the information is distributed from a reliable source to many users. This can allow UKZN to gain control of the distribution of information and prevent unreliable information from leaking out. Overall, the posting of critical

information on UKZN's OSM accounts can allow more students to view and share this information, as users of OSM are more engaging and frequent these online sites often.

The University of KwaZulu-Natal can also utilize the many features of OSM when implementing disaster risk management. These various features allow an easy way of finding information on this platform. Universities can leverage OSM to actively monitor and reveal any risks by tracking what is being said on OSM about them (Power, 2015). This information is posted on a first-hand basis by students which allows UKZN to understand what issues students are facing. By doing this UKZN can manage any risks before it becomes worse and keep its students happy. With 30% of people venting on OSM, this platform can play a significant role when wanting to manage risk (Brynley-Jones, 2016). The University of KwaZulu-Natal can create and maintain relationships with students to assess what these students are experiencing. Therefore, UKZN can leverage OSM to avoid, lessen or transfer risk by taking action and measures of prevention, mitigation and preparedness (Niekerk, 2011).

2.5.2 Unofficial UKZN Accounts on OSM

There are many unofficial UKZN accounts on OSM with a varying number of followers on each. Some of these unofficial accounts are "University of Kwazulu Natal Westville" with 180600 followers, "UKZN confessions" with 10200 followers, "UKZN PMB SRC 2013/2014/2015/2016/2017" with 1500 followers, "UKZN Stolen PICS" with 7500 followers and "UKZN PMB SRC 2014/15/16/17" with 6300 followers as of October 2017. As of October 2017, the "University of KwaZulu-Natal" page has 24300 likes on Facebook. This unofficial page was created due to "check in" feature used by people on Facebook. There are many users on these accounts, who share information and interact with each other on a regular basis. These unofficial OSM accounts have a variety of purposes, with users sharing a wide variety of information. This information generally relates to UKZN although there is a significant amount of information and content being posted which has no relation to UKZN.

2.6 Online Social Media Strategy

2.6.1 Strategy

To understand what an OSM strategy is, it is important to first understand the basics of a strategy. Organisations use a strategy to gain a competitive advantage like meeting the needs of consumers (Porter, 1996). A strategy is created from many factors of an organisation like its

culture, its technology, its processes, and its products or services (Porter, 1996). Organisations use strategies in decision making to effectively leverage its capabilities and resources to achieve the goals and objectives it has set (Porter, 1996). To achieve an end goal, an organisation must analyse the situational environment being faced, develop a strategy based on this assessment, and finally implement the strategy (Porter, 1996). Key elements of a strategy are vision, which is where an organisation wants to be in the future (Porter, 1996). The organisational strategic vision does not change over time like goals and objectives (Porter, 1996). The mission of the organisation seeks to answer why an organisation exists (Porter, 1996). Other key elements of a strategy are core values which are the values an organisation will not compromise on in any scenario, and purpose which is why an organisation exists beyond financial gain (Porter, 1996).

2.6.2 What is an Online Social Media Strategy?

The popularity of OSM can provide many benefits when universities like UKZN leverage the OSM platform. However, with how big the platform has become it is important for an organisation to not dive head first into OSM. Many universities have great success online while many universities fail (Klamm, 2011). Accounts and strategies fail to gain a following on OSM which leaves less active online communities and inactive accounts (Klamm, 2011). One of the best practices universities can use for effective OSM engagement is to develop a strategy and set goals for OSM (Klamm, 2011)

An OSM strategy ensures that the organisation is effectively leveraging its resources while mitigating risk to achieve the overall vision, mission, goals and objects that have been set (Stokes, 2014). Additionally, an OSM strategy describes relationships, its value, and plans of how to leverage OSM to achieve the goals that were set (Fox, 2014). The basis of this definition is that OSM provides a way to enable conversations, share information, collaborate and build relationships (Fox, 2014). An OSM strategy ensures that universities can effectively reach their objectives and goals when leveraging OSM (Fox, 2014). Using an OSM strategy is also more than just defining how to post information to these online accounts. A successful online strategy ensures that a university achieves its stated strategic objectives (Rampton, 2014).

When implementing and integrating strategy into an organisation, it is important to know what is the strategy, how it impacts all levels of an organisation, and how it creates a sustainable impact (Hicks, 2011). Strategies are initiatives set in place at different sectors of an

organisation to achieve its goals. All strategies are aligned with the overall goals of an organisation and when executed aim to achieve the organisation's vision, mission and objectives (Hicks, 2011). Increasing an organisation's OSM followers is not a goal, it is more of a means to achieve an objective and not an end goal (Cook, 2015). Goals should be based around the return on investments from resources and time of an organisation using OSM (Cook, 2015). Goals must be developed which create a real-world difference to show tangible and measurable return on investment on OSM, and help the organisation progress to a specific point (Cook, 2015). However, there is much confusion on how an OSM strategy looks and what is the difference from a more general marketing strategy.

The OSM strategy development model is said to be built on three factors, namely the audience, the brand and OSM goals (Cook, 2015). The combination of these three factors bring about three important elements for an effective OSM strategy which are the interaction strategy, the value-adding content and the goal "hitlist" (Cook, 2015). With the amount of time and effort organisations invest in OSM, it is important to see results as this time and effort can go towards other things in the organisation (Cook, 2015).

An organisation that has created goals and is active on OSM but is not reaching social audiences is said to be failing at creating content that resonates with its audience (Stokes, 2014). Organisations that resonate with their audience is important for OSM success (Cook, 2015). When content resonates with its audience, it creates engagement and a reaction like a share on OSM (Stokes, 2014). Overall, this increase in engagement can allow content to reach more users and create more impressions on OSM. It is important for an organisation to influence the new audience by eliciting an action from them like gaining a website click, gaining an email signup or gaining more engagement from a post (Cook, 2015). With the key being resonating with an audience for OSM success, there needs to be an OSM strategy (Cook, 2015).

Conversation on OSM are not strategies, instead it is a simple tactic used to achieve OSM goals (Plowman, 2018). It is said that practitioners are involved in both OSM strategy development and OSM tactical implementation, while practitioners only acknowledge the organisations strategic OSM activities and not its tactical OSM activities (Plowman, 2018). Online social media tactics are determined by goals set by an organisation and its OSM strategy (Cook, 2015). In conclusion, an OSM strategy is the foundation to an organisation's OSM initiatives and can help with the brands consistency (Cook, 2015). It is important that organisations focus not only on just getting more followers on OSM, and instead focus on those users who already

follow the organisation. It is important to choose two or three OSM goals and then use the best of each OSM platform to achieve these goals (Cook, 2015).

2.6.3 Success in Online Social Media Strategy

The goal of OSM is to engage with online users as this engagement can lead to a desired outcome or goal (Safko & Brake, 2009). Organisations use OSM due to its multiple opportunities and its ability to give a more personal feel to brands that feel abstract or distant (Chandy, 2014). It allows organisations to connect with users' trends, tastes and feedback, and develop and strengthen the online communities of users (Chandy, 2014). With many organisations understanding the potential of OSM and with the need for OSM strategy being established, it is important to discuss ways in which OSM strategies can succeed.

It is important for organisations to invest in OSM as a strategic plan is needed with a proper allocation of resources and time (Chandy, 2014). It is said that engaging and creating a bond on OSM is a constant commitment, with staff always needing to engage, anticipate and respond (Chandy, 2014). The University of KwaZulu-Natal will need a strategic plan for OSM which includes allocated time and resources, and not just a few points in the overall strategic plan. Additionally, there needs to be dedicated staff for UKZN's OSM accounts who need to engage, anticipate and respond to students around the clock.

Understanding the reasons why users want to engage with the organisation is also important as sometimes users desire social rewards from organisation's online community (Chandy, 2014). Looking at the number of likes on OSM is not sufficient; instead measures like traffic, reach, influence, sustainability and conversion are important (Weinberg, 2009). It is important for UKZN to understand why students use OSM to engage as it can help them craft an OSM strategy. Additionally, looking at OSM metrics and not just online followers can also show how effectively this OSM strategy is working for UKZN.

It is important that organisations steer user's sentiment and not force it, and ensure that there is transparency to effectively engage with users (Chandy, 2014). To build something that is sustainable and substantial through OSM initiatives for an organisation, it is important for high level staff to back these initiatives (Chandy, 2014). Finally, it is important to stay true to the brand by adapting communication to suit OSM, while keeping the tone and image of the organisation consistent across all forms of media (Chandy, 2014). To engage more effectively, UKZN needs to be transparent in its engagement with students, and ensure students' sentiments

are steered and not forced. For OSM to be beneficial and sustainable over a long-term at UKZN, high level staff at UKZN need to support these OSM initiatives. Finally, UKZN needs to stay true to its values and culture on OSM, and ensure that its image and voice is consistent across all platforms it uses.

2.6.4 Failure in Online Social Media Strategy

With an OSM strategy being defined, mistakes need to be avoided to ensure this strategy does not fail when implemented. One of the most common failures involves not having the University's values match the values that are in its OSM strategy (Rampton, 2014). Everything that wants to be achieved on OSM must be based on the values of the university. Therefore, these values must be used to guide the content and the objectives on OSM (Rampton, 2014).

Consistency was the next point where OSM strategies tend to fail. Sharing information consistently throughout the day is important to reach many students that use OSM at varying times in the day, while also ensuring they are not spammed (Rampton, 2014).

Misunderstanding how OSM works is another reason why OSM strategies fail. A common mistake is the thinking that all OSM sites are the same (Rampton, 2014). While Facebook is the most frequented, there must be an understanding that the way it is leveraged is different compared to the other OSM sites (Rampton, 2014). Developing and understanding OSM strategy must ensure that each OSM site is leveraged using its specific traits to effectively communicate and share information (Rampton, 2014).

Using OSM for one-way communication can also cause these strategies to fail. Many universities think that constantly posting information to its OSM accounts means that many students view this information (Rampton, 2014). This is not true as there is a lot of information being constantly shared and users tune out if all a university does is post information (Rampton, 2014). Online social media encourages engagement and interaction so by taking the time to hear students' feedback, an understanding is gained of what they like or dislike (Rampton, 2014). This shows universities what information is popular to get the most engagement on OSM (Rampton, 2014). If universities post information which do not get interaction on OSM, it is not effectively leveraging its OSM strategy and the traits of this platform (Rampton, 2014).

Not monitoring and measuring these OSM accounts is the final reason these strategies fail. Universities can measure and monitor how effective it is leveraging the OSM sites being used

(Rampton, 2014). This can provide information on how many likes or shares are on a post, and how many comments are being left on each post (Rampton, 2014). Important knowledge is gained on how engaging is content which can show universities what content its students prefer (Rampton, 2014). This can ensure that the content being created and posted encourages audience interaction and engagement. No organisation should be leveraging the OSM platform without an OSM strategy (Chandy, 2014).

This section reinforces the importance of OSM strategy, suggests ways to ensure that OSM strategy works and how OSM strategy can fail when used by an organisation like UKZN.

2.7 Conclusion

The use of OSM and the importance of OSM strategy for UKZN has been established although whether the University is leveraging this platform in an effective way is not understood. The University has gained many followers on the OSM platform, however the effectiveness of this intervention is not understood and the OSM strategy being used is not known. To understand these unknowns, it is critical to assess the underlying OSM strategy being used by UKZN. Specifically, what OSM strategy it is using, the effects exhibited when using this strategy and the effectiveness of this strategy. Assessing whether the OSM strategy is achieving its stated strategic objectives, is also critical to this study. Additionally, with the many risks associated when implementing OSM, it is important for UKZN to leverage an OSM strategy which in this study is created using the Balanced Scorecard framework discussed in Chapter 3. Overall, UKZN leveraging an OSM strategy creates an interactive, collaborative and engaging online community for its student users.

2.8 Overview of Chapter

This chapter presented the background literature that was used for this research study. First OSM is detailed to give a better understanding of what is OSM, how popular it is OSM, what features this platform has and its value. Literature relating to universities and students is also presented to show what are students' expectations from universities. Next literature relating to universities and OSM are outlined to give a background of using OSM in universities, and the opportunities and challenges that are faced by universities using OSM. The unofficial OSM accounts are covered to show its influence on universities and students, with the benefits of these unofficial OSM accounts also being shown. Online social media use is outlined which

shows the strategic documents and outlines the use of this platform by UKZN. A brief overview of the popular unofficial OSM accounts of UKZN are also provided. With the need to assess the OSM strategy of UKZN, literature related to OSM strategy was reviewed to establish the importance of OSM strategies, and outline ways this strategy can succeed or fail.

This chapter provides researchers with the basis of OSM use amongst students and universities. It provides justification by looking at the benefits and challenges when universities want to leverage OSM, while also looking at how important is OSM strategy when wanting to leverage this platform. Overall, it shows that OSM strategy amongst universities is important although there are now unique challenges on OSM which will need to be mitigated.

Chapter three discusses the research methodology used in this study.

Chapter 3: Methodology

3.1 Introduction

This chapter describes the research methodology used which includes the research methods, data collection instruments, the population and sampling techniques. Research is defined as the “careful enquiry or investigation through searching for new facts in all branches of knowledge” (Hornby & Wehmeier, 2000). Research contributes to existing knowledge which leads to its advancement, and aims to discover new answers to questions by applying scientific procedures (Hornby & Wehmeier, 2000). Methodology is defined as “the analysis of procedures and principles of enquiry in a specific field” (Merriam-Webster, 2008). Research methodology is a way to conduct research and choose methods which are used to advance the knowledge in any relevant field (Merriam-Webster, 2008). Research methodology links the research problems and elaborates on the relationships between the research questions, data collection methods, sampling techniques and analysis of research (Merriam-Webster, 2008).

This research study is descriptive and interpretive. The data collection is from questionnaires which were evaluated quantitatively and semi-structured interviews which were evaluated qualitatively. Quantitative data analysis and qualitative data analysis were used which make this study possible. This mixed methods approach is important in determining how effective is the University of KwaZulu-Natal’s (UKZN) online social media (OSM) strategy which is a key part of this study. The non-profit Balanced Scorecard (BSC) framework is used to answer the research questions.

In this chapter, the statement of purpose and the research questions are explained in more detail. Additionally, the data collection and analysis procedures are also discussed, with each research instrument being described and how it was implemented being explained. The ethical considerations will then be indicated.

3.2 Methodology of Research

This research study focuses on the OSM strategy that UKZN has employed. The theoretical framework, concepts and constructs help in the analysis of empirical data and in answering the research questions of this study. This descriptive and interpretive research study is based on assessing UKZN’s OSM strategy and understanding whether this online strategy is achieving

its stated strategic objectives. The research approach chosen for this study is a mixed method approach to gather empirical evidence.

The non-profit BSC framework was used for OSM strategy assessment.

3.3 Frameworks

Many frameworks were looked at but were deemed not suitable for this research study. These frameworks are discussed to motivate why the non-profit BSC was chosen.

3.3.1 Social Media Framework

The Social Media framework has been used by universities for its OSM accounts. This framework proposes the elements of defining the audience, the goals, the quality of content, the valuable content, the identity on OSM, and the integrated communication (Werder, Helms, & Slinger, 2014). This framework proposes knowing the goals for OSM and the purpose of engagement on OSM (Werder et al., 2014). Additionally, quality content must be shared which ensures value is gained when individuals engage with it (Werder et al., 2014). This framework also focuses on the image of the university on OSM and provides a guideline of how universities can manage its online reputation (Werder et al., 2014). Finally, this framework proposes integrating OSM in the wider communication objectives and not just as standalone platform (Werder et al., 2014).

Overall, this framework suggests that a university focus on 5 areas which can allow it be more effective on OSM and achieve its OSM goals. However, this framework was deemed not fit as it had no OSM strategy assessment element which is important in this study. This framework focuses on elements that help achieve OSM goals, however the BSC provides this element in its analysis while also providing steps to assess OSM strategy.

3.3.2 Social Media Marketing Framework

The second framework proposed was the Social Media Marketing framework. This framework focuses on the strategic plans and objectives of OSM. It is the process of how an organisation expects to target its audience through OSM and how it expects to achieve its marketing objectives (Ananda, Hernández-García, & Lamberti, 2014). This framework can be viewed as the activities, actions, behaviours and tactics used on OSM by an organisation to get a competitive advantage (Ananda et al., 2014).

With the focus of this framework on the decisions and objectives of an organisation, it was deemed not fit when used to assess UKZN's OSM strategy. This is due to UKZN's OSM strategy not being known according to staff, with the overall decisions for OSM being very brief. While a strategy can be created for UKZN's OSM accounts using this framework, the BSC proposes a step by step breakdown of creating an OSM strategy for UKZN. The focus of the Social Media Marketing framework is on actions taken from an external perspective to create value. This framework also focuses on creating a brand new strategy for an organisation. While the focus of the BSC is from both the internal and external perspectives which gives a balanced assessment of an organisation. The BSC can also be used to determine the current strategy of an organisation, and analyse how to effectively leverage this strategy by providing performance measures and targets.

3.3.3 Profit Balanced Scorecard Framework

The third framework looked at was the profit BSC framework. This framework is used to strategic plan and manage an organisation (Kaplan & Norton, 1996b). This framework shows the strategy of an organisation by connecting the dots of elements such as mission, vision, core values, and strategic objectives for easier creation and comprehension (Kaplan & Norton, 1996b). This framework proposes that an organisation has four perspectives of financial, customer/stakeholders, internal processes and organisational capacity (Kaplan & Norton, 1996b). The strategic objectives for this framework revolve around improving cost effectiveness and increasing the revenue of the organisation. Overall, the most powerful element of the BSC framework is the use of strategy mapping which shows cause-and-effect connections between objectives to show how value is created (Kaplan & Norton, 1996b). The increase in performance of the objectives results in desirable result in the customer and financial perspectives (Kaplan & Norton, 1996b).

While this framework can work for any organisation, it was deemed not suitable due to its focus of financial objectives. The assessment of UKZN's OSM strategy from a non-profit perspective was due to engagement being important from UKZN's strategic documents. Additionally, UKZN uses its OSM accounts to post information and engage with its students to create value, therefore it was determined that a non-profit theoretical framework was a better fit.

Overall, these frameworks were deemed not suitable as it lacked the concept of assessing an organisation's OSM strategy which is a fundamental part of the research questions and this study. If a framework had a strategy assessment element, it was deemed not suitable as the focus was from a financial perspective.

3.4 Balanced Scorecard Framework

3.4.1 Introduction

The BSC was first introduced in a detailed article by Dr David Norton and Dr Robert Kaplan in the 1992 Harvard Business Review (Kaplan & Norton, 1992) This article was very successful and it was based on a multiple company research project by Norton and Nolan in 1990. This research project looked at performance measurement in companies whose intangible assets played a critical role in creating value (Nolan, Norton, & Company, 1991). Norton's and Kaplan's interest in measurement which drives performance improvements came from a belief by Lord Kelvin a British scientist. This belief is "if what is being said can be measured and it can be expressed in numbers, something is known about it. However, when it cannot be measured and expressed in numbers, the knowledge of it is of a meagre and unsatisfactory kind. If you cannot measure it, you cannot improve it." (Nolan et al., 1991).

Norton and Kaplan believed that measurement is as important for managers as it is important for scientists (Kaplan, 2010). If organisations need to improve managing their intangible assets, they would have to implement measurement of these intangible assets in the management systems as well (Kaplan, 2010). After this article, the BSC has been adopted and used by many public, private and non-profit organisations throughout the world. This concept was then expanded by Norton and Kaplan into a management tool for communicating, describing and implementing strategy (Kaplan, 2010).

3.4.2 Balanced Scorecard

The BSC is a performance measurement framework. This framework is used to translate an organisation's vision and strategy into a detailed set of performance measures (Kaplan & Norton, 1992). These measures provide the framework for a strategic measurement and management system (Kaplan & Norton, 1992).

The BSC framework leverages traditional financial measures. These financial measures tell a story of past events which were beneficial for industrial aged companies where customer relationships and long term investments were not the focus (Kaplan & Norton, 1996a). With information age companies, these financial measures are considered inadequate in guiding and evaluating its journey in creating future value (Kaplan & Norton, 1996a). Future value is created through investments in employees, customers, technology, innovation, processes and suppliers (Kaplan & Norton, 1996a). Therefore, the BSC combines the financial measures of past performance in an organisation with that of drivers for future performance.

The measures and objectives of the BSC are determined by assessing an organisation's vision and strategy (Kaplan & Norton, 1996a). Evaluating these measures and objectives to understand organisational performance is done from four perspectives. These perspectives are: financial, customer, internal business process, and learning and growth which provides the framework for the BSC shown in Figure 3.1 (Kaplan & Norton, 1996a). This enables an organisation to track its financial results, monitor its progress in building capabilities, and gain intangible assets needed for future growth (Kaplan & Norton, 2007).

Translating Vision and Strategy: Four Perspectives

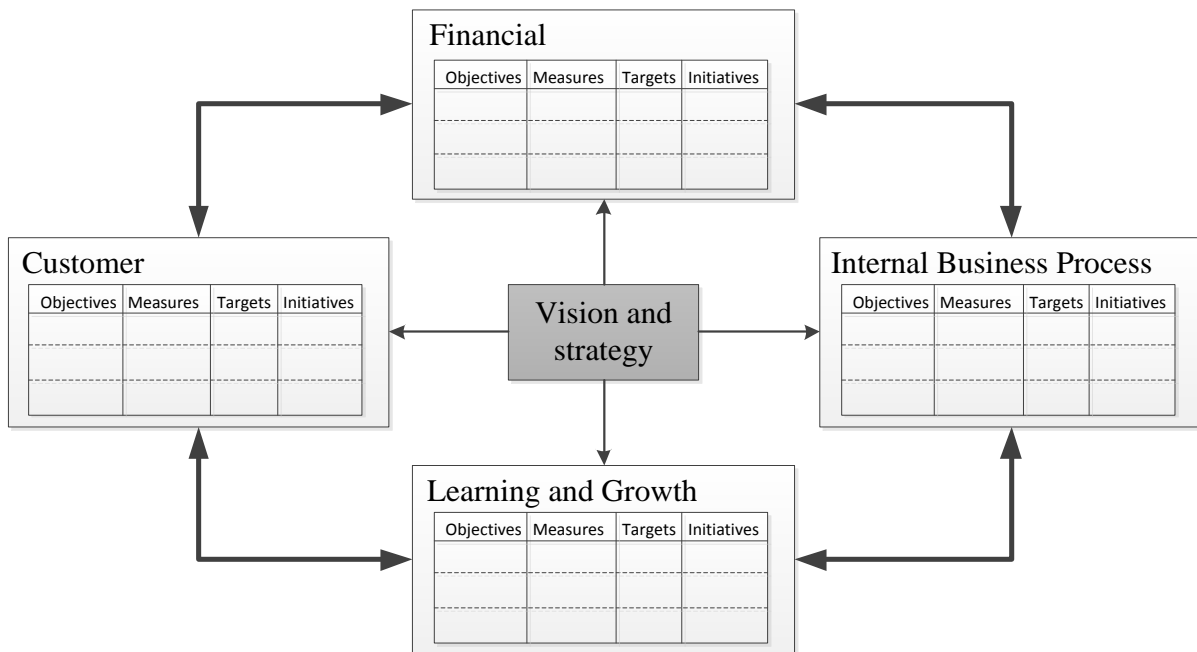


Figure 3.1: Original structure of the BSC (Adapted from Kaplan & Norton, 2007).

The BSC develops the business objectives beyond just financial measures. Organisations can measure how its businesses create value for new and current customers, and how it can enhance its internal capabilities (Kaplan & Norton, 1996a). Organisations can also determine how it can enhance investment in people, procedures and systems that improve future performance (Kaplan & Norton, 1996a). This framework can also determine the important value creation activities which are created by motivated and skilled organisational participants (Kaplan & Norton, 1996a). While retaining an interest on short-term financial performance, the BSC shows the value drivers for better long-term competitive and financial performance.

3.4.3 Why use the Balanced Scorecard?

Many organisations have already implemented some form of performance measurement system which have financial and nonfinancial measures. However, these lack a balanced set of measures which are leveraged when the BSC is used. These organisations use nonfinancial measures for internal improvements and customer interaction processes (Kaplan & Norton, 1996a). Therefore, organisations are leveraging its financial and nonfinancial performance measures solely for feedback and to control its short-term processes.

The BSC stresses that financial and non-financial measure have to be included in the information systems of employees at every level of an organisation (Kaplan & Norton, 1996a). The measures and objectives of the BSC are not just an unplanned set of financial and nonfinancial measures, instead they are determined from the top-down processes which are driven by the mission and strategy of an organisation (Kaplan & Norton, 1996a). This framework can be used by an organisation to translate its vision and strategy into a clear set of performance measures. These measures show a balance between the external measures which are for customers and shareholders, and the internal measures which are for innovation, critical business processes, and learning and growth (Kaplan & Norton, 1996a). Therefore, these measures are “balanced” with the results of past initiatives and the measures which drive future performance. The BSC can be considered more than just an operational and tactical measurement system. Instead innovative organisations are using the BSC as a strategic management system to manage its strategy over a long term (Kaplan & Norton, 1996a).

Many companies’ systems were built around financial measures and targets which had little relation to how a company progresses to achieve long-term strategic objectives (Kaplan & Norton, 2007). The focus on these short-term financial measures has therefore left a gap between the development of a strategy and its implementation (Kaplan & Norton, 2007). Therefore, managers who use the BSC do not rely on short-term financial measures as sole indicators for organisational performance (Kaplan & Norton, 2007). This framework introduces four management processes which separately and together, contribute to linking an organisation’s short-term actions with its long-term strategic objectives (Kaplan & Norton, 2007). These processes are shown in figure 3.2.

Managing Strategy: Four Processes

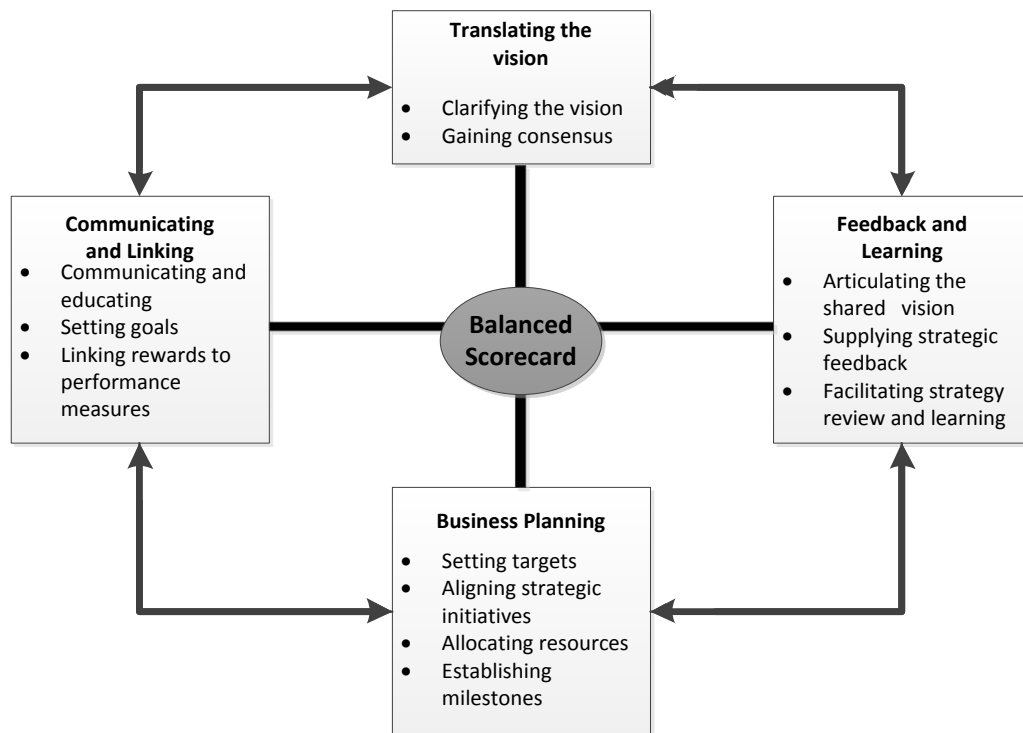


Figure 3.2: Managing Strategy: Four processes (Adapted from Kaplan & Norton, 2007).

The first process is “Translating the vision” which helps managers build an agreement around the organisation’s vision and strategy. Despite the top executives of an organisation having the best intentions, these do not translate into operational terms which can be useful in guiding actions at a local level (Kaplan & Norton, 2007). To act on the word of the vision and strategy, it must be defined as a joint set of objectives and measures which outline long-term drivers for success (Kaplan & Norton, 2007).

The second process is “Communicating and Linking” which allows managers to communicate the strategy at all levels of the organisation, and link it to individual and departmental objectives (Kaplan & Norton, 2007). Financial measures were used to assess departments, with individual incentives being linked to short-term financial goals (Kaplan & Norton, 2007). The BSC provides a way for managers to ensure that all levels of an organisation understand the long-term strategy, with individual and departmental objectives being linked to this strategy (Kaplan & Norton, 2007).

“Business Planning” is the third process and it allows an organisations to integrate its financial and business plans (Kaplan & Norton, 2007). Many organisations are implementing a variety of initiatives, however managers struggle to integrate these initiatives into their strategic goals which can lead to dissatisfaction with results (Kaplan & Norton, 2007). When managers use the goals set for the BSC to establish priorities and allocate resources, they can implement and manage the initiatives which only move their long-term strategic objectives forward (Kaplan & Norton, 2007).

The final process is “Feedback and Learning” which provides an organisation with the ability to strategically learn (Kaplan & Norton, 2007). Traditional feedback and review processes focused on whether the budgeted financial goals are met by the organisation, the departments and individual employees (Kaplan & Norton, 2007). With the BSC being at the centre of an organisation’s management systems, it can monitor short-term results from 3 other perspectives to evaluate strategy for current performance (Kaplan & Norton, 2007). The BSC allows an organisation to adjust its strategies to show real-time learning (Kaplan & Norton, 2007). This final process completes the loop shown in figure 3.2.

Therefore, the “Feedback and Learning” process will start the loop again at the “Translating the vision” process. The objectives of each perspective are reviewed, updated and replaced, with the present views of strategic outcomes and important performance drivers for the next period (Kaplan & Norton, 2007).

3.4.4 Weaknesses in the Balanced Scorecard

The BSC has many weaknesses which will have to be acknowledged so this framework can be successfully used. It must be noted that the BSC framework can be adapted to many organisations although it does not fit all organisational circumstances. The first weakness relates to balance as the BSC has multiple measures which are needed for performance measurement, with there being clashes and trade-offs between measures (Norreklit, Jacobsen, & Mitchell, 2008). A cause and effect relationship of one indicator can be successful in the financial perspective although this indicator may be hampered in another perspective of customer satisfaction (Norreklit et al., 2008).

Cause and effect relationships have a lag time as a leading measure can show effects instantly, while the effects of other measures can take a longer time to show changes (Norreklit et al., 2008). The BSC can push managers to become remote from operations although they need to

understand performance measurement to feel how and why certain things happen, and how the organisation can become better from first-hand experience (Norreklit et al., 2008). The final pitfall relates to implementing the BSC from a strategic level to an operations level. Low level measures are determined from the aims of a higher level which assumes that what you measure is what you get (Norreklit et al., 2008).

To overcome these pitfalls when implementing the BSC it is important to treat this framework as more of an iterative and explorative learning approach rather than that of a mechanical implementation (Norreklit et al., 2008). Overall, when implementing the BSC for an organisation it is important to understand and manage the BSC's weaknesses to ensure that it is correctly and effectively used. This section provides a basis of how the BSC should be implemented to ensure that it is successful and accurate with regards to strategic initiatives.

3.4.5 Non-profit Balanced Scorecard

The BSC was originally developed for the business sector but with a wide variety of organisations and the need for a performance measurement framework, this framework was modified for non-profit applications (Kaplan, 2010). Prior to this development, the performance reports of these non-profit applications focused on financial measures like donations, budgets, operating expenses, funds appropriated and spending (Kaplan, 2010). However, this cannot be used as a performance measure for non-profit organisations. Non-profit organisations can only measure success by looking at the effectiveness of providing benefits (Kaplan, 2010). Therefore, the standard structure of the BSC cannot be used for these non-profit organisations. The general objectives for these organisations are related to impact and mission. The mission for a non-profit organisation represents the accountability between society and it, the motivation for why it exists, and for ongoing support (Kaplan, 2010).

There were two modifications made to this framework by Dr Kaplan so it can be suitable for non-profit applications. The first modification was to put mission on the top of the BSC instead of financial objectives which shows the accountability between society and the organisation (Kaplan, 2001). The second modification relates to who is the customer. In the business sector the customer pays and receives the products or services, while in the non-profit sector donors or funders pay and receive the service (Kaplan, 2001). Therefore, to show this there are two perspectives proposed at the same level in the BSC (Figure 3.3).

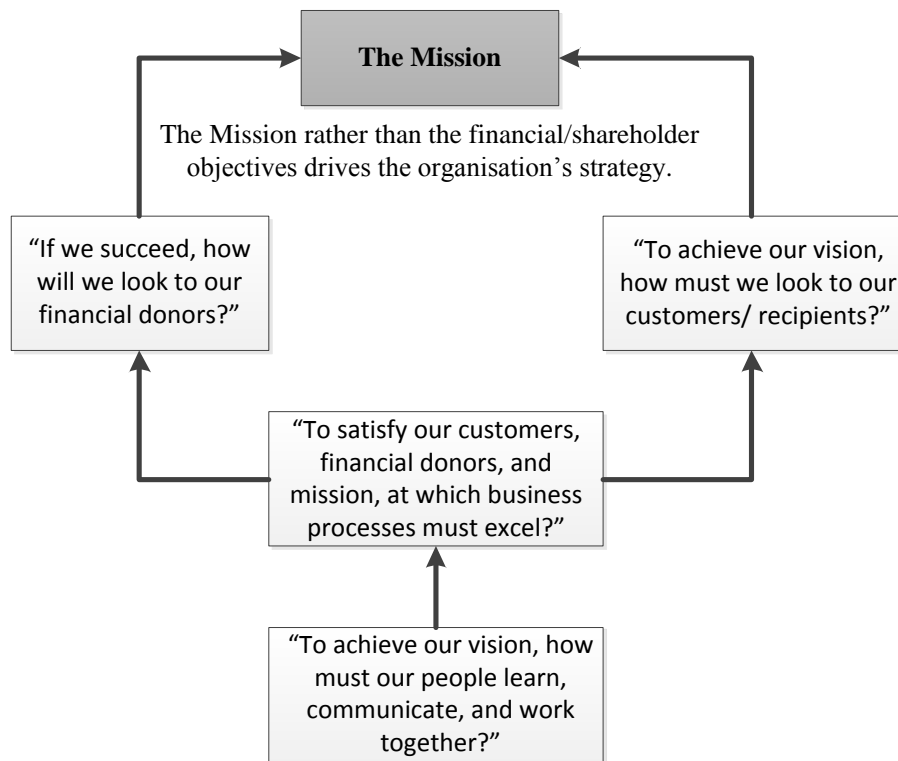


Figure 3.3: BSC framework for non-profit organisations (Adapted from Kaplan, 2001).

One such non-profit application was proposed by Elena Villaespesa for the art museum, Tate UK. Tate has a huge presence on OSM and it intends on constantly growing this presence. It moved away from using a static website which had information and events, and now using a more social website to encourage participation in online conversations and debates (Villaespesa, 2015). Looking at the new website, there is a live Twitter feed, a commenting feature and different OSM share buttons.

To leverage a more popular platform and successfully integrate with its website, Tate has created profiles on a variety of different OSM sites which it uses frequently (Villaespesa, 2015). Tate has a lot of people using OSM from its different departments which shows who is involved in Tate's social activities and shows diversification in using these platforms (Villaespesa, 2015). Tate leverages this platform for a wide variety of initiatives like posting updates, promotions, contests, links to content and visitors information (Villaespesa, 2015).

Museums are leveraging OSM which provides good opportunities in communicating, interacting and engaging with its audience. Museums are developing interactive digital projects to encourage participation while getting the audience involved in creating, rating and sharing content (Villaespesa, 2015). There was a clear shift shown in what to measure when evaluating a museum, changing focus from outputs and accountability to now wanting to evaluate impact,

value and outcomes (Villaespesa, 2015). However, it was said that it is hard to answer how museums can show the impact and value from its OSM activities (Villaespesa, 2015). For museums to recognise this impact and value it had to look beyond just counting the number of online followers as this variable is limited in measuring success in the OSM environment (Villaespesa, 2015). Therefore, the BSC was used as a performance measurement framework which helped determine the measures and tools needed to evaluate the impact and value of OSM. This non-profit framework was used to gather the strategic objectives from Tate’s OSM strategy which helped determine the performance measurements. Overall this helped Tate determine the validity and implementation challenges related to its OSM activities.

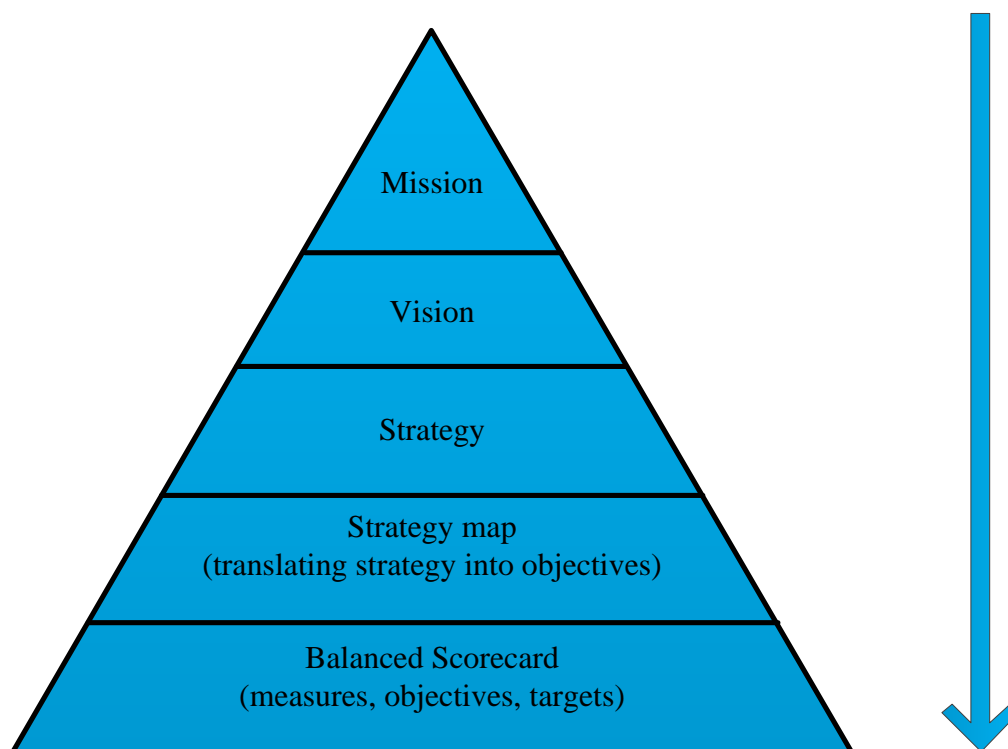


Figure 3.4: Steps which define the BSC (Adapted from Kaplan & Norton, 2004).

Figure 3.4 shows the steps of the BSC which can be applied to an organisation or for specific organisational activities. These steps were used for the OSM activities of Tate UK. First the mission and vision of Tate were defined to establish the strategic intent of its OSM activities, and outline the important values and priorities which its strategies need to adhere to.

The next step is titled “Strategy” and it assessed the strategy behind Tate’s OSM activities. This was done through assessing a series of strategic documents which showed the aims and objectives of Tate’s OSM activities. At this stage there were no specific objectives defined for Tate’s OSM activities, with there being only broad aims related to engagement and reach

(Villaespesa, 2015). By interviewing people who work on the OSM accounts of Tate, it showed that there were varying views of how to leverage OSM which are dependent on specific departments (Villaespesa, 2015). Specifically, these interviews showed how the different OSM sites are being used and its individual objectives. In this research study, Tate's vision and strategic documents revealed there was support from the top level of the organisation for OSM to contribute to its mission (Villaespesa, 2015). It is important for OSM initiatives to align with the organisation's goals as there are high-level strategic measures, while objectives are activities done to achieve these goals (Gilfoil & Jobs, 2012). However, Tate had no predominant and important strategic goals which aligned the whole organisation (Villaespesa, 2015). There was also a lack of a definition related to Tate's target audience which had a direct impact on the evaluation process, with there being no shared vision about how and what to measure (Villaespesa, 2015).

Assessing the strategic objectives of Tate and reviewing the interviews can provide a summary of the current development on the different aspects relating to OSM (Villaespesa, 2015). The future development of these aspects relating to OSM is also determined to show the evolution taking place and the external impact on the public (Villaespesa, 2015).

The next step involved translating its strategy into specific objectives by using a strategy map which shows what are the key factors for the successful strategy implementation process. The OSM activities and the measured results are determined, and how it links with each other and the value it creates for the public being shown.

Each perspective is shown, with the important factors and measures of success being explained. The internal perspectives were seen as important as they helped achieve the strategic goals set in Tate's digital transformation project (Villaespesa, 2015). The first internal perspective is "Learning and growth" which allowed staff to increase their OSM knowledge, with the available tools being an important factor to grow into a multiple voice organisation (Villaespesa, 2015). The next internal perspective is the internal business processes which are the tasks for managing OSM activity, and are supported by a set of policies, processes, and the internal network structure (Villaespesa, 2015). The internal perspective of Tate's online activities was assessed by interviewing the key people who work on its OSM accounts.

The external perspectives use measures that capture the impact and value created for the public, with this evaluation being used for its funders (Villaespesa, 2015). There were a lot of

interlinked strategic themes shown when people were interviewed on the overall impact of OSM, and how this platform allowed them to interact online (Villaespesa, 2015). The three external perspectives identified for Tate were called “Access to art”, “Conversation and interaction” and “Communication and marketing”(Villaespesa, 2015). Therefore, the external perspectives assessed the people who follow the OSM accounts of Tate, assessed the key people who work on these accounts and Tate’s strategic documents.

The final step involved creating a BSC for Tate UK. This revealed potential measures for the individual objectives, and the methods for data collection and analysis. The internal perspectives specified measures to evaluate change in the organisation and how far the OSM culture is adopted. These measures and data collection methods were through surveying the staff which showed how many knew about the strategy and are part of the online activities (Villaespesa, 2015). Interviews were used to get qualitative data relating to strategic alignment, changes, impact and challenges (Villaespesa, 2015). The external perspectives involved assessing the impact on users which were done by using both a quantitative and qualitative approach (Villaespesa, 2015). Quantitative data were metrics like the number of followers, comments, likes, impressions and traffic generated (Villaespesa, 2015). Qualitative data looked at analysing content, sentiment and quality of the content generated by users on OSM (Villaespesa, 2015).

3.4.6 Online Social Media Strategy and the Balanced Scorecard

Organisations need to first manage its entry into OSM before it can start measuring return on investment (ROI), success and value which are all important, however measuring success before platform creation is premature (Nair, 2011). The BSC is a way to show and understand this effort, and to articulate and manage strategy to make it functional at all levels (Nair, 2011). The BSC provides a way to not use the confined ROI performance measurements and instead focuses on return on objectives (ROO) when objectives, targets and measures are used (Ray, 2010). With it being important to determine if UKZN is achieving its objectives on OSM, the focus on ROO in the BSC supports its use. The BSC also identifies the expectations, initiatives, performance goals and metrics (Kaplan, 2010). With the identification of this, the organisation has a clear understanding of where it wants to go and how to achieve these expectations (Kaplan, 2010). Setting targets and defining successful measures can also provide a strong foundation for approving or rejecting proposed tactics or strategies (Ray, 2010). Finally, the

BSC allows perspectives to be chosen relating to the relevant study, with different studies adopting and using its own set of relevant perspectives (Ray, 2010).

Overall, OSM is about tactics and strategy supported by the BSC framework to strategically transform an organisation which engages with users on OSM (Nair, 2011). With OSM providing a wider range of advantages, it is important to use an approach to fully capture the value created by OSM like the BSC (Ray, 2010). While the BSC may seem like it is only intended for business strategists, it is applicable and beneficial to researchers and performance improvement practitioners (Hicks, 2011).

3.4.6.1 Executing Strategy using the Balanced Scorecard

There are many stages of a strategy, with each stage being important in achieving the goals of an organisation like UKZN. First the strategy is developed using the vision of the organisation, with the vision being communicated to managers and the different business units developing its own BSC (Hicks, 2011). With OSM strategy assessment being important, the relevant business unit, like UKZN's public relations business unit, will need to create its own BSC. Next the initiatives identified in the BSC are implemented when this strategy is executed, with staff monitoring its progress and ensuring they are working on strategic initiatives when reviewing its strategic plan (Hicks, 2011). When measuring strategy, the key performance indicators are used to track and monitor performance over a course of time (Rohm, Wilsey, Perry, & Montgomery, 2013). Managers review the business unit's BSC and actively contribute in managing the business unit's strategic contributions (Hicks, 2011). The relevant public relations manager at UKZN, who manage OSM strategy, will need to actively manage the contributions from the public relation's business unit. Organisations will achieve success when staff support strategies and acknowledge the bigger picture of how all the parts of an organisation work together for a successful outcome (Hicks, 2011). Staff will need to support UKZN's OSM strategy to ensure it is successful, and look at how this strategy affects all parts of UKZN to ensure it has a successful outcome. Finally, it is important to sustain the strategy for long-term implementation by being flexible, monitoring the strategy's execution and reevaluate when needed (Hicks, 2011).

In conclusion, with UKZN's public relations business unit using OSM, it is important for there to be an OSM strategy which has goals aligned with the organisation, and when implemented ensure it achieves the organisation's vision, mission and objectives. With it being important to assess UKZN's OSM success from a non-financial perspective, the customisation that the BSC

provides enforces its use. Being able to adopt the appropriate perspectives related to UKZN's OSM, metrics and targets, will accurately capture its impact on OSM. In conclusion, the public relations division at UKZN is considered a business unit, and it was found that the BSC is the most beneficial framework when developing an OSM strategy for the University.

3.4.7 Applications of the Balanced Scorecard

The different applications of the non-profit BSC are included to show how it is used in other scenarios.

3.4.7.1 *Yayasan Pembinaan dan Kesembuhan Batin Malang*

Yayasan Pembinaan dan Kesembuhan Batin Malang is a non-profit organisation engaged in the social and religious domain in Indonesia, and at its core involves dealing with the public. This organisation had a mission, vision, and implemented a strategic management process, and found it necessary to take measurements of its performance strategy to determine effectiveness (Syalom, 2015). This measurement was used to sustain its social actions through efficiently using its resources for improving public services (Syalom, 2015). The BSC was created to measure this non-profit organisation's performance, with each perspective of the BSC being weighed by a paired comparison method. Weighing can measure how far is the level of interest between variables, with these variables being strategic targets, indicators of results, and measurements of each perspective (Syalom, 2015). The strategic goals from this organisation were used to create a BSC which included customer satisfaction, the level of complaints from customers, the image and reputation of the organisation, donation growth, innovation in services, effective use of the budget, organisation's service quality, skills of employees, and employee satisfaction and retention (Syalom, 2015). Additionally, the financial perspective had the lowest weighing among perspectives which is in line with the organisation expressing it does not aim to increase profits, while the customer perspective had the highest weighing due to the mission, vision, and objective of caring for people (Syalom, 2015). The BSC recommended the organisation make innovations to improve service quality, maintain consistency of providing services, improve and maintain employee satisfaction, and maintain performance for a good image and reputation (Syalom, 2015). Additionally, the performance measurements were dynamic which required that the BSC be constantly adapted to any changes in the organisation, and evaluate the strategic goals annually (Syalom, 2015).

Overall, this study provided justification in using the BSC for assessing UKZN's OSM strategy. This non-profit organisation used the BSC to assess if its mission, vision and strategy has been achieved. This performance measurement framework provided justification in using the BSC to determine if UKZN's OSM strategy is achieving its strategic objectives.

3.4.7.2 *Arthur Bernardes Foundation*

The Arthur Bernardes Foundation is a non-profit organisation which supports the Federal University of Viçosa in Brazil. The main aim of this study was to validate the performance and strategy framework using the BSC (Gomes & Liddle, 2009). The findings from this study showed that some departments will better understand the BSC rationale, with other departments setting unrealistic objectives (Gomes & Liddle, 2009). It was found that this issue was due to the lack of experience in the strategic planning process by some department heads (Gomes & Liddle, 2009). Department managers stated that the BSC helped create a strategy and manage their departments in a better manner (Gomes & Liddle, 2009). The general consensus were that the BSC performance measures were useful when wanting to implement performance changes (Gomes & Liddle, 2009). The findings from the research showed that an organisation must not create an overall framework for the whole organisation, and instead it must create a different BSC for each business unit (Gomes & Liddle, 2009). It was stated that there was strong evidence that a BSC for each unit creates synergy and cooperation, instead of fragmentation and competition (Gomes & Liddle, 2009).

This study supports the use of the BSC framework when wanting to evaluate UKZN's OSM performance and OSM strategy. It provides justification for using the BSC to create an OSM strategy for organisations like UKZN, and that the BSC can better manage different departments like UKZN's OSM department. Finally, this study showed that an overall framework cannot work for a whole organisation like UKZN, and instead there must be specific BSCs for each department like a BSC for UKZN's OSM department.

Overall, the use of the BSC by Tate UK and the scenarios discussed shows justification for using the BSC to assess UKZN's OSM strategy from a non-profit perspective.

3.4.8 UKZN's Balanced Scorecard

Similar to museums, many universities like UKZN are now using OSM to communicate, interact and engage with its students. Similar to Tate UK, UKZN has integrated OSM buttons

on its website which encourages users to follow its official OSM accounts. The University also leverages multiple OSM sites to share information, provide important links for new and current students, and provide students with updates. The University has OSM projects which focus on engaging meaningfully with its student users via the OSM platform. Therefore, there was a shift in what UKZN want to measure, from concentrating on accountability and outputs to now wanting to evaluate impact and values on students. However, it can sometimes be hard to show the impact and value of UKZN using OSM. Looking at the number of likes and followers on these OSM accounts is not enough to provide an effective way of showing UKZN's success on OSM. Therefore, the BSC can be used as an effective performance management framework for UKZN. This framework can help determine the measures and tools which were used to evaluate the impact and value of OSM for UKZN. The framework assisted in determining UKZN's OSM strategy and gathering the specific objectives from this strategy including specific performance measurements. Overall this framework guided this research study in analysing UKZN's OSM strategy.

The steps from figure 3.4 were applied to the OSM activities of UKZN. Looking at UKZN's vision and mission showed its strategic intent for its OSM activities, and outlined the important values and priorities its strategy follows.

While creating the BSC for UKZN, the "Strategy" step was very important as it assessed the strategy behind its OSM activities. This step specifically looked at the strategic documents of UKZN which showed its aims and objectives of using the OSM platform. At this step there were no specific objectives defined for OSM, with only broad aims which relate to being more engaging with students on this platform (UKZN, 2012). This step includes interviewing the key people who work on UKZN's OSM accounts to assess how they use this platform. The interviews also determined how the different OSM accounts are being leveraged and what the individual objectives were. The strategic plan for UKZN showed that there was support from executives for OSM to contribute to its overall mission (UKZN, 2012). However, there was no specifically stated strategic objectives which aligned the whole of UKZN. By assessing the strategic objectives and reviewing the interviews, creates a figure which summaries the current development on different aspects of OSM at UKZN. The future development of OSM aspects at UKZN is also shown, to give an indication on the evolution taking place and the external impact on the students. This step helped in answering the research question "What is the online social media strategy used by UKZN?" and provided an understanding of what is the OSM

strategy that is being used by UKZN. However, the specific strategic objectives are only determined in the following step.

The “Strategy map” step translated UKZN’s OSM strategy into specific objectives, with the key factors for successfully implementing the strategy being shown. A strategy map was created for UKZN’s OSM activities. These activities and its results were measured, with the link between how it creates value for UKZN and its students being shown. Each perspective for UKZN is shown and the critical factors for success being explained with the measures that were selected. The internal perspective involved looking at the OSM activities from the University’s perspective. The first internal perspective is “learning and growth”, with the main objective being to increase the knowledge on the learning and growth initiatives related to UKZN’s OSM. The second perspective is the “internal business processes” and it relates to how key staff manage UKZN’s OSM accounts. Therefore, assessing the internal perspective of UKZN’s OSM activities involved interviewing the key staff who work on its OSM accounts.

Looking at the external perspectives of UKZN used measures that capture the impact and value created for its students. An important factor for this perspective is that the measures were determined by looking at strategic documents of UKZN, assessing UKZN’s OSM accounts and surveying the students at UKZN.

This step was important as it helped answer many research questions. The first question is “How is this online social media strategy manifested?” which revealed the measures on UKZN’s OSM accounts. These measures determined if the strategic objectives are being achieved or not. The next question is “How effective is this OSM strategy?” which provides two perspectives of assessment. The internal or University’s perspective interviewed staff who work on UKZN’s OSM accounts, and identified specific objectives of what UKZN wants to achieve when using OSM. The external or student users’ perspective surveyed the students and assessed UKZN’s OSM accounts, and identified the specific objectives relating to students’ impact when using OSM. Overall, this step contributed towards answering the primary question on whether the OSM strategy is achieving the strategic objectives it stated.

A BSC was created for UKZN once all the steps were completed. This BSC showed the potential measures for specific objectives, and the measures for data collection and analysis. The internal perspectives showed measures which evaluate change at UKZN and show how far OSM is adopted. These measures and its data collection methods were through interviewing

the staff who work on UKZN's OSM accounts. Semi-structured interviews were used to get qualitative data relating to strategic alignment, changes, impact and challenges. The external perspective involved assessing the impact on the students who use the OSM accounts of UKZN. The measures and data collection were through surveying the student who use OSM and UKZN's OSM accounts. A questionnaire was used to get the quantitative data from students which showed the impact of them using the OSM accounts of UKZN. Additionally, assessing UKZN's OSM accounts provided quantitative data like the number of followers, comments, likes, impressions and traffic generated.

The "Balanced Scorecard" step is critical in answering the primary research question of "How is UKZN's online social media strategy achieving its stated strategic objectives?" Once the BSC is created for UKZN, the OSM strategy being used and its strategic objectives is known. Therefore, an understanding is gained on whether the OSM strategy is achieving its stated strategic objectives which is critical to this study.

Despite vast amounts of data available, universities struggle to measure the value and impact of their OSM activities which is due to the lack of standard metrics that can be measured. The BSC overcomes this problem by providing a performance measurement framework which can help establish measures and tools needed for evaluation.

The adopted non-profit BSC provides steps which help in translating a University's mission and vision into a detailed set of performance measures that can be used for OSM strategic assessment.

3.4.9 Linking the Steps from the BSC to the Research Questions

Linking the research questions to each step in the BSC provides a clear approach of how each question is answered when using the BSC framework.

Table 3.1 matches the research questions to the adopted research approaches and to the steps of the BSC framework.

Table 3.1: Linking the research questions, approaches and steps in the BSC.

Research question	Research method	Research instrument	Link to steps in the Balanced Scorecard framework
Primary research question:			
How is UKZN's online social media strategy achieving its stated strategic objectives?	Quantitative Qualitative	Survey Analysis of University documents and online social media Semi-structured interviews	Step 5: Balanced Scorecard (measures, objectives, targets)
Sub research questions:			
1) What is the online social media strategy used by UKZN?	Qualitative	Semi-Structured interviews Analysis of University documents	Step 1: Mission Step 2: Vision Step 3: Strategy Step 4: Strategy map
2) How is this online social media strategy manifested?	Quantitative	Analysis of online social media	Step 4: Strategy map Step 5: Balanced Scorecard
3) How effective is this online social media strategy?	Qualitative Quantitative		Step 5: Balanced Scorecard
3.1) The University's perspective	Qualitative	Semi-Structured interviews	Step 5: Balanced Scorecard. Specifically, the internal perspectives (Learning and

			Growth, and Internal business processes)
3.2) The student users' perspective	Quantitative	Survey	Step 5: Balanced Scorecard. Specifically, the external perspective or students' perspective.

3.5 Research Design

When undertaking a research study, it is important to identify the design which will be adopted (LearnHigher & MMU, 2008). Research design guides the turning of research questions into projects which are linked to the purpose of the research (LearnHigher & MMU, 2008).

Descriptive and interpretive research designs are adopted in this research study. This research design is used when there is a need to gather information which concerns the current status of the phenomena, and describes what exists in respect to variables in a situation (Anastas, 2000). The primary focus of a descriptive research design is on determining “what is” without changing the environment (Knupfer & McLellan, 1996). This research design involves the gathering of descriptive data and then arranging, charting, showing and describing the data collection (Knupfer & McLellan, 1996).

Interpretive studies assume people make and link their own personal and intersubjective meanings when they engages with the world (Walsham, 2006). Interpretive research designs attempt to understand the phenomena by assessing the meanings which participants give them (Walsham, 2006). The focus of an interpretive research design is that knowledge is gained through social constructions like shared meanings, language, tools and documents (Walsham, 2006).

A case study is an intensive investigation on an individual, community and group where the researcher investigates data related to multiple variables (Woods & Calanzaro, 1980). A case study is a complete description and analysis of an individual case which assesses progress, or identifies the variables, structures, orders and forms of interaction of participants in a situation (Mesec, 1998).

3.5.1 Research Strategy: Survey Study

Research strategies determine the approach which is taken by the research to collect the information which addresses the research questions (LearnHigher & MMU, 2008). Out of the different strategies available, survey research is chosen which involves any methods of measurement that ask questions to participants or respondents. This strategy involves a process of undertaking a study from samples of a specific population.

The researcher deemed this research strategy appropriate as there is a need to obtain feedback to questions from a variety of respondents, with questionnaires and semi-structured interviews being used for data collection.

3.5.2 Research Approach: Mixed methods

A mixed methods research approach is used in this research study. This research approach involves using both quantitative and qualitative data collection techniques and analyses in a single study. These approaches are either used one after the other (sequential) or at the same time (parallel), however these approaches are never combined.

A quantitative research approach is structured and controlled as the problem is measured to achieve statistical and measurable data (Bryman & Bell, 2011). Variables like opinions, attitudes, behaviours and others are quantified, and generalised from the results of a large sample (Bryman & Bell, 2011). The statistical and measurable data is used to discover patterns and convey facts from the research (Bryman & Bell, 2011).

A qualitative research approach is used to describe and understand the phenomenon in terms of the significance people bring to them (Boeije, 2009). This involves assessing the relevant research questions through flexible methods, which enable contact with the people involved to understand what is happening in the field (Boeije, 2009). This method can provide rich descriptive data that can aid in practical use and theoretical knowledge (Boeije, 2009).

Quantitative research is focused on explaining why things work as they do, and focuses on interpreting and understanding people's experiences. Mixing both quantitative and qualitative approaches can give the research depth and breadth of understanding, while counteracting the weaknesses of using each research approach (FoodRiscResourceCentre, 2016).

3.5.3 Time Horizon

A cross sectional study assesses a specific phenomenon at a specific point in time (Saunders, Thornhill, & Lewis, 2009). This study is proposed as research projects for academic courses are sometimes time constrained (Saunders et al., 2009). Cross sectional studies often use a survey strategy which seeks to describe the phenomenon at a given point in time (Saunders et al., 2009). While quantitative methods are often used in this time horizon, qualitative methods can also be used like conducting interviews over a shorter period of time (Saunders et al., 2009).

A cross-sectional design is used in this study which uses both quantitative and qualitative research to study a particular phenomenon at a particular point in time. The students using UKZN's OSM accounts and the key people who work on these online accounts are measured at a one point in time.

3.6 Research Context

3.6.1 Research Population

The target population for the quantitative part of the study are the students of UKZN. There are 45000 students at UKZN and they are from the 5 campuses which are located in the areas of Durban, Pinetown, Westville and Pietermaritzburg.

The target population for the qualitative part of the study was chosen relevant to the topic of interest. Therefore, the target population were the key people who work on the OSM accounts of UKZN. The people interviewed were the Director of communications, two public relations managers and a public relations officer.

3.6.2 Sampling

The following sampling techniques were used:

Quantitative analysis: Virtual Snowball sampling

Qualitative analysis: Purposive sampling

3.6.2.1 *Snowball Sampling*

The sampling strategy used for the quantitative part of the study is virtual snowball sampling. Snowball sampling is a technique to find research subjects, with a participant referring the

researcher to another participant, and this participant providing another and so on (Atkinson & Flint, 2001). This technique is used to sample the hard to reach population (Atkinson & Flint, 2001). Virtual snowball sampling is a non-probability sampling technique which is a modern take on snowball sampling (Baltar & Brunet, 2012).

Virtual snowball sampling leverages OSM or virtual networks to study the “hard to reach” population, while expanding the sample size and scope of the study, and reducing the costs and time needed (Benfield & Szlemko, 2006). Virtual snowball sampling can leverage online questionnaires and distribute it using the OSM platform (Baltar & Brunet, 2012). One of the biggest problems identified when using the internet for social research is the low response rates and selection bias.

While virtual snowball sampling is more effective in expanding the size when compared to snowball sampling, the latter is more efficient in contacting the relevant population (Baltar & Brunet, 2012). These techniques were time efficient and cost effective while still being able to target a wider sample size (Baltar & Brunet, 2012). The researcher is a student of UZKN, and students at UKZN are easily identified and targeted.

The main disadvantages of virtual snowball sampling are selection bias, unclear answering instructions due to it being self-administered, being impersonal, and concerns around the privacy of data. Selection bias was reduced by properly selecting the initial individuals (UKZN’s students), ensuring that any subgroup can access these individuals’ network, and new members from any subgroup can participate. By utilising an online questionnaire which allows clauses to be used when answering the questionnaire, can ensure that students are guided through the questionnaire. These clauses can ensure respondents only chose one answer in the Likert scale and guides the respondent to successfully complete the questionnaire. While the administration of the questionnaire is impersonal, the researcher provides contact information for respondents to have a more personal administration of the questionnaire if the respondents required. Privacy of the respondents’ data is important, with the handling of the data being described in the first page of the questionnaire. The data will be securely stored by the discipline/department for 5 years.

3.6.2.2 Purposive Sampling

It is important to use sound judgement when selecting the manner in which to obtain data and from whom the data will be gathered (Etikan, Musa, & Alkassim, 2016). This is especially true

when no amount of data analysis can make up for improper data collection (Etikan et al., 2016). The sampling strategy used for the qualitative approach is purposive sampling or judgement sampling which is a non-probability type of sample. The researcher chooses what needs to be known, and then sets out to find the people who are relevant, willing to participate, and provide information by their virtue of experience and knowledge (Tongco, 2007). Therefore, this type of sampling is used when there is a need to select a sample using the knowledge of the population and the nature of the research study (Latham, 2007).

The main disadvantages of purposive sampling relate to the errors in judgement of the researcher, the lack of being able to generalise the findings and the low level of reliability. The errors of judgment were not an issue as the researcher targeted all staff who work on UKZN's OSM accounts, with those that responded being included in the sample. Additionally, generalising the findings were not important in this study as the study only focused on UKZN's OSM accounts. Finally, by not relying on a single method of data analysis, the researcher can be confident in the findings as there is increased reliability and validity (Holtzhausen, 2001).

These steps are proposed for purposive sampling which were adopted for this study:

1. Decide on what is the research problem
2. Determine what type of information is needed. It is important to note that information from all in the community can be valuable and that the information is held by certain members of the community.
3. Define what qualities the informant or informants must have or must not have.
4. Find the informant or informants based on the qualities stated. Therefore, it is important to research the community and area, getting help when going to the site and realise that finding these informants can be a trial and error process.
5. There is importance of reliability and competency when assessing these informants which must be kept in mind.
6. Make use of suitable data gathering techniques.
7. When analysing the data and interpreting the results, it is important to remember that this sampling technique is fundamentally biased. Therefore, the bias must be documented and not to apply these interpretations in more than the sampled population (Tongco, 2007).

The research problem involved determining the effectiveness of UKZN's OSM strategy from the University's perspective. Information from staff who work on UKZN's OSM accounts is needed to answer this research question. The specific admin responsible for these accounts were contacted and asked to help identify these staff.

3.7 Sample Size

The sample size when using snowball sampling is determined by targeting all student users of OSM, with these users becoming the census of this research study. The population size for snowball sampling were the 46520 students of UKZN. The sample size for snowball sampling was determined to be 382 students with a confidence level of 95% and a 5% margin of error (Raosoft, 2018).

The sample size when using purposive sampling is determined when completeness and saturation is achieved (Rubin & Rubin, 2012). Completeness is achieved once there is an overall sense of meaning from the process, concept or theme (Rubin & Rubin, 2012). Saturation is achieved once there is little learnt from new subsequent data collection (Rubin & Rubin, 2012). The population size for convenience sampling were 8 members of staff who worked on the OSM accounts of UKZN. The sample size was determined to be 8 members of staff with a confidence level of 95% and a 5% margin of error (Raosoft, 2018).

3.8 Data Collection Methods

3.8.1 Quantitative Approach

To investigate the effectiveness of UKZN's OSM strategy from the students' perspective, a questionnaire was distributed to students from UKZN. A questionnaire was chosen as it is more practical when wanting to gather large amounts of data from a large variety of people, while being relatively quick for data collection and cost effective (Bird, 2009). This research instrument can be carried out by anyone with little effect on the validity and reliability of the data (Bird, 2009).

There are two general types of questionnaires which can be developed. These are closed or structured questionnaires and open or unstructured questionnaires.

3.8.1.1 *Description of the Questionnaire*

A questionnaire is a pre-formulated set of questions with which respondents give their answers, typically within a closely defined alternative (Leedy & Ormrod, 2005).

Questionnaire are beneficial over interviews as it is more efficient and convenient for data collection. The questionnaire chosen for this study was a closed or structured questionnaire. This type of questionnaire was used as there is a need for specific data from respondents. The answers in the questionnaire are limited as there are specific questions being asked with specific answers being needed.

3.8.1.1.1 Advantages

The data collected from close ended questions in a questionnaire are easy to analyse when using software like Microsoft Excel and SPSS. When using websites to create electronic questionnaires, the data is automatically captured and entered into an Excel spreadsheet which can be exported for analysis to produce graphs.

Another advantage of using a questionnaire is that it reduces bias (Leedy & Ormrod, 2005). The researcher doesn't express verbal cues and show non-verbal cues which can influence the respondents' answers.

Questionnaires were also seen as being less intrusive when compared to interviews as the respondent can complete the questionnaire when they have free time. Therefore, when compared to other research methods, questionnaires do not interrupt the respondent.

3.8.1.1.2 Disadvantage

A disadvantage when using a questionnaire is a low response rate which is not ideal when performing successful statistical analysis as it reduces the researchers confidence in results (Leedy & Ormrod, 2005). The use of virtual networks in snowball sampling, increases the sample size and its representativeness compared to snowball sampling (Baltar & Brunet, 2012). It was found that respondents' confidence increases as the researcher's information is shown, and when using online questionnaires the quality of information is managed and there are less duplications (Baltar & Brunet, 2012). With this study using virtual snowball sampling, the low response rates of snowball sampling are overcome.

Another disadvantage of questionnaires is the lack of flexibility with responses from the respondents which is due to using closed ended questions (Leedy & Ormrod, 2005). However, providing a space to comment can allow the researcher to gather critical information which would otherwise be lost (Leedy & Ormrod, 2005).

Table 3.2 shows the sections of the questionnaire, number of questions, data collected and the purpose of the data collected. The questionnaire consists of 5 sections (A, B, C, D and E) which is shown in appendix A.

Table 3.2: Overview of the questions in the questionnaire.

Section	Number of questions	Data collected	Purpose of the data
A	2	Basic data	Identify gender and year of study
	1	OSM sites used	Identify OSM sites used
B	1	Usage of OSM	Identify frequency of use of OSM
	1	Usage of UKZN's OSM	Identify frequency of use of UKZN's OSM accounts
C	9	Frequency with which students notice the OSM activities of UKZN.	Establish how frequently students notice the OSM activities of UKZN
	10	Students' feelings regarding UKZN's OSM activities	Explore the students' feelings towards the OSM activities of UKZN
D	10	Students' feelings regarding engagement with UKZN via OSM	Explore the students' feelings toward the engagement they feel with UKZN via its OSM accounts

	4	Quality of engagement students felt with UKZN via OSM	Explore the quality of engagement students felt with UKZN via its OSM accounts
	1	Representation of the relationship between students and UKZN	Explore the relationship students felt with UKZN via its OSM accounts
E	2	Unofficial UKZN OSM accounts used	Identify the unofficial UKZN OSM accounts used
	1	Usage of unofficial UKZN OSM accounts	Identify frequency of use of the unofficial UKZN OSM accounts
	9	Frequency which students notice the activity by the unofficial UKZN OSM accounts	Establish how frequently students notice the activities of the unofficial UKZN OSM accounts
	10	Students' feelings regarding the activity by the unofficial UKZN OSM accounts	Explore the students' feelings towards the OSM activities by the unofficial UKZN OSM accounts

3.8.1.2 Process of Developing the Questionnaire

The process for developing a questionnaire was investigated. The steps and tips proposed by Rama B. Radhakrishna to develop a research questionnaire were adopted (Radhakrishna, 2007).

The first step taken relates to background information of the research study (Radhakrishna, 2007). A good understanding of the phenomenon of interest through the use of literature is important to be successful in this step (Radhakrishna, 2007).

The second step deals with the conceptualisation of the questionnaire (Radhakrishna, 2007). This step determines what the questionnaire needs to measure, in terms of knowledge to be gained from the questionnaire (Radhakrishna, 2007).

The third step encompasses the formatting and data analysis of the questionnaire (Radhakrishna, 2007). The writing of questions and using the correct scales are completed in this step. Looking at the ordering, formatting and layout of the questionnaire ensures there is a smooth flow, with questions being structured and following an order.

This step establishes the validity of the draft questionnaire which is created (Radhakrishna, 2007). Assessing the validity of the questionnaire, by conducting a field test or by gaining an expert's opinion, shows how accurately the study reflects what the researcher wants to research.

The final step is performing a pilot test of the questionnaire to establish its reliability (Radhakrishna, 2007). Reliability ensures that the measuring instrument is accurate and exact. Pilot testing is used to ensure the questionnaire consistently measures what it is supposed to measure. Pilot testing adhered to the 5 key criteria which are purpose, utility, directness, validity and reliability to ensure the quality of the questionnaire (Bloom & Fischer, 1982). First the purpose of the questionnaire is clarified. Next utility is tested which is to determine how practical it is to implement the questionnaire. The next criteria tested is directness which ensures the questions asked directly address the issues to be evaluated. Finally, validity ensures that the questionnaire is measuring what is supposed to be measured, and reliability ensures similar results are gained when the questionnaire is repeated.

There are 5 questions which were used to assess and improve the validity of the questionnaire (Radhakrishna, 2007):

1. Is this questionnaire valid? Is it measuring what it was intended to measure?
2. Does this questionnaire represent the content?
3. Is this questionnaire appropriate for the sample population?
4. Does the questionnaire gather a sufficient amount of information to answer the purpose of the research study?
5. Does the research instrument look like a questionnaire?

Once these proposed questions are addressed and the readability test is complete, the validity of the questionnaire is enhanced (Radhakrishna, 2007).

To ensure the reliability in this research study, a well-developed scale is used in the questionnaire. A well-developed scale which completely measures the constructs of interest ensures better reliability of the results (Miller, 2009). The most frequent scale used in this questionnaire is the 5-point Likert scale. The Likert scale is used when wanting to measure the attitude and behaviour of respondents which are assigned a numerical value on how strong they feel toward a question (Boone, 2012). A nominal scale is also used as there is a need to label variables which do not have a quantitative value being only descriptive. A dichotomous scale is a type of nominal scale and is more appropriate when only two categories are needed (Brown, 2011). This scale was used to attain consent from student participants and to determine if participants are students at UKZN.

The process when developing a questionnaire is important as it can reduce errors in data collection. Knowing what needs to be measured before developing the questionnaire can ensure relevant accurate data is collected in the end.

3.8.1.3 Administration of the Research Instrument

Before administering a questionnaire, a consent form must be signed by the participant as legal implications can affect the data gathered. The length of a questionnaire is important and must be made known as individuals do not want to waste time on answering a questionnaire (Bowling, 2005).

A link to the online questionnaire was distributed using UKZN's notice system, and via the researcher's Facebook and Twitter accounts where student "friends" would take the questionnaire. The researcher's friends were encouraged to participate and share the online questionnaire on their OSM accounts. The internet allowed the researcher to gain responses from people who were not close and allowed a wider scope of responses to be gained. The online questionnaire includes a declaration to determine if the participant is a student of UKZN which has to be accepted to proceed.

Google Forms provides a free and customisable tool to use for data collection. A questionnaire was created using this platform as it allows for efficient gathering and managing of the data from the respondents which can be exported to an excel spreadsheet. This excel spreadsheet is then imported into SPSS where statistical analysis was carried out.

3.8.2 Qualitative Approach

To investigate the effectiveness of UKZN's OSM strategy from the University's perspective, interviews were carried out with key people who work on the OSM accounts of UKZN. Interviews allow for the participants to get involved and discuss interpretations from their point of view. The researcher proposes open-ended questions and the interviewee responds providing primary data for the study (Kajornboon, 2005). The researcher asks questions and motivates responses which are precise while avoiding bias (Kajornboon, 2005).

3.8.2.1 *Description of Semi-Structured Interviews*

The interview type chosen for this study was semi-structured interviews. Semi-structured interviews provide more flexibility compared to structured interviews, and allow for the probing of views and opinions from the interviewee. Probing provides an opportunity to explore new paths which were not originally thought of by the researcher (Gray, 2004). It is important with this research instrument to conduct a conversational interview with focus around a key theme (Gray, 2004). Semi-structured interviews are best used when the researcher won't have more than one chance at interviewing someone to collect data (Cohen & Crabtree, 2006).

3.8.2.1.1 Advantages

Semi-structured interviews are popular as the interviewer can prepare questions in advance which allows them to prepare and seem competent when interviewing (Cohen & Crabtree, 2006). A significant advantage of semi-structured interviews is that it allows the informants the ability to freely express their opinions and views in their own ways (Cohen & Crabtree, 2006). This type of interviewing can provide reliable and comparable qualitative data (Cohen & Crabtree, 2006).

3.8.2.1.2 Disadvantage

A disadvantage of semi-structured interviews is that it is dependent on the skill of the interviewer and the expressiveness of the interviewee. The interviewer ensured that the interviewee was not forced to give the answers that the researcher wanted, instead the interviewee was encouraged to be more expressive with their answers if they were not detailed enough. Another disadvantage is that qualitative data gathered may be difficult to analyse. It can be hard for the researcher to decide what is and what is not important. The researcher used

the general 5 phase cycle for data analysis, with this cycle allowing an easier way of coding and determining the emergent themes from the data.

The interviewer can also give out unconscious signals which can influence the interviewee into giving answers that the interviewer expects. The interviewer ensured that questions were asked in a general manner, and responses from interviewees did not cause any facial or body cues from the researcher. Finally, the last disadvantage relates to validity. While the respondent might not purposely lie, they might not be able to perfectly recall events or experiences which took place weeks or months in the past. The interviewer encouraged the interviewee to give as much detail as possible without influencing their answers and ensuring that they were comfortable when expressing their responses.

3.8.2.2 Process of Developing Semi-Structured Interviews

The suggestions proposed by Zorn in the article titled “Designing and Conducting Semi-Structured Interviews for Research” were used to develop semi-structured interviews (Zorn, 2016).

The first set of questions usually relate to the participant’s background which gathers important information while “warming up” the interviewee (Zorn, 2016). These questions are easier to answer and help get the interviewee into an interviewing mindset (Zorn, 2016). The questions which were developed need to be broad and open-ended which allows the interviewee more freedom to construct their responses (Zorn, 2016).

The BSC framework was adopted in this study which was used to establish and develop interview themes and questions. Questions around “learning and growth”, “internal business processes”, and current and future state of maturity were developed.

Additionally, the best practices proposed by Angus to create an interview guide were used. First suggestive language must be avoided as the researcher wants the participants’ experiences without them thinking the question requires a specific answer (Angus, 2013).

The final question of the interview guide should ask the interviewee if they have any other comments (Angus, 2013). This allows the interviewee an opportunity to divulge an earlier thought or experience to a question they didn’t get to express (Angus, 2013).

Therefore, care must be taken when creating and editing an interview guide to ensure that the questions gather rich and meaningful data relevant to the research study.

3.8.2.3 Gaining an Expert's Opinion and Pilot Testing the Questions

The pilot test allows the researcher to practice asking the questions and have someone answer them. Pilot testing allows the researcher to see which questions work and which do not. Some questions were removed after the pilot test was performed.

The interview guide was also given to an expert for their opinion. Many questions were changed and removed to ensure the time frame is suitable and convenient for interviewees. Questions were also rephrased to ensure that there is no misunderstanding.

3.8.2.4 Administration of the Semi-Structured Interview

Staff working on UKZN's OSM accounts were first identified using the resources on UKZN's website. Contact was made via email with multiple members of staff and the people relevant to this study were determined. A discussion via email with the Director of communications, two public relations managers and a public relation officer, allowed the researcher to convey their research intent. Once permission was gained from them, a link to a fact-finding questionnaire was first administered via email.

These fact-find questionnaires helped determine management and staff, with interviews being crafted for them. Once all the questionnaires were completed and reviewed, semi-structured interviews were set up with staff at UKZN. Copies of the management and staff interview guides are shown in appendix B and appendix C.

Once all the interviews were completed and all the data gathered, the notes from the interviews were typed out as soon as possible.

3.8.3 Desk Research

The desk-based research method involves the analysis of secondary data sources and the analysis of documents.

3.8.3.1 *UKZN's Documents*

An in-depth search of UKZN's website was conducted, specifically around its use of the OSM platform and its OSM strategy. First a manual search of UKZN's website was conducted using the various tabs and directories to find relevant data. The next step involved leveraging the Google search engine which provided a more in-depth search of the many forms of online media like webpages, online newspapers, OSM sites and various publications.

3.8.3.2 *Online Social Media*

The OSM landscape of UKZN was also investigated around topics that relate to UKZN or universities. Online social media provides a good search function, and with Facebook and Twitter having many followers, there is a lot of information being shared online. Searching for information relevant to this research study, revealed many OSM campaigns, a wide variety of opinions and a lot of news articles.

3.8.4 Gephi

Gephi is a social network analysis and visualisation tool which the researcher leveraged to understand and explore OSM graphs. Graph data is processed through this tool, with the user interacting with the representations to manipulate the structures, shapes and colours which reveal patterns in data.

Data collected from UKZN's Facebook site was processed through this tool which creates visualizations of its OSM network. These network visualizations helped reveal patterns and behaviours of the student users that utilize the OSM accounts of UKZN.

3.9 Data Analysis

To answer the research questions, it is important to analyse the data collected from the research instruments.

3.9.1 Quantitative Analysis

The analysis of quantitative data was through the use of descriptive statistics.

3.9.1.1 *Descriptive Statistics*

Using descriptive type of statistics can demonstrate a general understanding of the data which was collected (Sekaran & Bougie, 2010). Measures of central tendency for data analysis can reveal trends from the data and inferences can be made from the data collected. Measures of central tendency, allow the data to be described in ways to understand the average of the data (mean), data which appears the most often (mode) and the middle point of the data set (median) (Sekaran & Bougie, 2010).

When using measures of spread, a description can be made of how a like or mixed a set of data values are from a certain data set (Sekaran & Bougie, 2010). To understand this, an assessment was made of the extreme values of a data set (range), how dispersed the data is (variance), indexing the spread of distribution in data (standard deviation) and measuring the distribution for the median (interquartile range) (Sekaran & Bougie, 2010).

Additionally, cross tabulations were used to compare responses across questions to better understand the data.

3.9.1.2 *Inferential Statistics*

With the use of inferential statistics, generalisations about the population where the samples were taken from can be made, while ensuring the sample accurately represents the population. By using inferential statistics to only describe the data can give an understanding of the phenomenon of interest and answer the research questions of the study. The inferential statistic chosen for this research study were Chi-Square goodness-of-fit tests. This provided detailed descriptive data from students' responses. This test determines whether students' responses were chosen significantly more or less related to UKZN's OSM accounts. This test determines how effectively UKZN is leveraging its OSM accounts. While the goodness-of-fit tests assumes all responses have an equal chance of being selected, it can be beneficial to determine if students chose significantly more "positive" responses compared to "neutral" or "negative" responses to assess effectiveness. This compares students' responses related to the official and unofficial OSM accounts of UKZN, and determine if UKZN is effectively leveraging OSM. The results from the chi-square goodness-of-fit tests are accepted when it is significant ($p < 0.05$) and rejected when the results are not significant ($p > 0.05$). With this study only assessing UKZN's students, it is important to not generalise the findings of the chi-square goodness-of-fit tests to other university students.

3.9.2 Qualitative Analysis

The analysis of qualitative data follows a general five-phased cycle: (1) Compiling, (2) Disassembling, (3) Reassembling, (4) Interpreting and (5) Concluding (Yin, 2010).

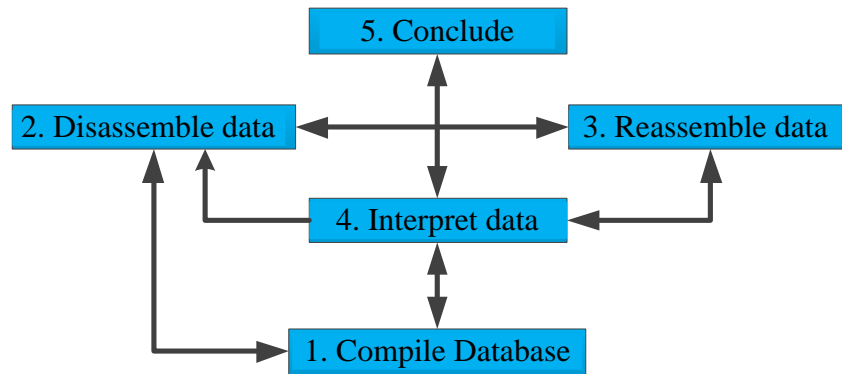


Figure 3.5: 5 phase cycles (Adapted from Yin, 2010).

Figure 3.5 shows the five phases and the complete cycle. Two-way arrows signify the back and forth between two phases which suggests that the analysis happens in a nonlinear way.

3.9.2.1 First Phase – Compiling

The first phase in the cycle is compiling and it is an important start to the analysis of qualitative data. This phase is equated to that of creating a “database” by compiling and sorting the field notes, recordings and transcripts gathered from data collection (Yin, 2010). This phase organises the qualitative data in a methodical way before a more formal analysis happens which leads to stronger analysis and meticulous qualitative research (Yin, 2010).

The use of NVivo which is a qualitative analytical tool helped compile the data more formally.

3.9.2.2 Second Phase – Disassembling Data

The second phase of the cycle involves disassembling the data which was previously compiled. An important note to this phase is that the researcher can return to an earlier phase to change something or move forward to preview an idea for the next phase (Yin, 2010).

The organised database consists of many unique items, and by coding these items can move them systematically into a higher conceptual level (Yin, 2010). While the uniqueness of the original items is not ignored, the same code is assigned to items which are similar. The higher conceptual level eventually allows the researcher to sort items from different records into

similar and dissimilar groups (Yin, 2010). Recognising these similar level one codes, eventually moves it into a higher conceptual level, becoming a level two code or category code (Yin, 2010).

NVivo was used to disassemble the data. This software helped check the coded material as well as allow the manipulating, retrieving and later assigning them to a higher conceptual level.

3.9.2.3 Third Phase – Reassembling Data

During the reassemble process the data is manipulated under different themes and arguments, and altered and realtered until the researcher sees something which is satisfactory (Yin, 2010). This step can use hierarchical, matrices and other types of arrays to help in the reassembling and the manipulation of the data.

An important note in this phase is that it involves the discretionary choices and judgements of the researcher which introduces bias. Robert Yin proposed three procedures to help against unknown bias which are to watch for negative cases, make constant comparisons and engage in rival thinking (Yin, 2010).

NVivo was used to assist in reassembling the data which can graphically present the results of the hierarchy. Once this phase was completed, the researcher saw broader themes in the data analysis. If the researcher had not seen broader themes emerge, the back and forth between the disassembling and reassembling phases will help.

3.9.2.4 Fourth Phase – Interpreting

This phase uses the reassembled data and data arrays to create a new narrative of the data. This phase is particularly important as it brings together the entire analysis. The goal of this phase is to create a wide-ranging interpretation of the data, while still encompassing specific data whose main themes become the basis for understanding for the whole study (Yin, 2010). Yin proposes the following attributes for good interpretation which are fairness, completeness, value-added, credibility and empirical accuracy (Yin, 2010).

3.9.2.5 Fifth Phase – Concluding

This phase draws conclusions from both the previous interpretative phase and the study's empirical findings (Yin, 2010). Conclusions captured the wide-ranging significance of the

study which are in the concepts of “implications in the research” and the “lessons learned” (Yin, 2010). The discretionary freedom of the researcher allows them to make inferences from the overall research (Yin, 2010). An important note is that conclusions which restate the findings in saying them in a different way are not desired (Yin, 2010).

3.10 Data Quality Control

This section discusses in detail the differences between validity and reliability, and the different types of validity and reliability.

Many qualitative researchers reject the framework used for validity and reliability which are accepted in quantitative research. These qualitative researchers argue for a different standard when judging quality in research findings. Campbell proposed qualitative research pursue validity, generalisability, reliability and replicability (Campbell, 1997). While Lincoln and Guba proposed four criteria for judging trustworthiness in qualitative research which are credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985).

Validity and reliability are conceptualised as the rigor, quality and trustworthiness in a qualitative approach (Golafshani, 2003).

3.10.1 Validity

Validity can be defined as the degree to which the research instruments reflects what it is supposed to measure (Darban & Li, 2012). Validity refers to whether the research measures and explains what the researcher said it would be measuring and explaining (Mason, 2002).

The concept of validity in qualitative research has been long debated as the research must produce consistently valid results, else any research based on these results is considered unreliable (Maxwell, 1992). The point of view of qualitative researchers in their work is that the results from the research findings are from interpretive efforts and are subjective but not objective (Thomson, 2011). In qualitative research, the researcher is part of the research process and they understand that they can affect the results (Thomson, 2011).

Different types of validity:

Internal validity – refers to the degree with which the results are attributed to the independent variable and not some other explanation (Maxwell, 1992).

External validity (generalisability) – The ability to apply the theory from the results of a study to other studies is called generalisability (Maxwell, 1992).

Types of test validity indicate the amount of meaning that can be placed on the results:

Face validity - refers to validity that determines whether the questions being asked are the ones being answered in this research study (Saunders et al., 2009).

Content validity – refers to the degree in which the measurement device in a research instrument, like questions in a questionnaire, can provide sufficient coverage to answer the investigative questions (Saunders et al., 2009)

Criterion-related validity – relates to the ability of the measurement device (questions) to make accurate predictions (Saunders et al., 2009).

Construct validity – refers to the degree in which the measurement device (questions), accurately measure the constructs which the researcher intended on measuring (Saunders et al., 2009)

Descriptive validity - refers to the issues which were excluded or included, e.g. an interview transcription can be descriptively invalid due to excluding features of the respondents tone or speech which are important when wanting to understand the interview (Maxwell, 1992).

The validity of the research instrument needs it to be reliable although a research instrument that is reliable doesn't have to be valid (Darban & Li, 2012).

3.10.2 Reliability

Reliability is defined as the degree to which a research instrument can produce the same results when it is repeated or administered again (Miller, 2009). By ensuring the reliability of a research instrument, the stability and consistency of the findings which were gained over time can be guaranteed (Miller, 2009). There are 3 aspects of reliability for a research instrument which are equivalence, internal consistency and stability (Miller, 2009). The Cronbach's alpha is used to objectively measure reliability which is the most widely used measure of reliability (Tavakol & Dennick, 2011). Cronbach's alpha is a measure of the internal consistency of a scale between 0 and 1, with the internal consistency being the extent to which all items in a test accurately measures the same construct (Tavakol & Dennick, 2011). Improper use of

Cronbach's alpha can lead to a scale being untrustworthy; which can be avoided by understanding the concepts of internal consistency and homogeneity (Tavakol & Dennick, 2011). Homogeneity refers to unidimensionality which is described as an item that measures a single construct, and internal consistency is the interrelatedness of a sample of a test item (Tavakol & Dennick, 2011).

In quantitative research, reliability relates to the extent that the results and processes are exactly replicable. However, in qualitative research such a definition is challenging and reliability is gained through consistency.

Replicability – refers to the degree in which the restudy of the phenomenon repeats the findings from the initial study (Leung, 2015). If the replicability of the research is consistent among researchers, then the findings are more valid (Leung, 2015).

3.10.2.1 Trustworthiness

To ensure the trustworthiness of qualitative findings it is important to consider dependability, credibility, transferability and confirmability (Schwandt, Lincoln, & Guba, 2007). Dependability is related to the stability of the findings over a course of time (Bitsch, 2005). To ensure the dependability of data, it is important to establish an audit trail, stepwise replication, code-recode strategy and peer examination (Anney, 2014). An audit trail is an examination of the process of inquiry and product which validates the data, and stepwise replication uses two or more researchers to assess the same data and compare the results (Anney, 2014). Code-recode strategy is coding the data twice to see if the results are the same or different, and peer examination discusses the researchers findings with their colleagues which help identify categories not covered (Anney, 2014)

Credibility refers to the confidence in how true are the research findings (Anney, 2014). To establish the credibility of the findings is through the use of triangulation, member checks, prolonged field engagement, peer debriefing, negative case analysis and persistent observation (Anney, 2014). Triangulation is the use of many different methods to gain supporting evidence, member checks involve constant tests of data, and prolonged engagement involves spending extended time in the field to gain an understanding of respondents (Anney, 2014). Peer debriefing provides a way to test growing insights and exposes searching questions, negative case analysis is contradicting data of what the researcher expects, and persistent observations look at whether the researcher has conducted in-depth analysis to get detail (Anney, 2014).

Transferability is the degree of the results from qualitative research that can be transferred to other respondents in other contexts (Anney, 2014). To establish transferability by a potential user is through thick description and purposeful sampling (Bitsch, 2005). Thick description allows judgments on how good the research context fits into other contexts, and purposive sampling is the focus on selecting key knowledgeable informants to answer specific research questions (Anney, 2014).

Finally, confirmability is the degree to which the other research can confirm the research findings (Anney, 2014). Confirmability can be established using reflexivity which is a reflexive document by the researcher to be reflected upon related to interpreting and planning data collection (Wallendorf & Belk, 1989).

3.11 Ethical Requirements

The declaration of consent was included in the online questionnaires and the semi-structured interviews. This declaration of consent meant that respondents who completed questionnaires, their participation and the results from these questionnaires can be used in this study. For interviews, this consent meant that interviewee's responses, recordings and participation can be used in this study. The acceptance of consent is part of the ethical requirements and must be agreed by all subjects who participate in this study.

No personal information was requested from respondents. Their answers for the questionnaire and their responses for the interview are kept anonymous at all times. Their names do not appear in any part of this study.

A copy of the questionnaires and the interviews were sent to the Ethical Requirements committee at UKZN for approval. The Ethical Requirements committee subsequently approved this application (Appendix D). A gatekeeper's letter was also attained (Appendix E) which grants permission to conduct research at UKZN.

The following section summarises the research approach.

3.12 Summary of the Research Approach

Conducting a mixed-method study is not easy, however it is necessary to determine the effectiveness of UKZN's OSM strategy which is a critical part of the research questions. Quantitative methods reveal patterns to paint a broad picture of the data gathered which details

the relationships between the data. However, quantitative methods cannot be used when wanting to understand more complex relationships in data. Through the use of qualitative methods these complex relationships can be understood. By using semi-structured interviews, can allow the interviewer to probe and reveal more details in complex relationships.

Table 3.3: Data collection instruments.

Data collection instrument	Dates	Number of responses
Survey of UKZN students	October 2016- November 2016	233
Interview with key people who work on UKZN's OSM accounts	May 2017	4

3.13 Conclusion

The analysis of OSM strategies can be found in the research study titled “Measuring Social Media Success: The value of the BSC as a tool for evaluation and strategic management in museums” (Villaespesa, 2015). This study explored an evaluation model which measures OSM success from a non-profit perspective. The study details a performance measurement framework which selects a set of tools and measures for the evaluation task.

The non-profit BSC framework describes the steps to analyse and capture an organisation's OSM strategy. This research explores UKZN's OSM strategy and its effectiveness. This research study is descriptive and interpretive in nature. A large amount of data was collected using the various data collection techniques which were analysed and are presented in the following chapters.

This chapter summarised the research questions, described the methodologies employed and the reason for choosing this approach. The next chapter presents the analysis of the empirical data collected.

3.14 Overview of Chapter

This chapter first establishes the BSC framework and links its importance when wanting to develop and assess OSM strategy. Then the steps from the BSC are linked to the proposed research questions. Next the research design is discussed to give context of how this research study was conducted. The data collection for the quantitative and qualitative part of the study are detailed, with secondary data sources also being outlined which supplement the primary data gathered. The data analyses techniques for the quantitative and qualitative parts of this study are outlined, with data quality control like validity and reliability being shown. The ethical requirements are detailed to show that this study was conducted in an ethical manner.

Overall, this chapter provides researchers with a basis on how to develop research questions for OSM strategy analysis and use the BSC to answer them. Additionally, this study also details the primary and secondary data collection methods to show how important it is and how much value it can provide to similar research studies. This chapter provides others with details on using the 5-phase cycle to analyse the data from semi-structured interviews with OSM staff.

Chapter four will discuss the research findings from the data.

Chapter 4: Findings and Analyses

4.1 Introduction

In this chapter, the data gathered from the research instruments are analysed and discussed. Using this data to answer the research questions will fulfil the purpose of this research study. The data analysis provides an understanding on whether the University of KwaZulu-Natal's (UKZN) online social media (OSM) strategy is achieving its stated strategic objectives.

Questionnaires and semi-structured interviews were used as the primary research instruments. As discussed in Chapter 3, the data for the questionnaires were gathered from UKZN students, and the data for semi-structured interviews were gathered from key people working on UKZN's OSM accounts. In total, 233 responses were obtained from students and 4 semi-structured interviews were conducted with UKZN staff. Questionnaires were omitted from respondents who did not give their consent to use their responses and where respondents were not students of UKZN.

Due to the nature of the data gathered from the questionnaires, descriptive and inferential statistics were used for analysis and interpretation. The data gathered from the questionnaires were captured into an Excel spreadsheet. Once this was completed, the data is verified and then the Excel spreadsheet is imported into SPSS. The data gathered from semi-structured interviews uses the general five phased cycle by Robert Yin to analyse and interpret the data. The data was transcribed from the interviews and then captured into the NVivo software.

This chapter is broken down into 3 sections. The first section addresses the reliability and validity of the data gathered from the research instruments. The second section gives an overview of the demographic information from this study. And lastly, the third section uses descriptive statistics, inferential statistics, Gephi, and OSM analytics for analysis.

4.2 Data Quality Control

4.2.1 Reliability

Before making inferences from the data gathered, the data from the questionnaire needs to be tested for reliability. Reliability refers to the trustworthiness of the data. Cronbach's alpha (α) is used to test the reliability of the questionnaire research instrument.

The results of the reliability analysis for the questionnaire is shown in table 4.1:

Table 4.1: Cronbach reliability analysis of the questionnaire.

OSM accounts	Cronbach's Alpha	Number of items
Official Facebook accounts	0.944	35
Official Twitter accounts	0.932	35
Unofficial Facebook accounts	0.953	20
Unofficial Twitter accounts	0.954	20

The result from the Cronbach's Alpha test show that this questionnaire has a high degree of reliability and that the questionnaire has strong inter-item consistency (Cooper & Schindler, 2011). A reliability coefficient of 0.7 is considered adequate, with this study obtaining higher in the questionnaire (Cooper & Schindler, 2011).

4.2.2 Validity

To test the validity of the questionnaire, the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy was performed. The results from the KMO test are shown in table 4.2:

Table 4.2: KMO test of the questionnaire.

OSM accounts	Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy
Official Facebook accounts	0.913
Official Twitter accounts	0.862
Unofficial Facebook accounts	0.933
Unofficial Twitter accounts	0.899

The KMO measure of sampling adequacy was > 0.5 which shows that the sample was adequate and produced reliable results.

The statistical tests performed which assess the reliability and validity of the data gathered from the questionnaire are shown. The results from these tests show that the questionnaire is both reliable and valid.

4.3 Demographic Information

Understanding the demographic information from the data collected can convey important information to the researcher. This section looks at the demographic information from UKZN's students like age, year of study, OSM sites used, and the unofficial OSM sites that are used.

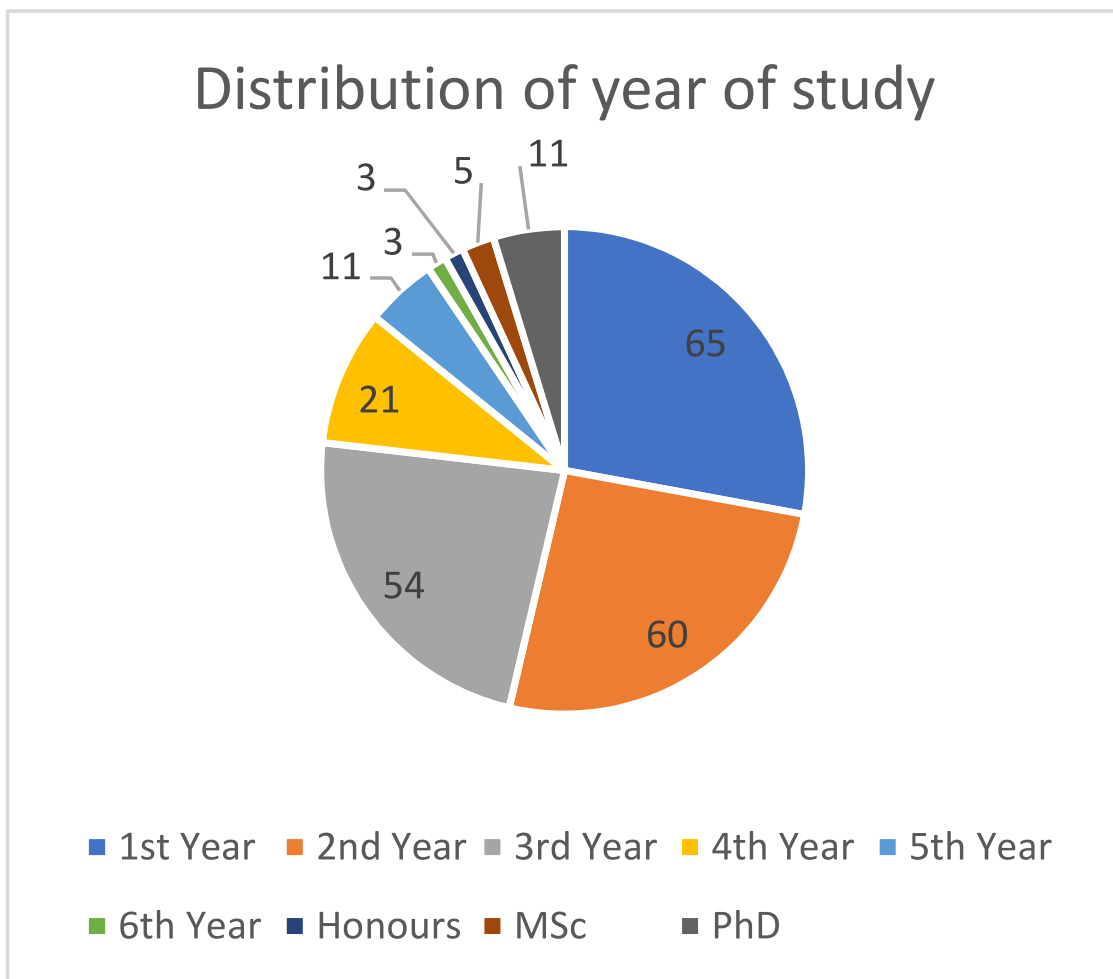


Figure 4.1: Distribution of year of study of students.

Figure 4.1 shows the distribution of the year of study for the students that participated in the questionnaire.

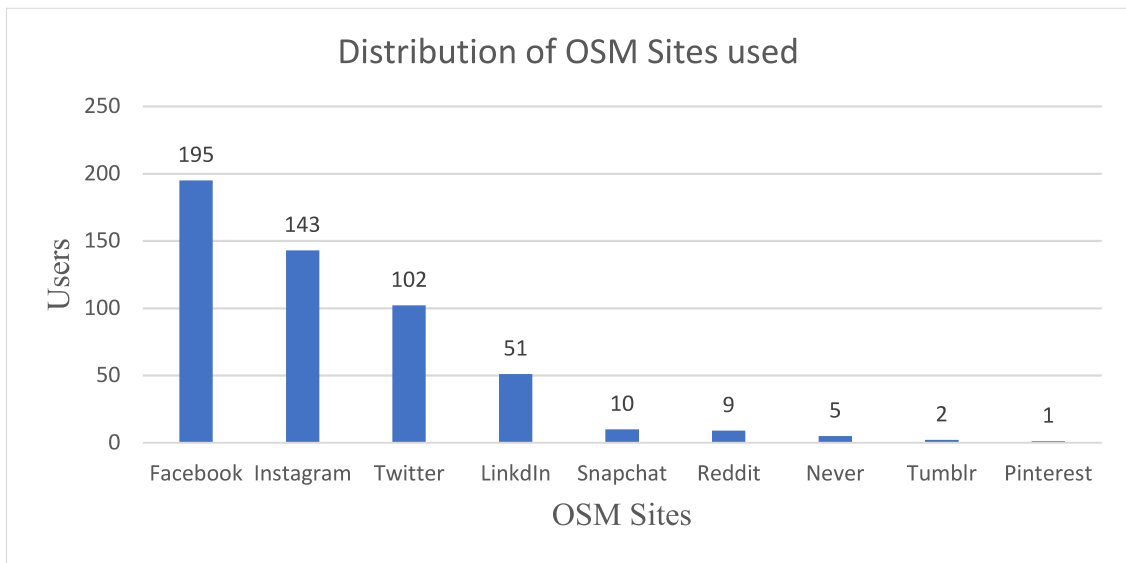


Figure 4.2: Distribution of OSM sites used by students.

Figure 4.2 shows the number of students using the different OSM sites. It is interesting to note that there were more students using Instagram when compared to Twitter. This will be discussed later in the study.

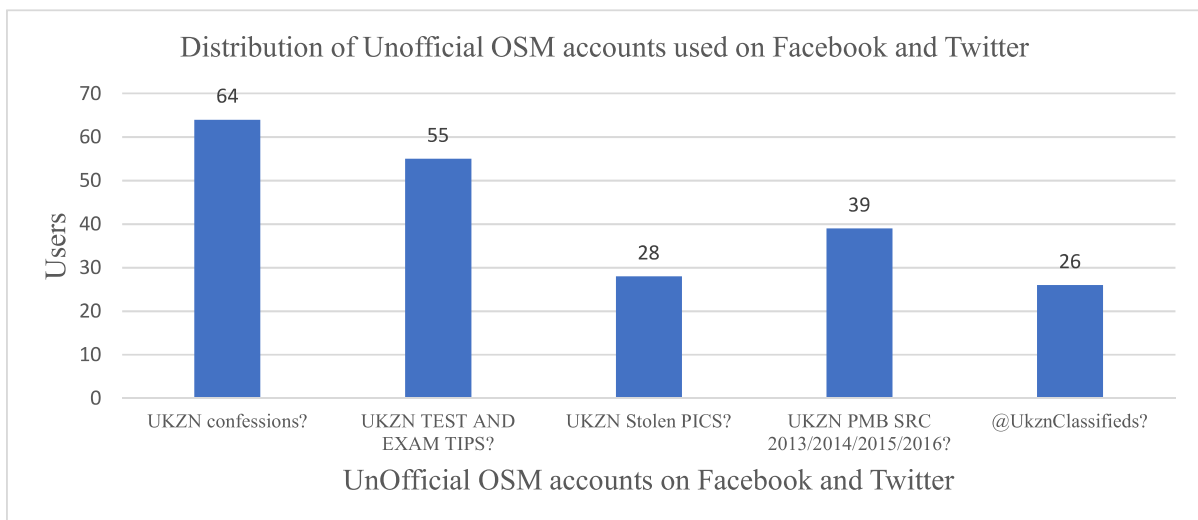


Figure 4.3: Distribution of unofficial OSM accounts used by students.

Figure 4.3 shows the number of students who use the different unofficial OSM accounts across Facebook and Twitter.

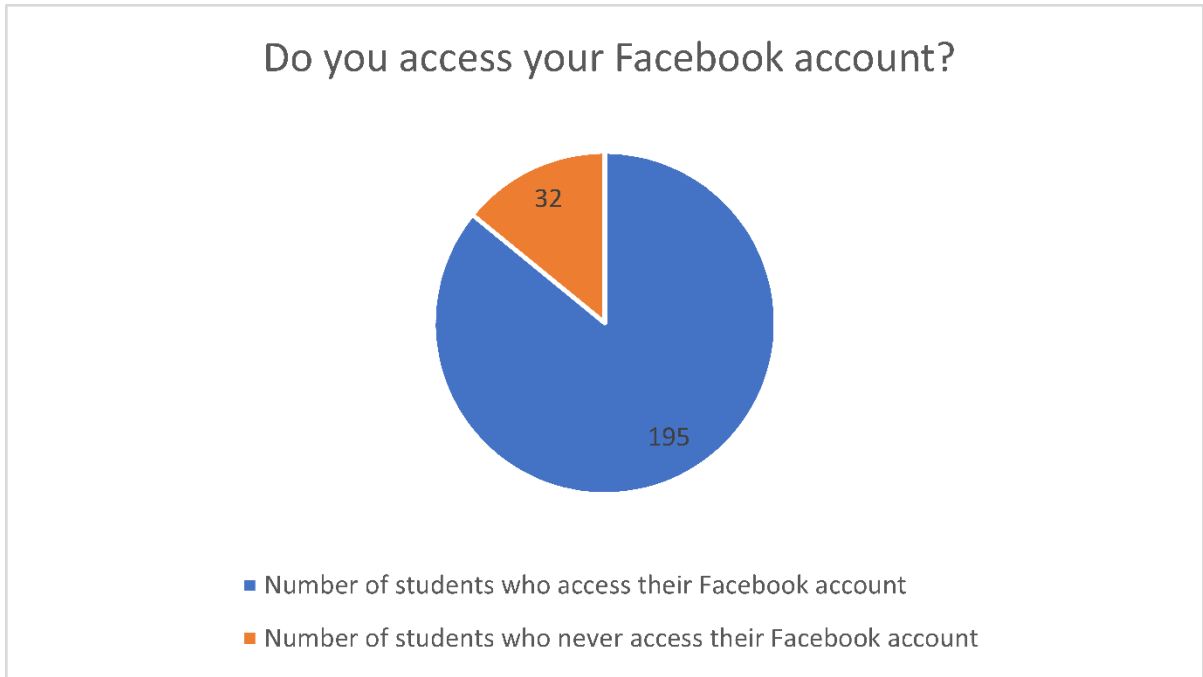


Figure 4.4: Students who access their Facebook account.

Figure 4.4 shows the distribution of students who access and who never access their Facebook accounts.

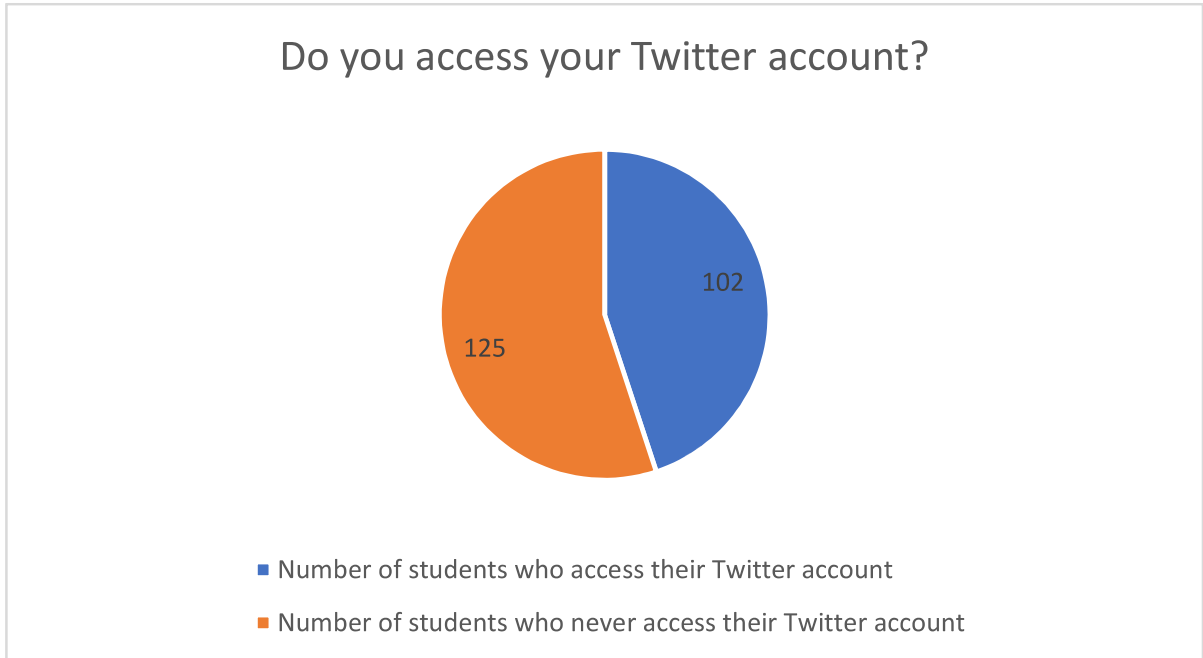
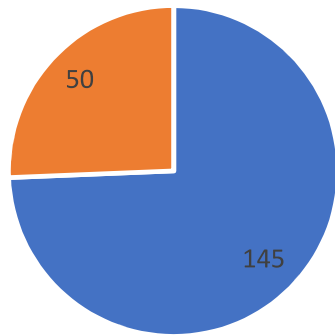


Figure 4.5: Students who access their Twitter account.

Figure 4.5 shows the distribution of students who access and who never access their Twitter accounts.

Do you view UKZN's Official Facebook account?

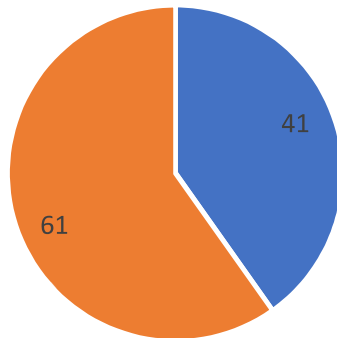


- Number of students who view UKZN's Facebook account
- Number of students who never view UKZN's Facebook account

Figure 4.6: Students who view UKZN's Facebook account.

In Figure 4.6, the distribution of students who view and who never view UKZN's Facebook accounts is shown.

Do you view UKZN's Official Twitter account?



- Number of students who view UKZN's Twitter account
- Number of students who never view UKZN's Twitter account

Figure 4.7: Students who view UKZN's Twitter account.

In Figure 4.7, the distribution of students who view and who never view UKZN's Twitter accounts is shown. What was really interesting is that 59.8% of students do not view UKZN's Twitter account when compared to Facebook, which will be elaborated on more in the next

chapter. Finally, a cross tabulation also revealed that only 32 students use both UKZN's Facebook and Twitter accounts.

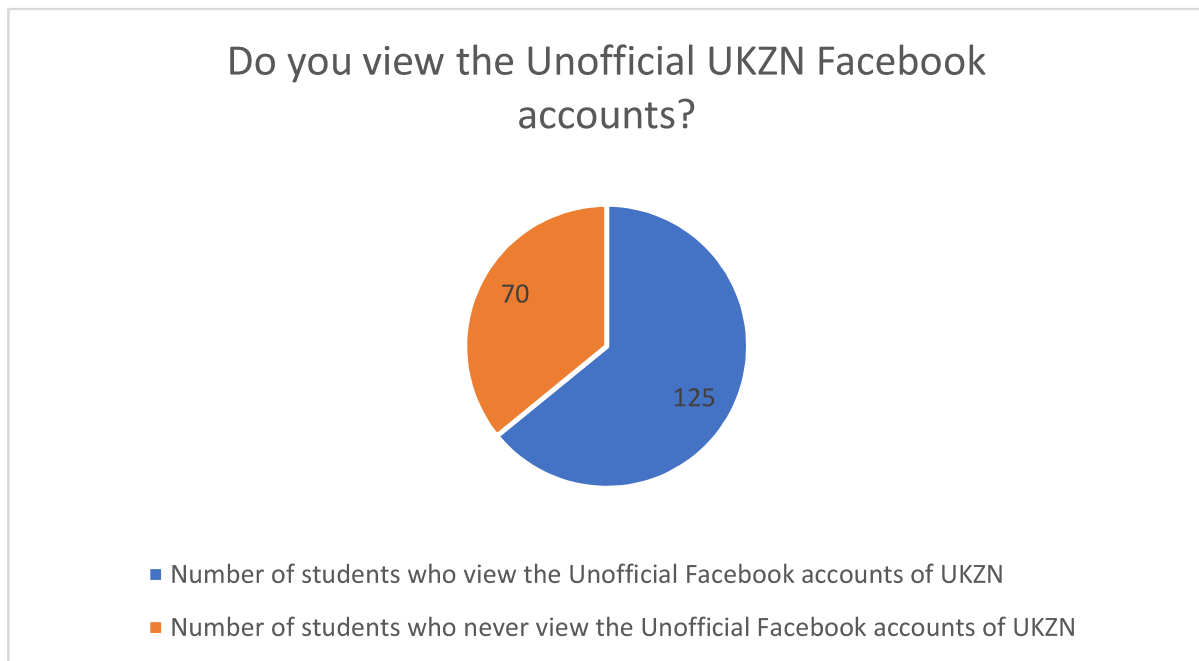


Figure 4.8: Students who view the Unofficial Facebook accounts of UKZN.

Figure 4.8 shows the distribution of students who view and who never view the unofficial accounts of UKZN on Facebook. Comparing figure 4.6 and 4.8, shows that 145 students viewed UKZN's Facebook account compared to 125 students viewing the unofficial Facebook accounts of UKZN. Overall, there were 98 students who viewed both accounts. This will be detailed more when discussing the effectiveness of UKZN's OSM strategy in chapter 5.

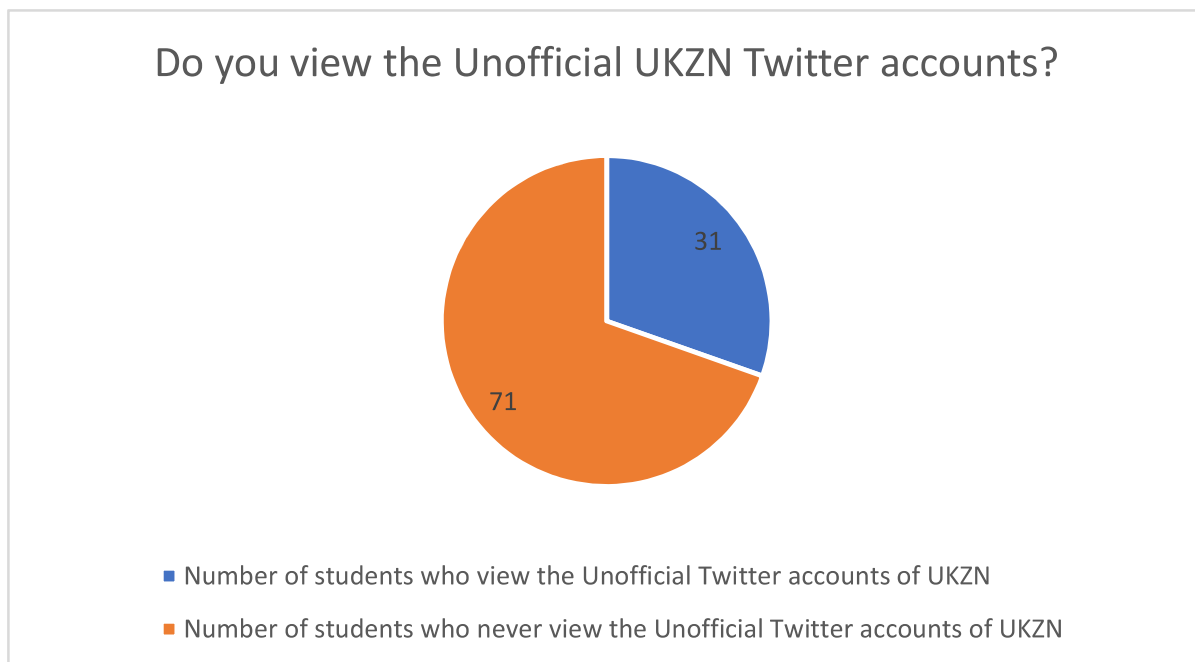


Figure 4.9: Students who view the Unofficial Twitter accounts of UKZN.

Figure 4.9 shows the distribution of students who view and who never view the unofficial accounts of UKZN on Twitter. Comparing figure 4.7 and figure 4.9, revealed that 41 students view UKZN’s Twitter account and 31 students view the unofficial Twitter accounts of UKZN, while only 14 students viewed both accounts. This point will also be discussed in chapter 5.

4.4 Data Analysis

4.4.1 Quantitative Findings

4.4.1.1 Descriptive Statistics

Descriptive statistics was used to describe the data gathered from the students’ questionnaire which can be used to discover patterns from the data. The data is described from the 6 sub-groups of Facebook and Twitter.

4.4.1.1.1 Students use of the Official UKZN OSM Accounts

This section analyses the responses from students with regards to their use of UKZN’s official Facebook and Twitter accounts.

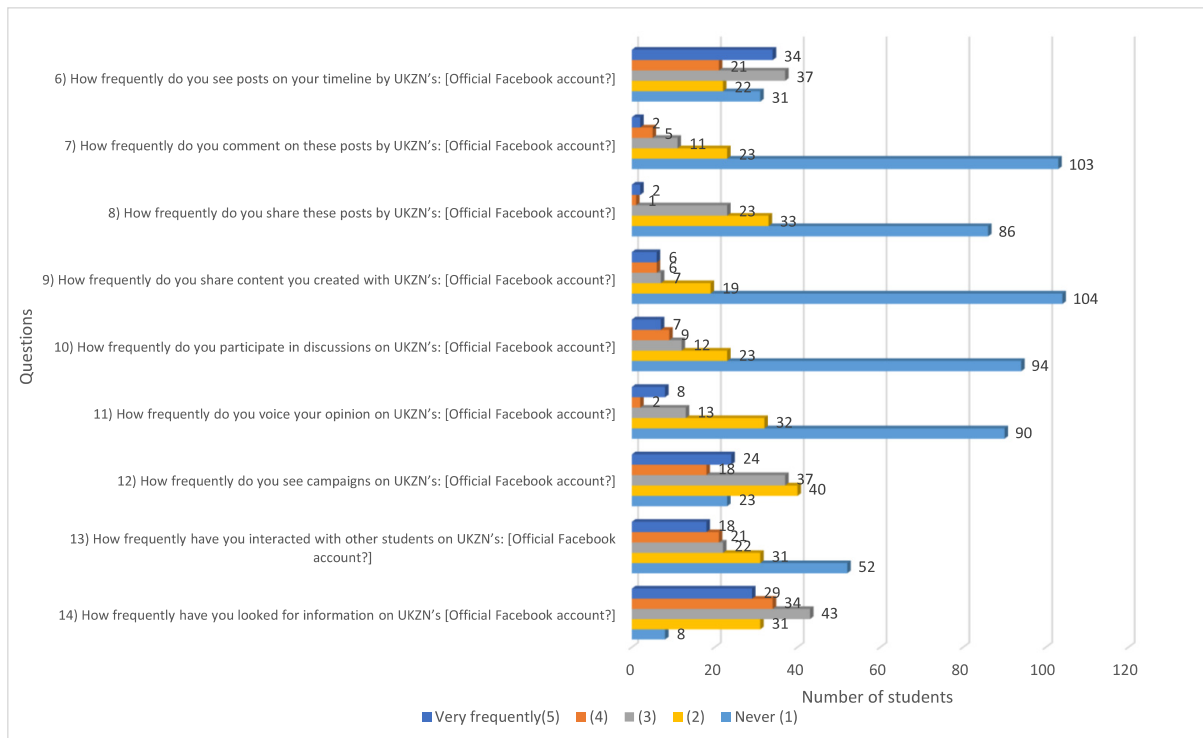


Figure 4.10: Students use of UKZN's Facebook account.

In figure 4.10, how frequently students use UKZN's Facebook account across the various questions is shown. It is interesting to note that 25.5% of students chose "3" on the Likert scale with regards to seeing posts by UKZN's Facebook account. A cross tabulation also revealed that many students access their Facebook account while majority of them never see posts on their timeline by UKZN's Facebook account.

Additionally, 71.5% of students never comment on posts by UKZN's Facebook account. Looking at a cross tabulation of students who see these posts showed that many students never even comment on these posts.

More than 59% of students never share posts by UKZN's Facebook account which could be due to them never seeing these posts. Additionally, looking at students who actually see these posts revealed that majority of students never share these posts by UKZN.

Another interesting cross tabulation showed that many students view UKZN's Facebook account while majority of them never share content they created with this account.

There were also 64.7% of students who never participate in discussions, 62% who never voice their opinions and 36.1% who never interact with other students on UKZN's Facebook page. This is interesting in that UKZN has many online followers on Facebook and many students

view this account, however many students do not interact with this account or others on this account.

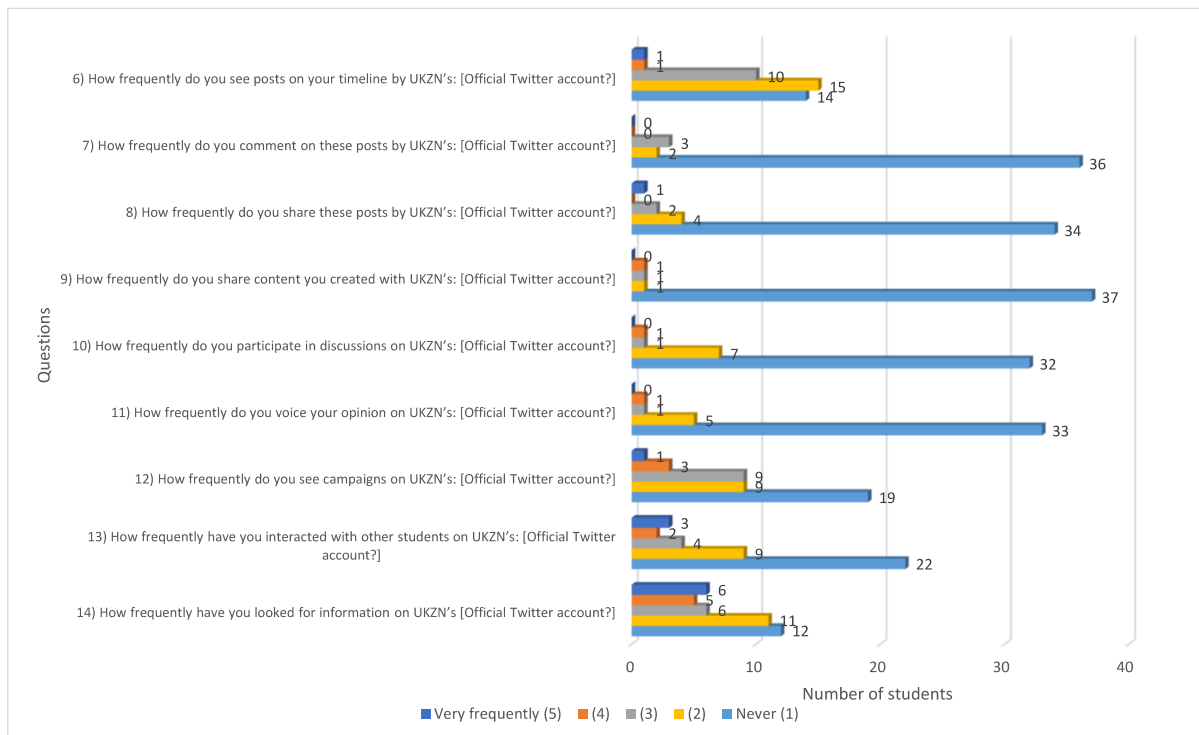


Figure 4.11: Students use of UKZN's Twitter account.

In figure 4.11, how frequently students use UKZN's Twitter account across the various questions is shown. A cross tabulation showed that there were people who access their Twitter account, however majority of them never see posts on their timeline by UKZN's Twitter accounts. Therefore, students never comment or share these posts by UKZN's Twitter account as well.

Additionally, there were students who viewed this Twitter account although many of them never share content they created with this account. Finally, in terms of OSM use, 78% of students never participate in discussions, 82.5% never voice their opinions and 55% never interact with other students on UKZN's Twitter account.

A goal in UKZN's strategic plan was engaging with students but the data related to UKZN's OSM accounts showed there is not much engagement with regards to most of these questions. These questions related to OSM use will be discussed in more detail in the next chapter to show the effectiveness of UKZN's OSM strategy from the students' perspective.

4.4.1.1.2 Level of Agreement on UKZN's Official OSM Accounts

This section looks at the level of agreement students felt around questions relating to UKZN's OSM accounts.

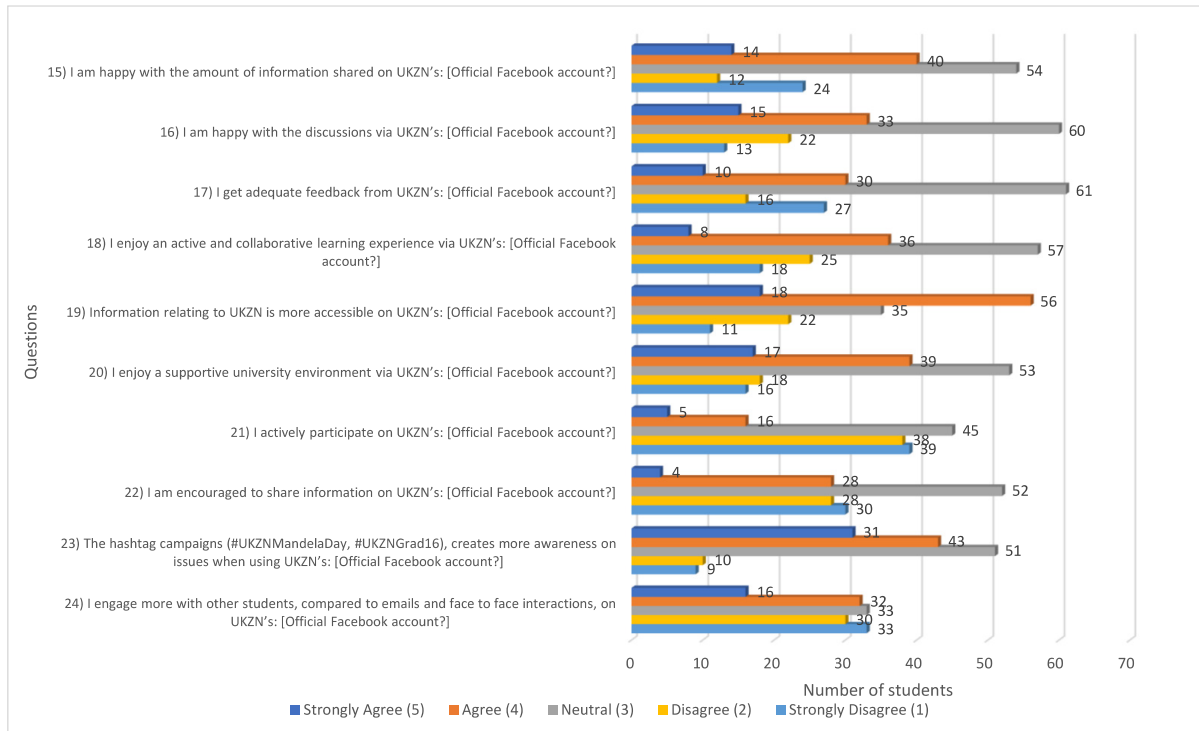


Figure 4.12: Level of agreement on UKZN's Facebook account.

Figure 4.12 shows the level of agreement students had across various questions related to their use of UKZN's Facebook account. There were 37.5% of students who felt neutral with the amount of information shared on UKZN's Facebook account. Additionally, it can be seen that 39.4% of students agreed that information was more accessible on UKZN's Facebook account.

More than 31% of students also expressed they felt neutral with regards to actively participating on UKZN's Facebook account. This is in line with figure 4.10 which showed that students do not interact much on this account.

One of the main uses of UKZN's OSM accounts was posting campaigns although 35.4% of students felt neutral with regards to hashtag campaigns creating more awareness on UKZN's Facebook account.

It is interesting to note that 43.8% of students expressed negative responses with regards to engaging more with other students, when compared to emails and face to face interactions, on UKZN's Facebook account.

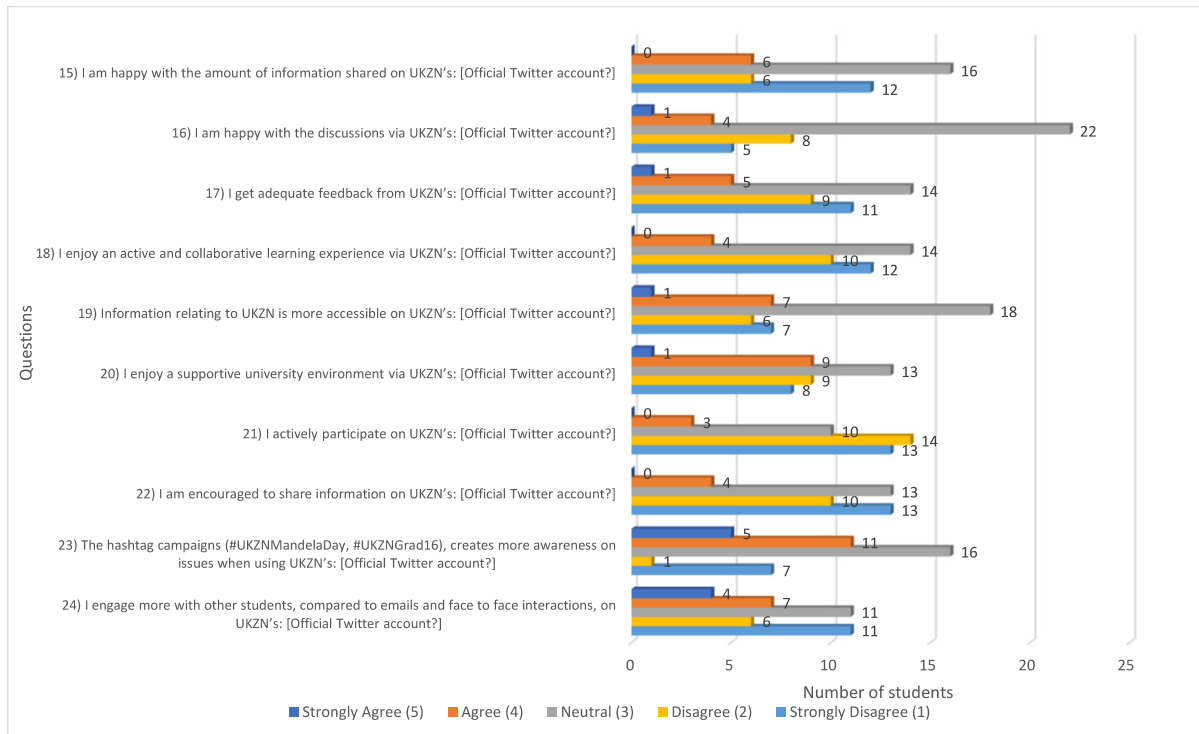


Figure 4.13: Level of agreement with UKZN's Twitter account.

Figure 4.13 shows the level of agreement students had across various questions related to their use of UKZN's Twitter account. On Twitter, 85% of students expressed neutral and negative responses with being happy with the amount of information shared on UKZN's Twitter account. Additionally, when comparing responses with regards to information being more accessible on UKZN's accounts, it can be seen that 18 students were neutral on UKZN's Twitter account compared to 56 students agreeing on Facebook. With UKZN leveraging OSM to provide information to its OSM community and OSM encouraging the sharing of information to many people, these results do not show effective use of UKZN's Twitter account.

It is worth noting that 27 students expressed negative responses with regards to actively participating on UKZN's Twitter account compared to 3 positive responses. Forty percent of students also felt neutral with hashtag campaigns creating more awareness on UKZN's Twitter account.

Finally, an equal number of students felt neutral and strongly disagreed with being encouraged to share information and engage with other students on UKZN’s Twitter account.

Looking at this section showed many interesting responses from students. These will be discussed further in the next chapter to show how effectively UKZN is leveraging Facebook and Twitter.

4.4.1.1.3 Engagement on UKZN’s OSM accounts

The questions from this section ascertain how students feel with regards to the level of engagement felt on UKZN’s official Facebook and Twitter accounts.

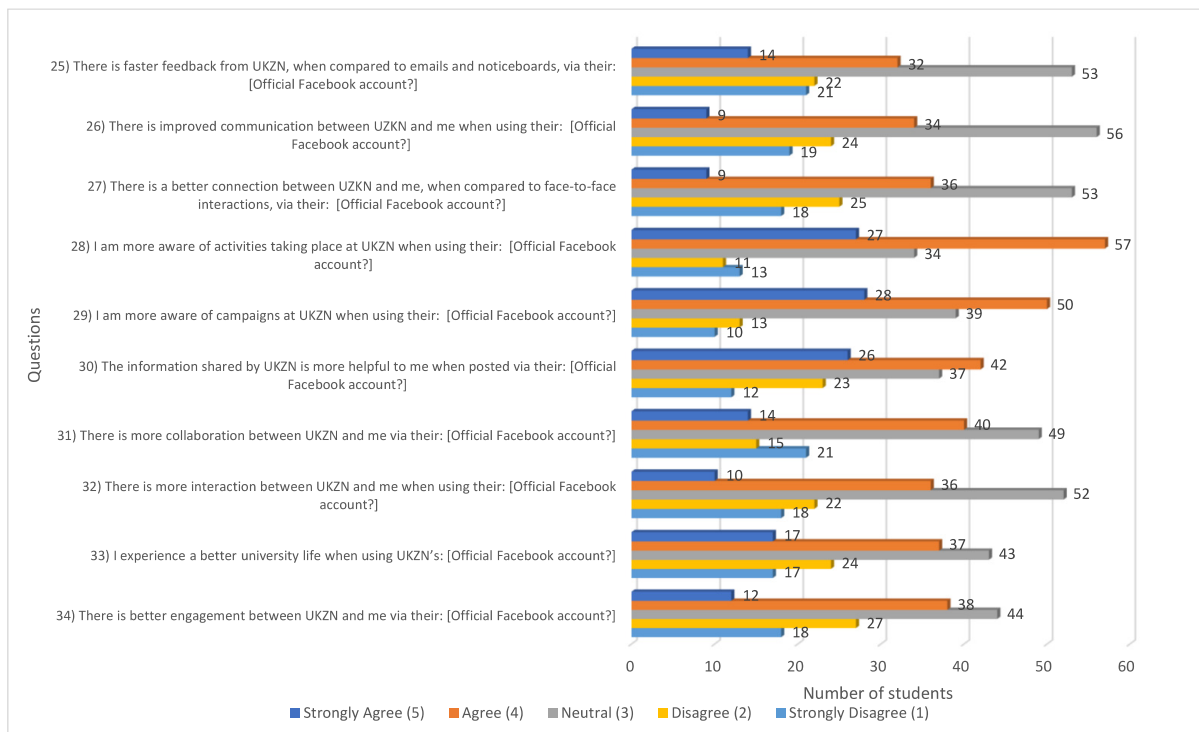


Figure 4.14: Engagement with UKZN’s Facebook account.

Figure 4.14 shows the level of engagement students felt across the various questions related to UKZN’s Facebook account. It is interesting to note that 40.1% of students agreed that they were more aware of activities taking place, 35.7% were more aware of campaigns and 30% felt information was helpful when shared on UKZN’s Facebook account. This shows UKZN is effectively leveraging OSM in this regard. However, it can be seen that across the rest of the questions, majority of students were neutral.

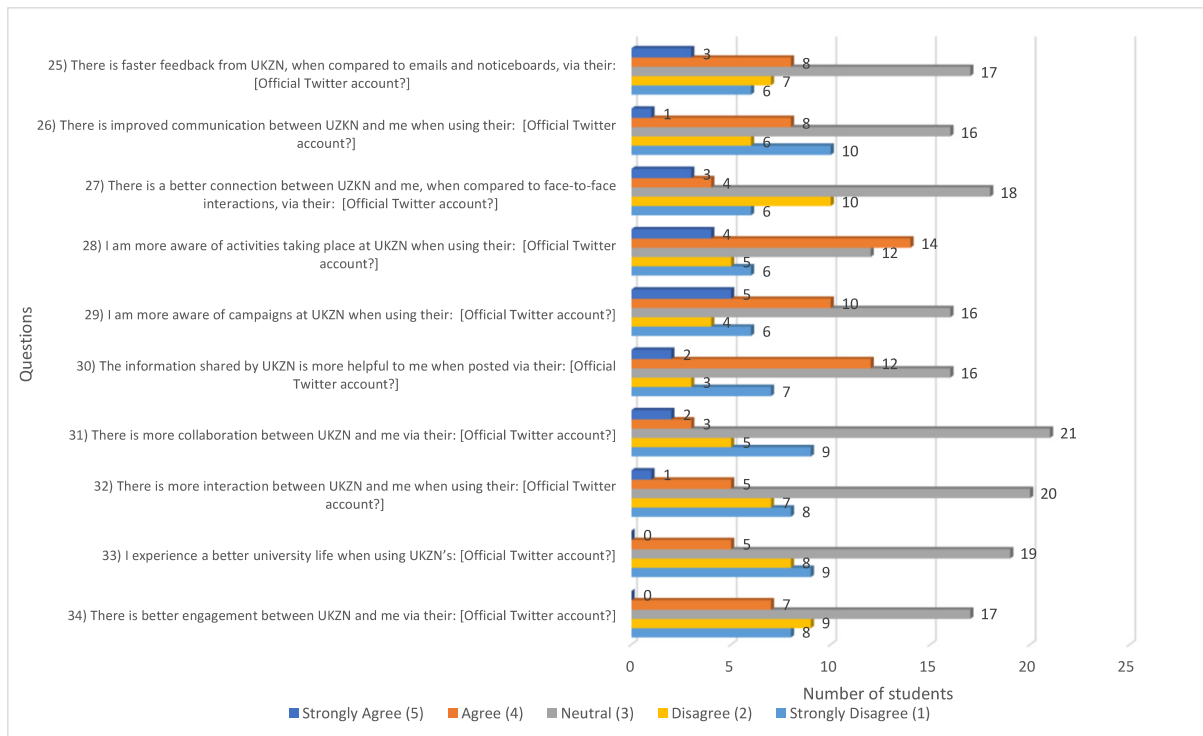


Figure 4.15: Engagement with UKZN's Twitter account.

Figure 4.15 shows the level of engagement students felt across the various questions related to UKZN's Twitter account. More than 34% of students agreed that they were more aware of activities taking place when using UKZN's Twitter account. Additionally, while 17 students were neutral with regards to having better engagement with UKZN's Twitter account, there were an equal number of students who expressed negative responses as well.

Finally, it can be seen that across the rest of the questions, students were neutral with regards to engagement. It can also be seen that on Facebook there were more positive responses compared to Twitter, however the majority of students were still neutral across most questions from both accounts.

The engagement felt across UKZN's Facebook and Twitter showed varying results. These results will be elaborated on more in section 5.3.3.2.

4.4.1.1.4 Quality of Engagement Felt on UKZN's OSM accounts

This section assesses the responses from UKZN's students on the quality of engagement they felt with UKZN via the official Facebook and Twitter accounts.

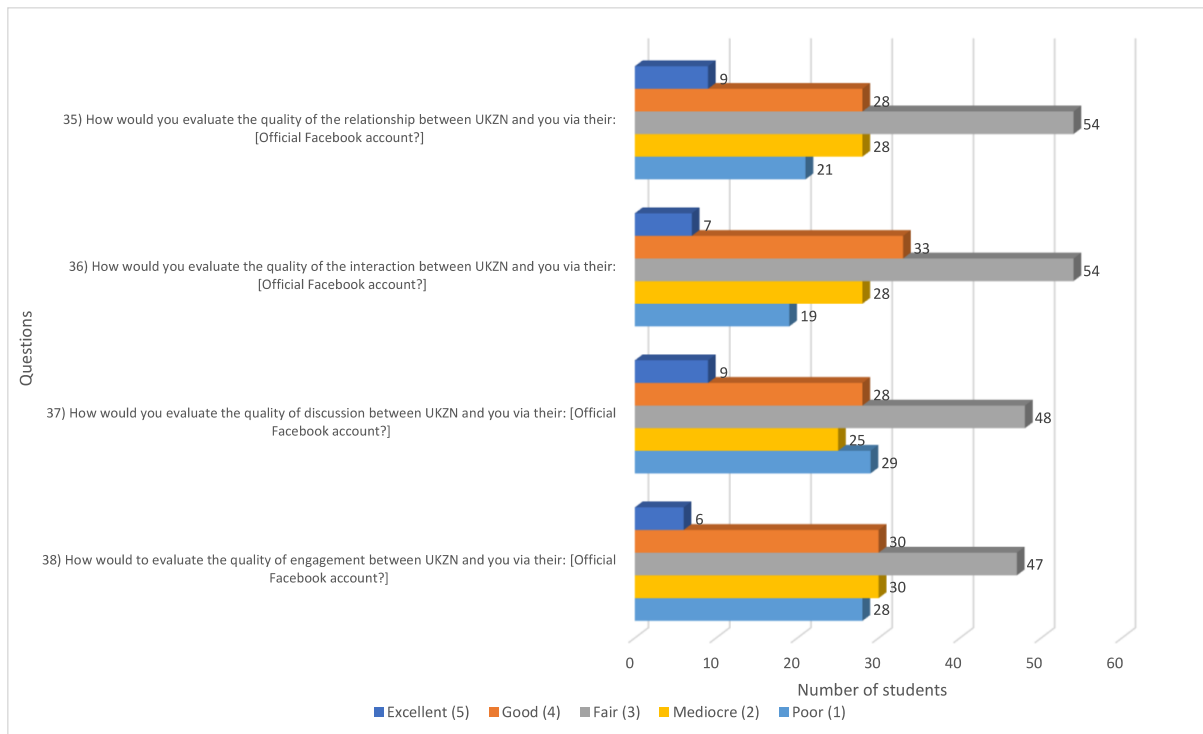


Figure 4.16: Quality of engagement felt on UKZN's Facebook account.

Figure 4.16 establishes the quality of engagement students felt across various questions related to UKZN's Facebook account. Looking at responses related to UKZN's Facebook account, it can be seen that across all questions, the majority of students felt the quality of engagement with this account was fair.

Finally, looking at the total number of responses, there were more negative responses when compared to neutral responses with regards to the quality of discussion and quality of engagement felt with UKZN's Facebook account.

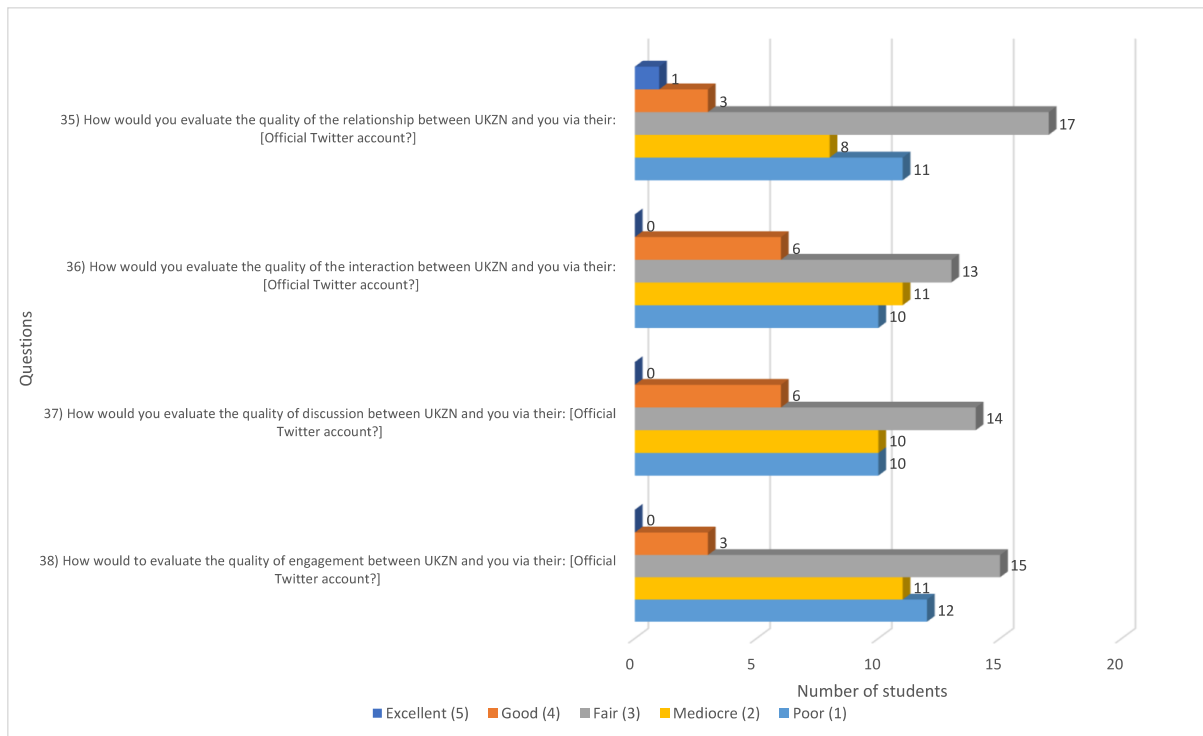


Figure 4.17: Quality of engagement felt on UKZN’s Twitter account.

Figure 4.17 establishes the quality of engagement students felt across various questions related to UKZN’s Twitter account. Most students expressed fair across all questions related to UKZN’s Twitter account. There were also an equal number of students that expressed negative and neutral responses with regards to the quality of the relationship felt with the University via its Twitter account.

Finally, there were more negative responses compared to neutral responses with regards to quality of interaction, quality of discussion and quality of engagement felt on the official UKZN Twitter account.

In the next chapter these questions will be detailed and matched to the key strategic themes which were established, to assess if UKZN’s OSM strategy is achieving its strategic objectives.

Figure 4.18 and 4.19 is used to best gauge the relationship students feel with UKZN via its official OSM accounts.

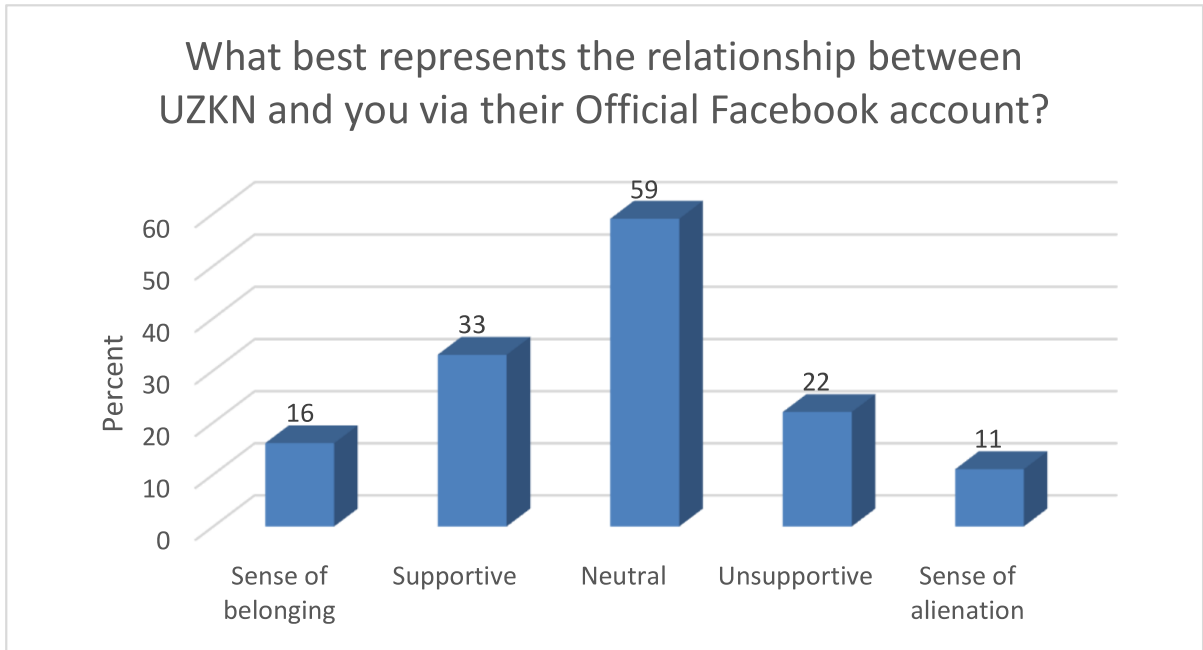


Figure 4.18: Relationship between UKZN and students via Facebook.

Figure 4.18 expresses the relationship that students felt with UKZN via the official Facebook account. More than 41% of students felt neutral with the relationship they shared with UKZN via the official Facebook account. The second most popular response from students were supportive with 23.4% of students feeling this way, while the third most popular response was unsupportive with 15.6% of students feeling this way.

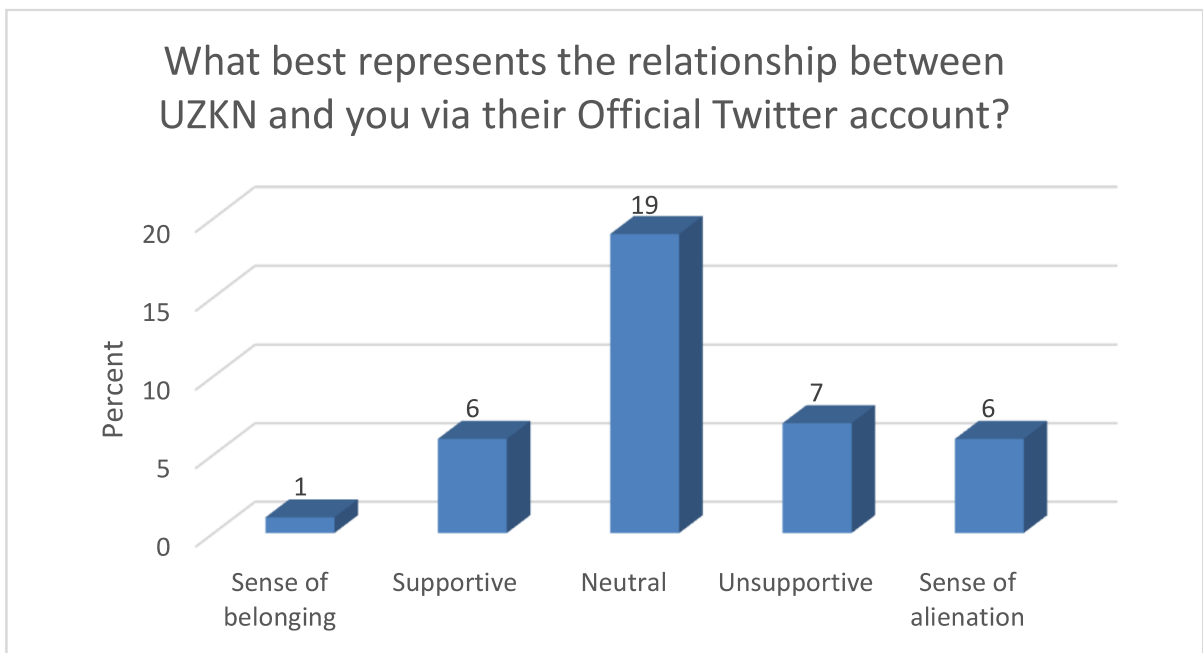


Figure 4.19: Relationship between UKZN and students via Twitter.

Figure 4.19 expresses the relationship that students felt with UKZN via the official Twitter account. It can be seen that 48.7% of students felt neutral with the relationship they share with UKZN’s Twitter account. Additionally, there were more students that also expressed negative responses compared to positive responses with what best represents their relationship with UKZN via Twitter.

4.4.1.1.5 Students use of the Unofficial UKZN OSM Accounts

Assessing students’ responses towards their use of the unofficial UKZN OSM accounts, can give a contrast between the official and unofficial OSM accounts. This will help when assessing the effectiveness of UKZN’s OSM strategy.

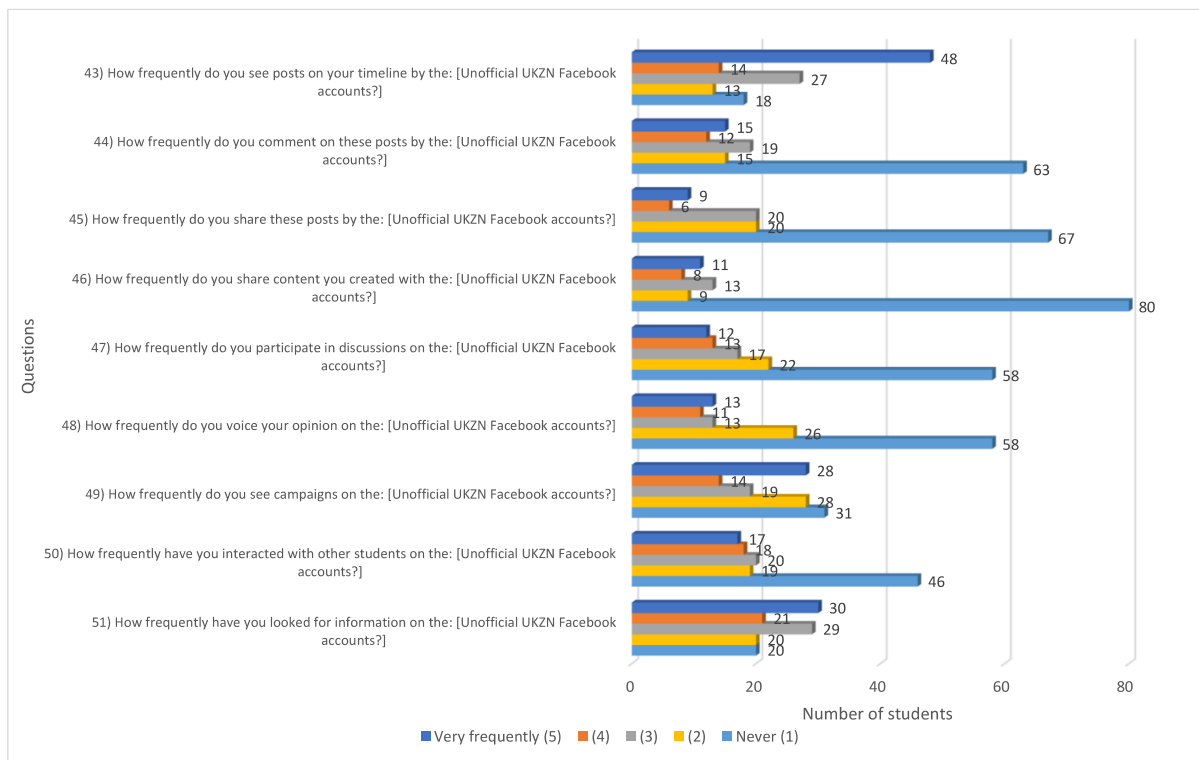


Figure 4.20: Students use of the unofficial UKZN Facebook accounts.

In figure 4.20, how frequently students use the unofficial Facebook accounts of UKZN across the various questions is shown. It is interesting to see that 40% of students see posts very frequently on their timeline by the unofficial Facebook accounts of UKZN. A cross tabulation between the official and unofficial Facebook accounts of UKZN, showed that there were more students who see post on the unofficial accounts when compared to UKZN’s official Facebook account.

While 50.8% of students never comment on posts by the unofficial Facebook accounts of UKZN, when comparing those that do comment, there were more students commenting on the unofficial accounts when compared to the official Facebook account. Additionally, there were more students sharing posts on the unofficial Facebook accounts when compared to UKZN's official Facebook account.

There were also more students sharing content they created, more students participating in discussions, and more students voicing their opinions on the unofficial Facebook accounts when compared to the official account.

Additionally, 25.8% of students never saw campaigns on the unofficial accounts. A cross tabulation revealed that there were more students seeing campaigns and more students interacting with other students on UKZN's Facebook account when compared to the unofficial Facebook accounts of UKZN.

Finally, there were more positive responses compared to neutral or negative responses with regards to looking for information on the unofficial Facebook accounts of UKZN. However, it was determined that more students look for information on the official account compared to the unofficial.

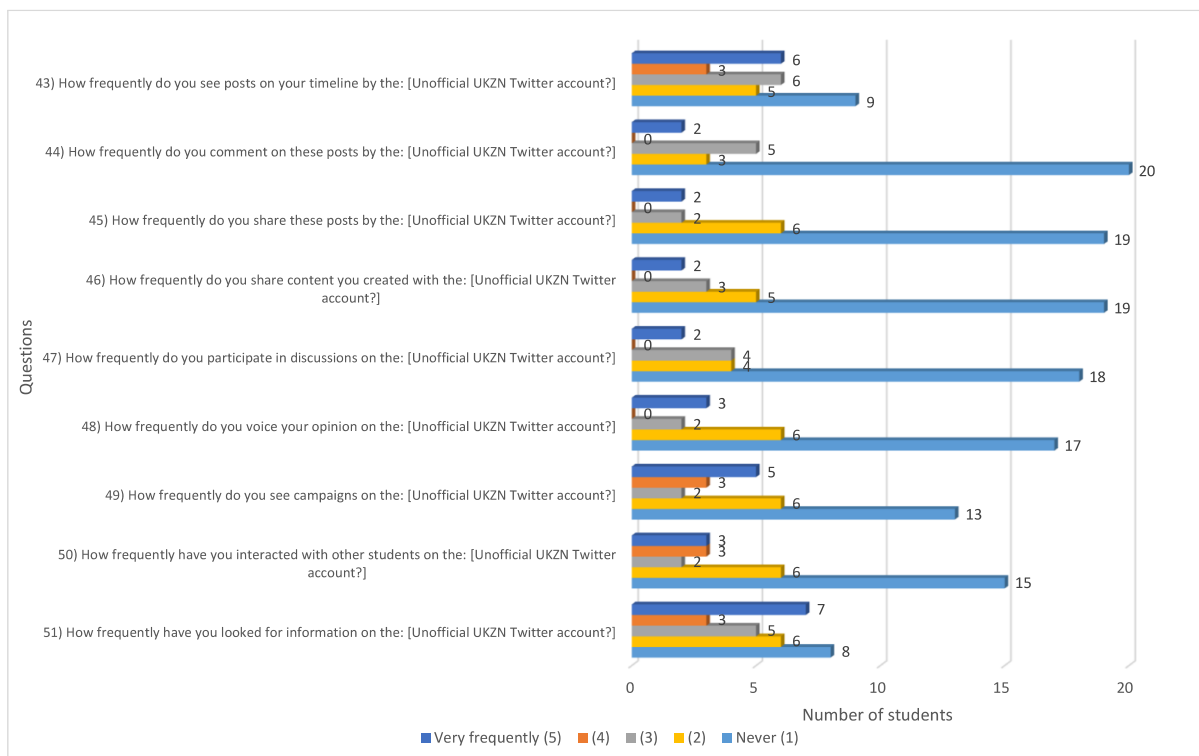


Figure 4.21: Students use of the unofficial UKZN Twitter accounts.

In figure 4.21, how frequently students use the unofficial Twitter accounts of UKZN across the various questions is shown. Across all questions relating to students use of the unofficial UKZN Twitter accounts, more students expressed never compared to other responses. However, looking at cross tabulations between the official and unofficial Twitter accounts of UKZN showed interesting occurrences.

There were more students seeing posts on their timeline, more students commenting on these posts, and more students sharing these posts on the unofficial Twitter accounts when compared to UKZN’s Twitter account.

Additionally, there were more students sharing content they created, more students participating in discussions, and more students voicing their opinions on the unofficial Twitter accounts compared to the official Twitter account.

It is interesting to note that were an equal number of students who see campaigns, an equal number of students interacting with other students, and an equal number of students looking for information across both the official and unofficial Twitter accounts.

4.4.1.1.6 Level of Agreement on the Unofficial UKZN OSM Accounts

Comparing the level of agreement on the official and unofficial OSM accounts of UKZN, will give an understanding of UKZN’s OSM strategy, its implementation and its success.

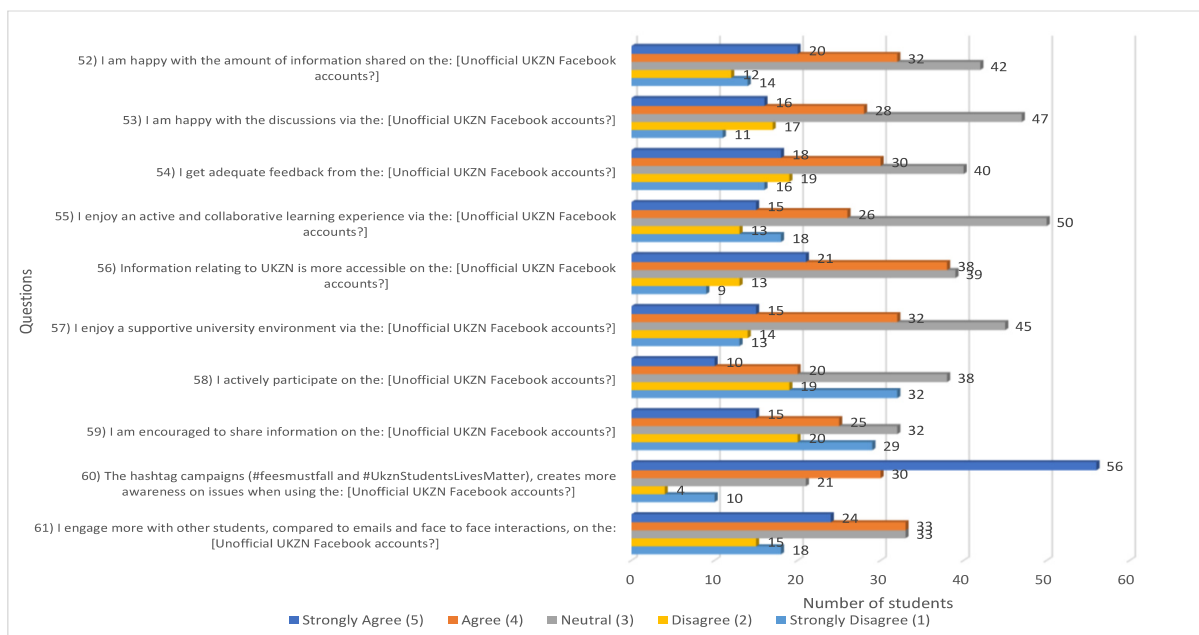


Figure 4.22: Level of agreement with the unofficial UKZN Facebook accounts.

Figure 4.22 shows the level of agreement students had across various questions related to their use of the unofficial Facebook accounts of UKZN. More than 43% of students expressed positive responses with regards to being happy with the amount of information shared on the unofficial Facebook accounts of UKZN. A cross tabulation showed that majority of students expressed positive responses with regards to being happier with the amount of information shared on the unofficial accounts when compared to UKZN's Facebook accounts.

Thirty nine percent of students expressed positive responses with regards to getting adequate feedback on the unofficial Facebook accounts compared to the official account. However, more students expressed positive responses with regards to being happy with discussions, and enjoying an active and collaborative learning experience on UKZN's official Facebook account compared to the unofficial Facebook accounts.

More than 49% of students also expressed positive responses with regards to information being more accessible, and more than 39% of students enjoyed a supportive university environment on the unofficial Facebook accounts compared to UKZN's Facebook account. There were also a high number of students who expressed negative responses with regards to actively participating and being encouraged to share information on the official account when compared to the unofficial Facebook accounts.

It is interesting to note that 46.3% of students strongly agreed that hashtag campaigns create more awareness on the unofficial Facebook accounts of UKZN. Additionally, a cross tabulation showed that more students expressed positive responses with regards to hashtag campaigns creating more awareness on the unofficial Facebook accounts of UKZN compared to UKZN's official Facebook account.

There were an equal number (33) of students who agreed and felt neutral with regards to engaging more with other students when using these unofficial Facebook accounts. However, there were more students who expressed positive responses with regards to engaging more with other students on UKZN's Facebook account when compared to the unofficial Facebook accounts.

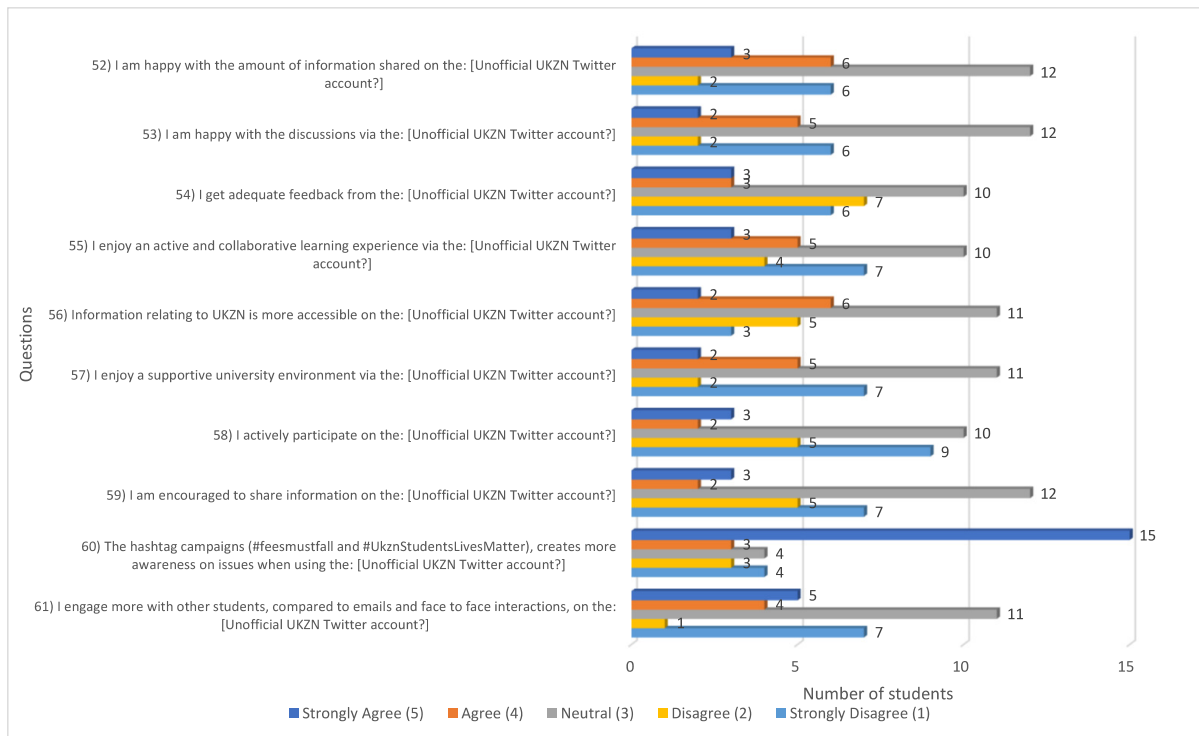


Figure 4.23: Level of agreement with the unofficial UKZN Twitter accounts.

Figure 4.23 shows the level of agreement students had across various questions related to their use of the unofficial Twitter accounts of UKZN. Across most questions, more students were neutral compared to other responses although it is interesting to see that 51.7% of students strongly agreed that hashtag campaigns create more awareness on the unofficial Twitter accounts of UKZN.

A cross tabulation revealed that more students were happier with the amount of information shared, happier with discussions, and got adequate feedback on the unofficial Twitter accounts of UKZN when compared to UKZN’s Twitter account. However, there were more students who expressed neutral responses with regards to enjoying an active and collaborative learning experience on the unofficial Twitter accounts of UKZN compared to the official Twitter account.

A cross tabulation showed that an equal number of students expressed neutral responses with regards to information relating to UKZN being more accessible across both the official and unofficial Twitter accounts. Additionally, more students expressed neutral responses with regards to enjoying a supportive learning environment, actively participating and being encouraged to share information on the unofficial Twitter accounts when compared the official account.

More students strongly agreed that hashtag campaigns create more awareness and they engage more with other students on the unofficial Twitter accounts when compared to UKZN’s Twitter account.

Overall, questions relating to the official and unofficial OSM accounts of UKZN will be compared to determine the effectiveness of UKZN’s OSM strategy.

4.4.1.2 Inferential Statistics

4.4.1.2.1 Chi-Square Goodness-of-Fit Tests

The goodness-of-fit test compares expected and observed frequencies for each category and then assess if these categories have the same quantity of values (Levin, 1999).

This test was applied to all questions from Facebook and Twitter to determine if any option is chosen significantly more or significantly less than what is expected. Every option on the Likert scale has an equal chance of being selected, with significantly more “positive” responses compared to “neutral” and “negative” responses showing that UKZN is effectively using its OSM accounts. The tables are for Facebook and Twitter, with only results which were significant ($p < 0.05$) being shown.

Interpretations of the tables:

A - Significantly more responses than expected.

B - Significantly fewer responses than expected.

4.4.1.2.1.1 Facebook

Table 4.3: Chi-square goodness-of-fit test (OSM use on UKZN’s Official Facebook account).

Questions	Interpretation	
	A	B
7) How frequently do you comment on these posts by UKZN’s Official Facebook account?	Never	

8) How frequently do you share these posts by UKZN's Official Facebook account?	Never	
9) How frequently do you share content you created with UKZN's Official Facebook account?	Never	
10) How frequently do you participate in discussions on UKZN's Official Facebook account?	Never	
11) How frequently do you voice your opinion on UKZN's Official Facebook account?	Never	
12) How frequently do you see campaigns on UKZN's Official Facebook account?	"2" on the Likert Scale	
13) How frequently have you interacted with other students on UKZN's Official Facebook account?	Never	
14) How frequently have you looked for information on UKZN's Official Facebook account?		Never

Students expressed "never" significantly more than expected relating to commenting on posts, sharing these posts and sharing content they created on UKZN's Facebook account. On UKZN's Facebook account there were significantly more never responses than expected with regards to students participating in discussions, voicing their opinions, and interacting with other students.

It is interesting to note that students chose "never" significantly more with regards to their use of UKZN's Facebook account. While the goodness-of-fit tests hypothesises that every option have an equal chance of being chosen, for UKZN's OSM strategy to be effective there should be significantly more positive responses than expected. However, this was not the case except where students chose "never" significantly less than expected with regards to students looking

for information on UKZN’s Facebook account. Students also chose “2” on the Likert scale significantly more than expected with regards to seeing campaigns on UKZN’s Facebook.

Table 4.4: Chi-square goodness-of-fit test (Agreement on UKZN’s Official Facebook account).

Questions	Interpretation	
	A	B
15) I am happy with the amount of information shared on UKZN’s Official Facebook account?	Neutral	
16) I am happy with the discussions via UKZN’s Official Facebook account?	Neutral	
17) I get adequate feedback from UKZN’s Official Facebook account?	Neutral	
18) I enjoy an active and collaborative learning experience via UKZN’s Official Facebook account?	Neutral	
19) Information relating to UKZN is more accessible on UKZN’s Official Facebook account?	Agree	
20) I enjoy a supportive university environment via UKZN’s Official Facebook account?	Neutral	
21) I actively participate on UKZN’s Official Facebook account?		Strongly Agree
22) I am encouraged to share information on UKZN’s Official Facebook account?		Strongly Agree
23) The hashtag campaigns (#UKZNMandelaDay, #UKZNGrad16), creates more awareness on issues when using UKZN’s Official Facebook account?	Neutral	

Questions 15-18 showed that students chose “neutral” significantly more than expected. This would indicate that UKZN’s OSM strategy is not effective in terms of the amount of information shared, encouraging discussions, getting adequate feedback, and encouraging an active and collaborative learning experience for students via UKZN’s Facebook account. However, students agreed significantly more than expected with regards to information being more accessible on UKZN’s Facebook account.

According to UKZN’s strategic plan, it was important to provide a supportive university environment but respondents chose “neutral” significantly more than expected with regards to this statement. Looking at UKZN’s OSM accounts, revealed that OSM campaigns were some of the main uses of these accounts. However, students expressed “neutral” significantly more than expected with regards to hashtag campaigns creating more awareness on UKZN’s Facebook account.

Students also expressed “strongly agree” significantly less than expected with regards to actively participating and being encouraged to share information on UKZN’s Facebook account. Looking at the test results also showed that neutral or negative responses were chosen more when compared to positive responses.

It would be ideal if students chose “strongly agree” or “agree” significantly more than expected as it would show UKZN’s OSM strategy is effective but this was not the case.

Table 4.5: Chi-square goodness-of-fit test (Engagement on UKZN’s Official Facebook account).

Questions	Interpretation	
	A	B
25) There is faster feedback from UKZN, when compared to emails and noticeboards, via their Official Facebook account?	Neutral	
26) There is improved communication between UKZN and me when using their Official Facebook account?	Neutral	

27) There is a better connection between UKZN and me, when compared to face-to-face interactions, via their Official Facebook account?	Neutral	
28) I am more aware of activities taking place at UKZN when using their Official Facebook account?	Agree	
29) I am more aware of campaigns at UKZN when using their Official Facebook account?	Agree	
30) The information shared by UKZN is more helpful to me when posted via their Official Facebook account?		Strongly Disagree
31) There is more collaboration between UKZN and me via their Official Facebook account?	Neutral	
32) There is more interaction between UKZN and me when using their Official Facebook account?	Neutral	
33) I experience a better university life when using UKZN's Official Facebook account?	Neutral	
34) There is better engagement between UKZN and me via their Official Facebook account?	Neutral	

While students have chosen “neutral” significantly more than expected with regards to most engagement questions on UKZN’s Facebook account, there were interesting variances shown.

In UKZN’s strategic plan, the use of new methods like OSM to improve students’ experience of university life was important. However, students expressed “neutral” significantly more than expected with regards to experiencing a better university life when using UKZN’s Facebook account.

Students have also agreed significantly more than expected that they are more aware of activities taking place when using UKZN’s Facebook account. Additionally, table 4.4 showed that students were neutral significantly more than expected with regards to hashtag campaigns creating awareness. However, students agreed significantly more than expected with regards to being more aware of campaigns on UKZN’s Facebook account.

Finally, students chose “strongly disagree” significantly less than expected with regards to information shared being more helpful when shared by UKZN on its Facebook account. Looking at the test results revealed that there were fewer negative responses compared to neutral or positive responses with regards to this question.

Table 4.6: Chi-square goodness-of-fit test (Quality of engagement on UKZN’s Official Facebook account).

Questions	Interpretation	
	A	B
35) How would you evaluate the quality of the relationship between UKZN and you via their Official Facebook account?	Fair	
36) How would you evaluate the quality of the interaction between UKZN and you via their Official Facebook account?	Fair	
37) How would you evaluate the quality of discussion between UKZN and you via their Official Facebook account?	Fair	
38) How would you evaluate the quality of engagement between UKZN and you via their Official Facebook account?		Excellent
39) What best represents the relationship between UKZN and you via their Official Facebook account?	Neutral	

According to UKZN’s strategic plan, engagement was important on UKZN’s OSM account, however students chose “fair” significantly more than expected with regards to most of the quality of engagement questions. Therefore, there were fewer positive responses with regards to quality of relationship, quality of interaction and quality of discussion between students and UKZN via its Facebook account. Additionally, students chose “excellent” significantly less than expected with regards to the quality of engagement felt with UKZN’s Facebook account. Therefore, looking at the goodness-of-fit test revealed that there were more fair and negative responses relating to this question.

Finally, students chose “neutral” significantly more than expected with regards to what best represents their relationship with UKZN via its Facebook account. A more effective OSM strategy would be students choosing a “sense of belonging” significantly more than expected with regards to their relationship with UKZN via its Facebook account which was not the case.

Table 4.7: Chi-square goodness-of-fit test (OSM use on the unofficial UKZN Facebook account).

Questions	Interpretation	
	A	B
43) How frequently do you see posts on your timeline by the Unofficial UKZN Facebook accounts?	Very Frequently	
44) How frequently do you comment on these posts by the Unofficial UKZN Facebook accounts?	Never	
45) How frequently do you share these posts by the Unofficial UKZN Facebook accounts?	Never	
46) How frequently do you share content you created with the Unofficial UKZN Facebook accounts?	Never	

47) How frequently do you participate in discussions on the Unofficial UKZN Facebook accounts?	Never	
48) How frequently do you voice your opinion on the Unofficial UKZN Facebook accounts?	Never	
50) How frequently have you interacted with other students on the Unofficial UKZN Facebook accounts?	Never	

Students responded “very frequently” significantly more than expected with regards to seeing posts on their time by the unofficial Facebook accounts of UKZN. While it cannot be compared to the same question relating to the official Facebook account as that test was not significant, it is important to note that many students see posts by the unofficial accounts.

Finally, across the rest of the questions related to students use of the unofficial Facebook accounts of UKZN, students responded “never” significantly more than expected. Comparing these questions to the same questions relating to the official Facebook account (Table 4.3), showed that across most questions, except for question 14, students also chose “never” significantly more than expected. The goals of OSM is detailed in UKZN’s strategic plan and UKZN have staff that manage its Facebook account, however students expressed similar negative responses across most questions on the unofficial accounts which are run by students.

Table 4.8: Chi-square goodness-of-fit test (Agreement on the unofficial UKZN Facebook account).

Questions	Interpretation	
	A	B
52) I am happy with the amount of information shared on the Unofficial UKZN Facebook accounts?	Neutral	

53) I am happy with the discussions via the Unofficial UKZN Facebook accounts?	Neutral	
54) I get adequate feedback from the Unofficial UKZN Facebook accounts?	Neutral	
55) I enjoy an active and collaborative learning experience via the Unofficial UKZN Facebook accounts?	Neutral	
56) Information relating to UKZN is more accessible on the Unofficial UKZN Facebook accounts?	Neutral	Strongly Disagree
57) I enjoy a supportive university environment via the Unofficial UKZN Facebook accounts?	Neutral	
58) I actively participate on the Unofficial UKZN Facebook accounts?	Neutral	
60) The hashtag campaigns (#feesmustfall and #UkznStudentsLivesMatter), creates more awareness on issues when using the Unofficial UKZN Facebook accounts?	Strongly Agree	
61) I engage more with other students, compared to emails and face to face interactions, on the Unofficial UKZN Facebook accounts?		Disagree

Students expressed “strongly disagree” significantly less than expected and chose “neutral” significantly more than expected with regards to information being more accessible on the unofficial Facebook accounts.

With regards to hashtag campaigns creating more awareness on the unofficial Facebook accounts, students chose “strongly agree” significantly more than expected. Therefore, students felt the unofficial Facebook accounts were successful when using hashtag campaigns to create

more awareness on campaigns. Students also expressed “disagree” significantly less than expected with regards to engaging with other students on the unofficial Facebook accounts of UKZN.

4.4.1.2.1.2 Twitter

Due to many of the goodness-of-fit tests not being significant, many of the tables were combined.

Table 4.9: Chi-square goodness-of-fit test (UKZN’s Official Twitter account).

Questions	Interpretation	
	A	B
6) How frequently do you see posts on your timeline by UKZN’s Official Twitter account?		“4” on the Likert Scale & Very Frequently (5)
7) How frequently do you comment on these posts by UKZN’s Official Twitter account?	Never	
8) How frequently do you share these posts by UKZN’s Official Twitter account?	Never	
9) How frequently do you share content you created with UKZN’s Official Twitter account?	Never	
10) How frequently do you participate in discussions on UKZN’s Official Twitter account?	Never	
11) How frequently do you voice your opinion on UKZN’s Official Twitter account?	Never	
12) How frequently do you see campaigns on UKZN’s Official Twitter account?	Never	

13) How frequently have you interacted with other students on UKZN's Official Twitter account?	Never	
16) I am happy with the discussions via UKZN's Official Twitter account?	Neutral	
17) I get adequate feedback from UKZN's Official Twitter account?		Strongly Agree
19) Information relating to UKZN is more accessible on UKZN's Official Twitter account?	Neutral	
20) I enjoy a supportive university environment via UKZN's Official Twitter account?		Strongly Agree
23) The hashtag campaigns (#UKZNMandelaDay, #UKZNGrad16), creates more awareness on issues when using UKZN's Official Twitter account?	Neutral	
25) There is faster feedback from UKZN, when compared to emails and noticeboards, via their Official Twitter account?	Neutral	
26) There is improved communication between UKZN and me when using their Official Twitter account?	Neutral	
27) There is a better connection between UKZN and me, when compared to face-to-face interactions, via their Official Twitter account?	Neutral	
28) I am more aware of activities taking place at UKZN when using their Official Twitter account?	Agree	
29) I am more aware of campaigns at UKZN when using their Official Twitter account?	Neutral	

30) The information shared by UKZN is more helpful to me when posted via their Official Twitter account?	Neutral	
31) There is more collaboration between UKZN and me via their Official Twitter account?	Neutral	
32) There is more interaction between UKZN and me when using their Official Twitter account?	Neutral	
33) I experience a better university life when using UKZN's Official Twitter account?	Neutral	
35) How would you evaluate the quality of the relationship between UKZN and you via their Official Twitter account?	Fair	
39) What best represents the relationship between UKZN and you via their Official Twitter account?	Neutral	

With regards to students use of UKZN's Twitter account, there were significantly more "never" replies which shows UKZN is not effectively using Twitter in certain aspects. Students should have expressed "very frequently" significantly more than expected which shows UKZN is effectively leveraging its Twitter account. Additionally, significantly more "neutral" and "fair" responses are not positive or negative which means UKZN's can leverage Twitter in a better manner.

Students also chose "4" on the Likert scale and "very frequently (5)" significantly less than expected with regards seeing posts by UKZN's Twitter account. With many of these Twitter posts being reposted from UKZN's Facebook account, many students would ignore these posts as Twitter is a different platform compared to Facebook. Facebook concentrates on images and texts to capture its audience, while Twitter focuses on limited characters to convey quick information to capture its audience.

Students expressed “strongly agree” significantly less than expected with regards to getting adequate feedback and enjoying a supportive university environment via UKZN’s Official Twitter account. However, students expressed “agree” significantly more than expected with regards to being more aware of activities taking place when using UKZN’s Twitter account. Therefore, UKZN was using Twitter in a good manner related to sharing activities at the University although they were not leveraging the other aspects of OSM in a good manner.

Table 4.10: Chi-square goodness-of-fit test (Unofficial UKZN Twitter accounts).

Questions	Interpretation	
	A	B
44) How frequently do you comment on these posts by the Unofficial UKZN Twitter accounts?	Never	
45) How frequently do you share these posts by the Unofficial UKZN Twitter accounts?	Never	
46) How frequently do you share content you created with the Unofficial UKZN Twitter accounts?	Never	
47) How frequently do you participate in discussions on the Unofficial UKZN Twitter accounts?	Never	
48) How frequently do you voice your opinion on the Unofficial UKZN Twitter accounts?	Never	
49) How frequently do you see campaigns on the Unofficial UKZN Twitter accounts?	Never	
50) How frequently have you interacted with other students on the Unofficial UKZN Twitter accounts?	Never	

52) I am happy with the amount of information shared on the Unofficial UKZN Twitter accounts?	Neutral	
53) I am happy with the discussions via the Unofficial UKZN Twitter accounts?	Neutral	
57) I enjoy a supportive university environment via the Unofficial UKZN Twitter accounts?	Neutral	
59) I am encouraged to share information on the Unofficial UKZN Twitter accounts?	Neutral	
60) The hashtag campaigns (#feesmustfall and #UkznStudentsLivesMatter), creates more awareness on issues when using the Unofficial UKZN Twitter accounts?	Strongly Agree	
61) I engage more with other students, compared to emails and face to face interactions on the Unofficial UKZN Twitter accounts?	Neutral	

Looking at questions relating to students use of the unofficial Twitter accounts of UKZN, showed that students expressed “never” and “neutral” significantly more than expected across most questions which were significant. However, students chose “strongly agree” significantly more than expected with regards to hashtag campaigns creating more awareness when using the Unofficial Twitter accounts of UKZN. Overall, there were few replies related to the unofficial Twitter accounts of UKZN. This could be due to there being fewer unofficial Twitter accounts which were not very active when compared to the unofficial Facebook accounts.

4.4.2 Qualitative Findings

Qualitative data analysis used the general 5 phase cycles for data analysis. The data was gathered from semi-structured interviews with staff who work on UKZN’s OSM accounts. These staff were a Director of communications, two public relations managers and a public relation officer.

First the recordings of the interviews with staff were transcribed into Nvivo. Next the data was disassembled and then reassembled, with the researcher interpreting these findings. Finally, the emergent themes and concepts from each question, with some questions being specific to management or staff, are presented in table 4:

Table 4.11: Qualitative findings

Questions	Emergent themes and concepts
Question 2.1 - Management	Manage and monitor OSM staff via OSM.
	Engage with UKZN's OSM community.
Question 2.1 - Staff	Constantly engage, manage and utilise UKZN's OSM accounts.
Question 2.2	Two-way communication platform to engage with UKZN's OSM community.
	No individual objectives for OSM accounts.
	Actively maintain and engage on UKZN's OSM accounts.
Question 2.3	OSM statistics performance report.
Question 2.4	Not achieved on UKZN's main OSM accounts.
	Achieved on UKZN's Health Sciences OSM accounts.
Question 3.1 - Management	No formal learning and growth initiatives for OSM staff.
	Built-in OSM analytics software.
Question 3.1 - Staff	No formal learning and growth initiatives for OSM staff.
	Built-in OSM analytics software.
Question 3.2	University of choice.
	University of freedom of expression.
	University of academic excellence.
	University of diversity.
Question 4.1	No formal OSM strategy.
	No OSM policies.
	No governance for OSM.

Question 4.2	No role beyond OSM notice system.
Question 5.1.1	Have an OSM department.
Question 5.1.2	More staff engaging with UKZN's OSM community.
Question 5.1.3	Use OSM more than just a communication tool.
	Develop an OSM strategy
	More community OSM training.
Question 5.1.4	Keep up with the latest tools, technologies and trends.
Question 5.1.5	Evolving to OSM focused key performance areas.
Question 5.1.6	Use the current platforms better while staying relevant with popular platforms used by UKZN's OSM community.

4.4.3 Secondary Findings

4.4.3.1 Gephi

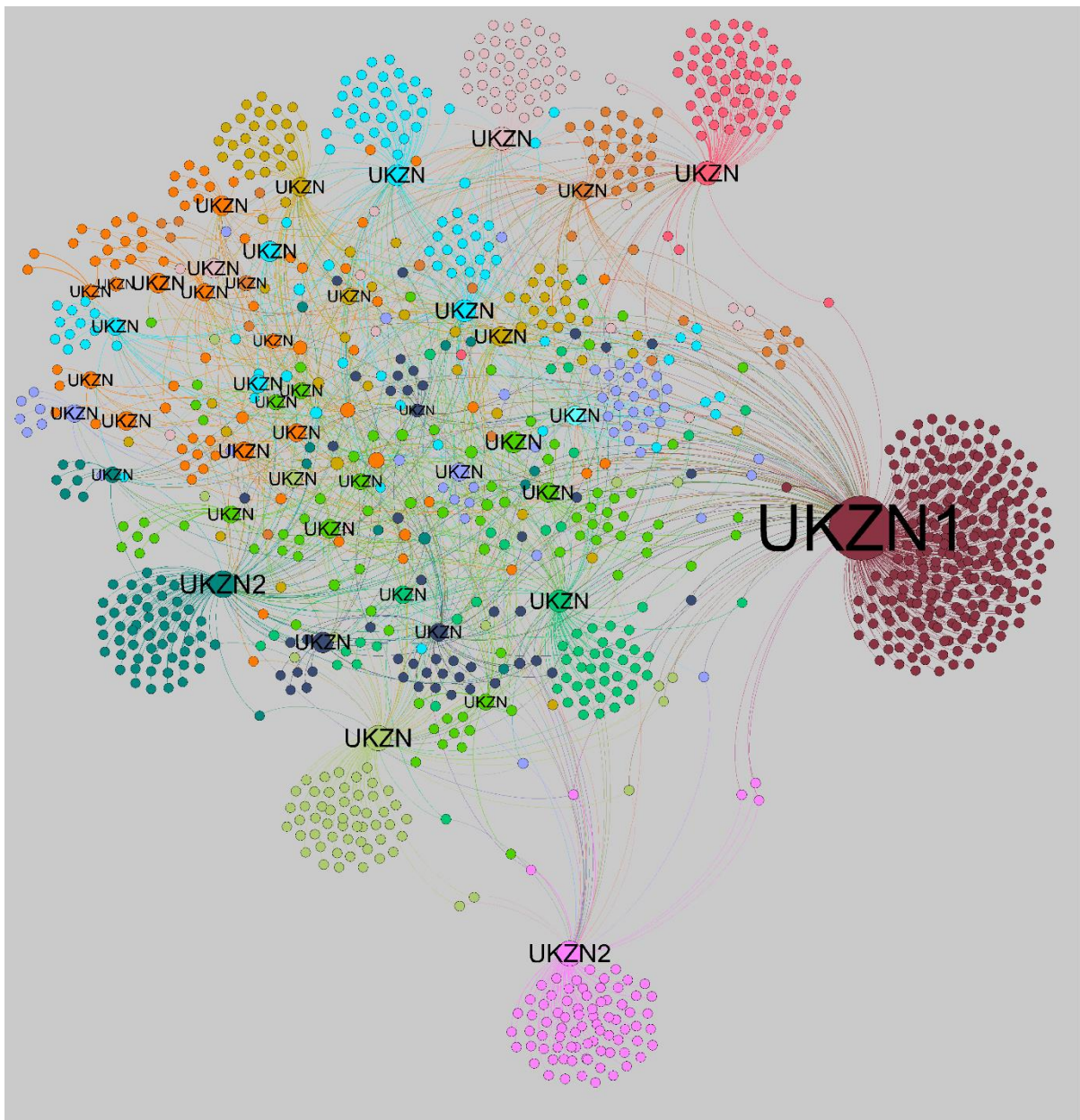


Figure 4.24: OSM graph representing posts by UKZN and its interaction with students (Author's own creation using Gephi).

Creating graphs from OSM is a good way of visualising how effective posts can be regarding interaction and engagement with people. First the Facebook application called Netvizz is used to download network data from UKZN's Facebook page. This data includes posts by UKZN, students' interaction with these posts and analytics around these posts. This data is imported into Gephi and an unorganised grey network graph is created. The modularity algorithm is used which detects communities from the data and creates clusters of nodes connecting to other

nodes (Bastian, Heymann, & Jacomy, 2009) Many techniques were investigated and it was determined that the Noverlap layout algorithm was best suited to organise the data so it is more coherent. Noverlap spreads out the clusters so it is more defined, while using repulsive force so clusters do not overlap with other clusters (Bastian et al., 2009). Additionally, the data was manually organised to separate nodes which were too close and nodes were coloured to create a more visual understanding around the connection between nodes. Gephi uses vertices which are indicated as nodes or dots in the graph, while edges are shown as the connection between nodes/dots (Bastian et al., 2009).

Figure 4.24 is a visualisation of posts by UKZN's Facebook account, and how students interact and engage with these posts. Specifically, the last 50 posts by UKZN from May 2017 were analysed. The nodes labelled UKZN are the posts by the University, with nodes which aren't labelled being students. The connection between UKZN's nodes and students' nodes (unlabelled) represents students commenting or reacting to posts by UKZN. The different coloured nodes labelled UKZN indicate a unique post by UKZN's Facebook page, while the unlabelled node of the same colour indicate users' interaction with that unique post. These colours are used to create "heat" maps of the nodes and its connections to each other, with more dense colours indicating more dense clusters around a node. Therefore, students can have connections with multiple posts by UKZN, with the connections being coloured coded to show student interaction with these posts. More dense colours show more popular posts by UKZN as more student interaction with this post.

This section will discuss various algorithms for network analysis when using Gephi. Average degree analysis shows the mean number of connections for each node in the network graph (Bastian et al., 2009). Between nodes there was an average degree of 3.247 or there were 3.247 connections between the nodes of UKZN and students. For UKZN to be effective when using its OSM accounts, there should be more connections between nodes as this indicates more engagement between UKZN and students.

The ratio between the number of connections of each node to the number of total nodes is called graph density (Bastian et al., 2009). Through data from UKZN's Facebook network, it was determined that this network had a graph density of 0.001. Graph density shows how complete is a network, and if a network had all possible connections it would have a graph density of 1 (Bastian et al., 2009). A graph density of 0.001 is low which would indicate that posts by UKZN have more engagement with new students. Therefore, posts are not encouraging regular

engagement with students in this network. Additionally, students rarely engage with multiple posts by UKZN which is shown by having many incomplete connections between UKZN's nodes and students' nodes.

The University of KwaZulu-Natal has a graph diameter of 1 and it had an average path length of 1. Diameter is represented as the longest path or the distance between the two most distant nodes (Bastian et al., 2009). The diameter of 1 indicates that a student can see UKZN's post, however this student does not re-share the post and UKZN does not engage with this student. A bigger graph diameter would show more engagement and sharing of information between UKZN and students via the University's Facebook account.

As can be seen, popular posts were engaging with a lot of new students who did not engage with other posts by UKZN. Additionally, the middle of figure 4.24 shows there are few students (bigger unlabelled nodes) who actively engage with UKZN on a regular basis. The analytics on OSM also revealed this to be true, with a select few users constantly commenting and reacting to posts by UKZN on a regular basis. For UKZN to be effectively using Facebook to engage with its OSM community, there should be bigger nodes of UKZN connecting to bigger unlabelled nodes (students), while also connecting to many smaller nodes (new students). With these smaller nodes eventually engaging regularly and growing as well.

The more popular posts by UKZN are represented by larger nodes labelled UKZN1 and UKZN2, and larger unlabelled nodes are more active students. Data from the last 50 posts and figure 4.24, revealed there is one significantly bigger node (UKZN1), a few medium nodes (UKZN2) and many small nodes (UKZN). This would indicate that there are posts which do not engage a lot with students (smaller nodes) when compared to medium and big nodes, however there were much more smaller nodes compared to medium and big nodes.

While students preferred and engaged with certain campaigns more than others as shown with UKZN1 and UKZN2, it is important for UKZN to understand what is the cause and to craft future posts using this knowledge. Therefore, posts will encourage two-way communication and interaction with students, and create a more engaging OSM community on UKZN's OSM accounts.

4.4.3.2 OSM Analytics

By looking at the analytics relating to UKZN's OSM accounts, can allow interpretations to be drawn from the data.

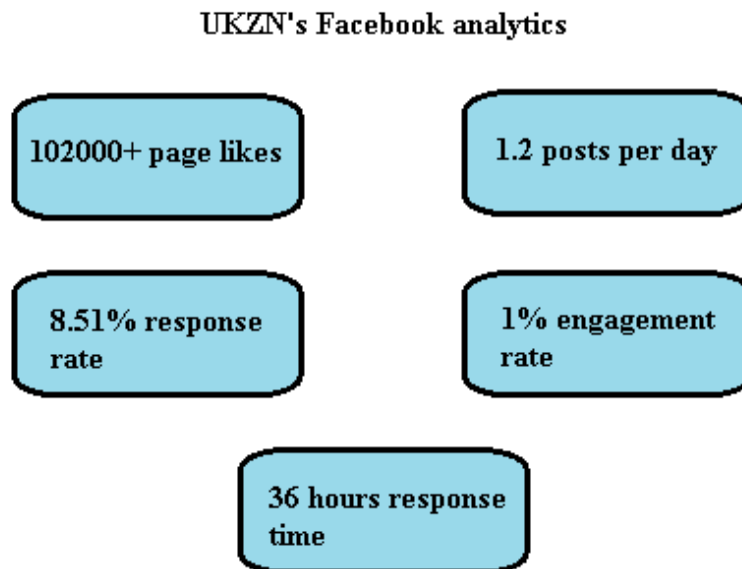


Figure 4.25: UKZN's Facebook analytics as of October 2017.

Figure 4.25 was created using LikeAlyzer which is a website that provides many helpful analytics gathered from UKZN's Facebook page (LikeAlyzer, 2017). UKZN posts on average 1.2 posts per day which was low and will be discussed later. LikeAlyzer suggests that to engage with users on Facebook, there should be multiple posts made on a daily basis (LikeAlyzer, 2017). However, sufficient enough not to spam students who follow these accounts (LikeAlyzer, 2017).

Engagement rate is calculated by taking the number of people talking about UKZN's Facebook account divided by the total number of likes of this account. The engagement rate on UKZN's Facebook account was calculated to be 1%, which was low. LikeAlyzer conducted surveys which found that to achieve success on Facebook, an engagement rate of 7% was needed (LikeAlyzer, 2017). Additionally, it was determined that UKZN's Facebook account has a response rate of 8.51% and responds in 36 hours. According to UKZN's strategic plan, two-way communication is important, however UKZN's Facebook account does not respond frequently to posts and if it does respond it is after some time. Facebook users want fast responses to their posts (LikeAlyzer, 2017).

Additionally, the last 50 posts of UKZN from May 2017 were analysed. This analysis showed that these posts had on average 33 likes, 2 shares and 36 reactions from students. With more than 98000 likes on UKZN's Facebook page as of May 2017, there should be more engagement by students. While many students can view these posts, the OSM platform encourages engagement and this is seen as important in accordance with UKZN's strategic plan.

With the analytics gathered, these demonstrated that there is insufficient engagement on UKZN's Facebook account. Students do not engage on a level relevant to the number of likes on this page and UKZN does not engage a lot with students on this page. Additionally, LikeAlyzer compared similar University pages and it was determined that UKZN's response rate was "quite bad" compared to other pages.

4.5 Summary

This chapter began by analysing the reliability and validity of the questionnaire used. Due to having many questions in the questionnaire, the reliability and validity analysis was divided into 6 sub-groups for both Facebook and Twitter. Across all the sub-groups, the questionnaire showed a high level of reliability and validity.

Next the demographic information was analysed to evaluate the sample population of the questionnaire. This included comparing students' use of the official and unofficial OSM accounts of UKZN.

The descriptive statistics relating to students' responses regarding various aspects of UKZN's OSM accounts were observed. Additionally, cross tabulations were used to analyse only students who use UKZN's OSM accounts and compare certain questions from the questionnaire. Descriptive statistics relating to the unofficial OSM accounts of UKZN were also analysed. A cross tabulation was conducted to compare the data between the official and unofficial OSM accounts of UKZN which draw conclusions on how effective is UKZN using its OSM accounts.

The Chi-Square goodness-of-fit tests were conducted relating to UKZN's OSM accounts. These tests were used to show what students expressed significantly more or significantly less than expected related to various OSM questions. These questions were analysed and variances in results were discussed, with some points being discussed further in the next chapter. Additionally, the Chi-Square goodness-of-fit tests were conducted relating to the unofficial

OSM accounts of UKZN as well. These tests were used to compare the results between the official and the unofficial OSM accounts to show if UKZN is effectively leveraging OSM.

Additionally, an OSM visualisation generated by Gephi of UKZN's Facebook account showed the last 50 posts by UKZN from May 2017 and students' interactions with these posts. This would allow conclusions to be drawn from the posts by UKZN's Facebook account and students who engage with these posts.

OSM analytics were used to confirm the interpretation from the OSM graph, while also providing interesting analytics since UKZN's Facebook account began. Various analytics were provided to convey how UKZN is leveraging its Facebook account.

4.6 Overview of Chapter

Cronbach's alpha and KMO measure of sampling adequacy are performed to ensure the quality of the data gathered from the students' questionnaire. Next the data from the students' questionnaire related to demographic information is shown. The descriptive and inferential data analysis is performed, with figures and tables being used to explain the data in a better manner. Additionally, Gephi is used which assessed data from UKZN's Facebook account to give visualisations of the reactions to posts on this account. Finally, the data related to OSM analytics of UKZN's Facebook account were shown.

This chapter provides a clear process of how to ensure data quality for quantitative and qualitative analysis. By using descriptive and inferential statistics can show others how the data can examine OSM strategy and draw conclusions from the findings. Additionally, the qualitative analysis shows other researchers how the data was categorised and what themes emerged after analysis. This chapter also provides supporting evidence on how Gephi, a network visualisation tool, can be used when wanting to assess OSM. While bar graphs provide a good visualisation of the data, the graphs created by Gephi show the engagement between UKZN and users on Facebook. This also provides a better visualisation of UKZN's online community.

Chapter five will create and discuss the Balanced Scorecard for UKZN.

Chapter 5: Balanced Scorecard for UKZN

5.1 Introduction

This chapter entails using the data gathered to determine the effectiveness of the online social media (OSM) strategy that the University of KwaZulu-Natal (UKZN) is using. To determine UKZN's OSM strategy, the Balanced Scorecard (BSC) framework is used. A BSC is created for UKZN's OSM activities to evaluate its success.

First UKZN's mission and vision is assessed, with the analysis behind UKZN's OSM activities following. This revealed the strategic objectives for OSM and gave an understanding of how UKZN operates on OSM. This part of the research is driven by analysing UKZN's strategic documents, the mapping of current OSM activities and interviews with key staff on UKZN's OSM accounts. Once the strategic objectives were determined, a strategy map for UKZN is created which includes the key strategic themes, and how these link to the internal and external perspectives. Finally, a BSC is created for UKZN which has the objectives for the internal and external perspectives, how these objectives are measured, methods for data collection, and initiatives for these objectives.

The University of KwaZulu-Natal's BSC is used to the answer the research questions proposed. Interesting points from the data analysis are used to determine the effectiveness of UKZN's strategy. Finally, the limitations of this research study are shown and recommendations for future research are proposed.

5.2 Balanced Scorecard for UKZN's OSM activities

5.2.1 Step 1: Mission & Step 2: Vision

Step 1 looks at UKZN's mission which is to be "A truly South African university that is academically excellent, innovative in research, critically engaged with society and demographically representative, redressing the disadvantages, inequities and imbalances of the past." (UKZN, 2017b).

Step 2 of the BSC framework looks at the "Vision" of UKZN which is "To be the Premier University of African Scholarship." (UKZN, 2017b).

These are the principles and core values of UKZN:

- Actively encourage and respect the right of all staff, students and scholars to engage in critical inquiry, public debate, intellectual discourse and independent research in a spirit of accountability and responsibility, which is in agreement with the values of institutional autonomy and academic freedom.
- Expand educational and employment opportunities for all by promoting access to education.
- Provide education which promotes an awareness of sound ethical practice in a diverse society, and operate to the highest ethical standards.
- Foster a culture of ethical, responsible and sustainable use of natural resources, and manage and run the institution with a conscious awareness of the environment.
- Acknowledge the value of the individual by promoting the social, intellectual and personal well-being of staff and students through respect and tolerance for social values, diverse cultures, religions and multilingualism, and foster the realisation of each person's full potential (UKZN, 2017b).

The goals of UKZN were:

- African-led Globalisation: Promote African-led globalisation through African scholarship by positioning the University, through its teaching, learning, research, innovation and scholarship, to enter the global knowledge system.
- Responsible Community Engagement: Contribute through knowledge to the sustainability and prosperity of the province, and to nation-building, by connecting with and committing the University to the communities served in a manner that adds value and earns their trust, respect and admiration.
- Excellence in Teaching and Learning: Promote excellence in teaching and learning through innovative and creative curriculum design, development, assessment practices, and pedagogical strategies in accordance with the highest quality management principles.
- Institution of Choice for Learners: Establish the University as an institution of choice which values students in all their diversity, and has a student-centred ethos by providing students with teachers, infrastructure, curricula and support services designed around their needs, to produce well-educated, sought-after and competent graduates.
- Efficient and Effective Management: Establish and maintain effective management systems and processes which provide a caring and responsive service to meet internal and external needs in a pragmatic and flexible manner (UKZN, 2017b).

The mission and vision of UKZN has set the strategic intent of the University’s activities, with the principles, core values and goals outlining what UKZN’s strategies need to adhere to. Now that the organisational context and strategic direction for OSM has been established at UKZN, the next section follows a more in-depth analysis around the strategic objectives for OSM.

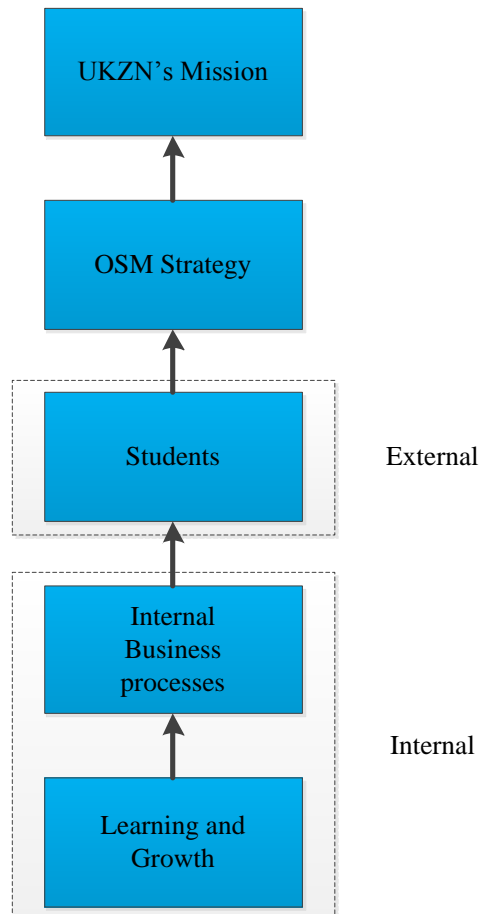


Figure 5.1: UKZN’s OSM Measurement Framework (Author’s own construction).

Figure 5.1 shows the OSM framework which was created for UKZN. The figure starts at the learning and growth initiatives which outlines the internal skills and capabilities of staff to achieve the value creating internal processes. The internal business processes step outlines how UKZN is to operate on OSM. These include internal process, policies, governance and organisational structure related to OSM. Learning and growth, and the internal business processes are grouped as internal as these are needed when UKZN wants to achieve its goals related to its OSM strategic plan. Students is the next step and relates to the external initiatives like selecting measures that capture the value created for students from UKZN’s OSM initiatives. The internal initiatives drive the external initiatives. Together the internal and external initiatives drive UKZN to achieving its OSM strategy. This in turn drives UKZN in

achieving its mission which relates to the University's objectives. Figure 5.1 will be expanded more in the following sections.

5.2.2 Step 3: Strategy

With the mission and vision for UKZN outlining its goals and values, strategic documents and interviews with UKZN's staff will define the intentions for the internal use of OSM.

A number of strategic documents have been published which show the objectives and goals for UKZN using OSM. The first document is called "Strategic Plan 2007-2016", and it details the ways in which UKZN intends on engaging meaningfully with students via OSM. Two-way communication with students, promoting effective student participation in decision making, and using new methods to engage with students was seen as important in this strategic plan (UKZN, 2012). It is important to note as of October 2017, there was no updated strategic plan for UKZN.

UKZN has recognised the importance of two-way communication and intends on engaging meaningfully with students on a regular basis through its OSM accounts (UKZN, 2012). Using these accounts, UKZN assesses, monitors and reacts to any concerns from its broad base of student users to acknowledge their changing needs (UKZN, 2012). Additionally, UKZN provides programmes to promote student participation in decision making, and to foster constructive critical engagement (UKZN, 2012). Using the official OSM accounts of UKZN, such as its Facebook page, allows it to communicate on a more personal level with its users and improve students' experience of university life (UKZN, 2012).

The next strategic document evaluated was sent out by the Corporate Relations division at UKZN which detailed a job opening for a marketing and OSM assistant. This document details the roles and responsibilities of the OSM assistant which is shown below:

- The assistant must manage and respond to all queries across UKZN's Facebook and Twitter pages. This will be done on a daily basis throughout the day.
- The OSM assistant is to post a minimum of three interactive posts per day which have to encourage student participation. Additionally, the online feedback analytics platform for each OSM site must be visited at least once a week to inform campaign activities.

- The assistant is to manage the online reputation of UKZN at all levels with OSM managers, and ensure that there is close coordination between all departments to craft textured campaigns.
- Craft an OSM plan for the year which is in line with the marketing office's objectives, and build UKZN as an institution of choice for students.
- Develop statistics reports for each of the platforms used, and set up campaign calendars, create process reports on a monthly basis, and create campaign summary reports.
- Maximising the online presence of UKZN was also seen as important which needs to be done by implementing creative, strategic and tactical online marketing activities. Graphics to leverage a higher level of interactivity with students and community members on UKZN's OSM platforms is also needed.
- The assistant will monitor and engage, when needed, in brand related online conversations (UKZN, 2017a).

The key points from these strategic documents highlighted that there is a need for UKZN to be engaging on OSM by being active on its OSM accounts and creating interactive content which encourage student participation and engagement.

Semi-structured interviews with key staff from UKZN's OSM accounts revealed varying results with regards to OSM objectives. Key staff that were interviewed had discussed their responses related to UKZN's main OSM accounts and the OSM accounts of the College of Health Science. When key staff from UKZN's main OSM accounts were asked about the strategic objectives for OSM, it was revealed that there were no strategic objectives for this platform. However, staff from the Health Science's OSM accounts revealed their strategic objectives were to maintain these OSM accounts as a two-way communication platform to engage with its OSM community. These varying responses can be attributed to staff expressing that the strategy for UKZN's main OSM accounts were part of the overall strategy. While staff from the Health Sciences OSM accounts expressed they had strategic objectives for this platform which is part of their underlying communication strategy, however there was no specific strategy for OSM.

The analysis of UKZN's strategic documents and interviews with UKZN's staff has created figure 5.2. This figure is a summarised current state of maturity around the different organisational aspects related to OSM, and how it will be in the future.

	Current	Future
Strategy	No specific strategy for SM	Develop a UKZN SM strategy which outlines policies, governance and strategic objectives for OSM use
Organisational Structure	On the main UKZN OSM accounts, interns manage them and report to a marketing coordinator. The marketing	Have a more established social media department with SM manager and SM team
	On UKZN's Health sciences OSM accounts, PROs report to the PRM and they report to Director. PRM also reports to	Have a more established social media department with SM manager and SM staff
Staff	Staff on the main UKZN OSM accounts repost notices which were posted on the internal notice system	Have more trained staff that are engaging with the SM community
	Staff on UKZN's Health sciences SM accounts engage with SM community	Have more relevant staff that are responding and engaging with UKZN's SM community
Processes	No SM strategy. No processes defined on how to operate on SM	Develop a SM strategy to operate and utilise SM in a better manner
Tool and Technologies	Built in SM analytics software is used	Use with the latest tools and technologies for SM
Evaluation	A statistics performance report is given to higher level figures	More social media focused Key Performance Areas which are constantly evolving
Platforms	Multiple platforms used with Facebook being more active and Twitter used to repost Facebook information	Use the current platforms better while staying relevant with popular platforms used by UKZN's SM community

Figure 5.2: Current state of the different organisational aspects and plans of how they will be in the future (Author's own construction).

The first organisational aspect looked at is strategy and it was determined there is an OSM strategy for UKZN which is part of the overall strategy. Staff outlined that it is important to have a formal OSM strategy for UKZN including policies, governance and strategic objectives relating to OSM. Having an OSM strategy can guide UKZN in the right direction on effectively leveraging OSM. With no objectives and details on how to achieve these objectives, there is no guidance for staff on how to use OSM or what to achieve with this platform.

Organisational structure relating to UKZN's main OSM accounts include interns managing these accounts and reporting to a marketing coordinator, who reports to the Director of communications. On UKZN's Health Science OSM accounts, public relations officers report to the public relations manager, who manages these accounts, and reports to the Director of the College. It was determined that in the future there is to be a more established OSM department, with a dedicated OSM manager and OSM team. This was due to staff handling all forms of communication at UKZN beyond OSM. Additionally, interns were tasked with managing the main OSM accounts of UKZN which could pose potential risks. Trained staff know how to better manage risk when leveraging these OSM accounts which have many followers, and craft more appropriate content which does not offend the OSM community. An OSM manager could further oversee all posts on OSM and take corrective measures if necessary.

At present the staff on UKZN's main OSM accounts repost the notices meant for the internal notice system onto its OSM accounts. On the Health Science's OSM accounts, the staff engage with the OSM community. It was revealed that the future of the main OSM accounts would consist of trained staff who engage with UKZN's OSM community. The future for the Health

Science's OSM accounts will have more relevant and dedicated staff who respond and engage with UKZN's OSM community. With staff having many tasks beyond managing OSM and with UKZN having many followers online, there is a need for more staff dedicated to managing these accounts with relevant training. Engaging with UKZN's OSM community was seen as important, and to create this engagement the OSM accounts must be constantly monitored and leveraged in a better manner.

It was established that UKZN's OSM strategy was part of the overall strategy, hence no processes were defined on how UKZN is to operate on OSM. In the future, an OSM strategy for UKZN is to be developed which will include how to operate and utilise OSM in a better manner. By having no direction on how to leverage OSM and not fully adopting OSM into its business processes, UKZN cannot integrate OSM into its organisational culture. It is important to fully integrate OSM to take advantage of this platform in the best way possible and leverage its many benefits.

The tools and technologies used by UKZN's OSM staff are built-in analytics software from the OSM sites like Facebook Insight and Twitter Analytics. In the future, the staff will utilise the current tools and technologies in a better manner, and utilise the latest OSM tools and technologies available to them. The use of the latest tools and technologies can allow a better assessment of UKZN's success on OSM as it provides more in-depth analytics like engagement rates and reactions. These analytics can be used to determine which posts are successful by looking beyond just "likes" by users, and instead establishing more effective strategies for posting content.

The current evaluation needs for OSM at UKZN are statistics reports which are created and given to higher level figures to review. In the future, there will be more OSM focused key performances areas which are constantly evolving. The statistics leveraged do not provide much value beyond showing how many followers are OSM and how many students liked a post. Using an array of measures like engagement rate and response time can better define the areas which are seen as important when effectively leveraging OSM. These performance areas must always evolve so it is relevant with the constantly growing OSM community of UKZN.

Multiple OSM platforms are used, with Facebook being the most active and content simply reposted to Twitter. This will mature into using the current platforms in a better manner, while still keeping up to date with the latest OSM trends. With the rapid growth of certain OSM

platforms, it is important for UKZN to keep track of current trends and utilise the relevant OSM platforms. With Instagram being more popular among students, UKZN should be focusing on leveraging the traits of Instagram. Additionally, each OSM platform is unique and each platform needs to be investigated on how to best leverage that platform. Content will need to be crafted by UKZN for its OSM community and the platforms used.

5.2.3 Step 4: Strategy Map

The evaluation framework for OSM success has two type of measures which are the internal and external measures. First the internal measures evaluate UKZN's progression in implementing the OSM strategy in relation to learning and growth, and the internal business processes. The external measures evaluate the impact and value for students from UKZN's OSM activities.

Step 4 from the BSC framework entails creating a strategy map for UKZN. A strategy map translates UKZN's strategy into specific objectives which identify the key success factors for implementing its OSM strategy. The University of KwaZulu-Natal's strategy map shows the activities and the results which are to be measured, with the link between it and how it creates value for students.

The strategy map is formulated using the BSC framework. There are 4 keys areas included in the strategy map which are the Mission/Vision section, the strategic themes section, the external perspectives section and the internal perspectives section. First UKZN's Mission and Vision are added at the top of the strategy map. The mission and vision were attained by analysing the strategic documents of UKZN. Next the strategic themes are added. These themes were identified by analysing the strategic documents of UKZN, the data gathered from questionnaires, and the data gathered from the interviews with staff working on UKZN's OSM accounts. In analysing this data, it was revealed that 3 themes occurred the most across all 3 forms of data analysed. These 3 themes sit at the top of the strategy map and link to the external perspectives. The external perspective is identified as the perspective that creates value and impacts the students at UKZN. The themes which are revealed under the external perspectives were identified from the student's questionnaire. The questionnaire was developed by analysing the OSM landscape and the University's environment. Additionally, key strategic documents of UKZN were analysed to develop this questionnaire.

The external perspective links to the internal perspective. The internal perspective is determined by interviewing the staff from UKZN's OSM accounts and the strategic documents of UKZN. The interviews were developed using the BSC which identifies the internal business process, and the learning and growth initiatives. First the internal business processes revealed that an OSM strategy was important for UKZN which include content coordination, content creation, OSM management and OSM evaluation. Additionally, it was seen as important to have OSM related organisational structures, internal processes supported by OSM, OSM specific policies and governance for OSM. The learning and growth initiatives revealed that it was important to have more formal OSM training and use more tools and technologies for OSM. Overall, it was revealed that this will create a university of open communication that engages with its OSM community.

In conclusion, the internal perspectives are looked at first which links to the external perspective. The external perspective then links to the key strategic themes which were identified. Finally, the key strategic themes align with UKZN's mission and vision.

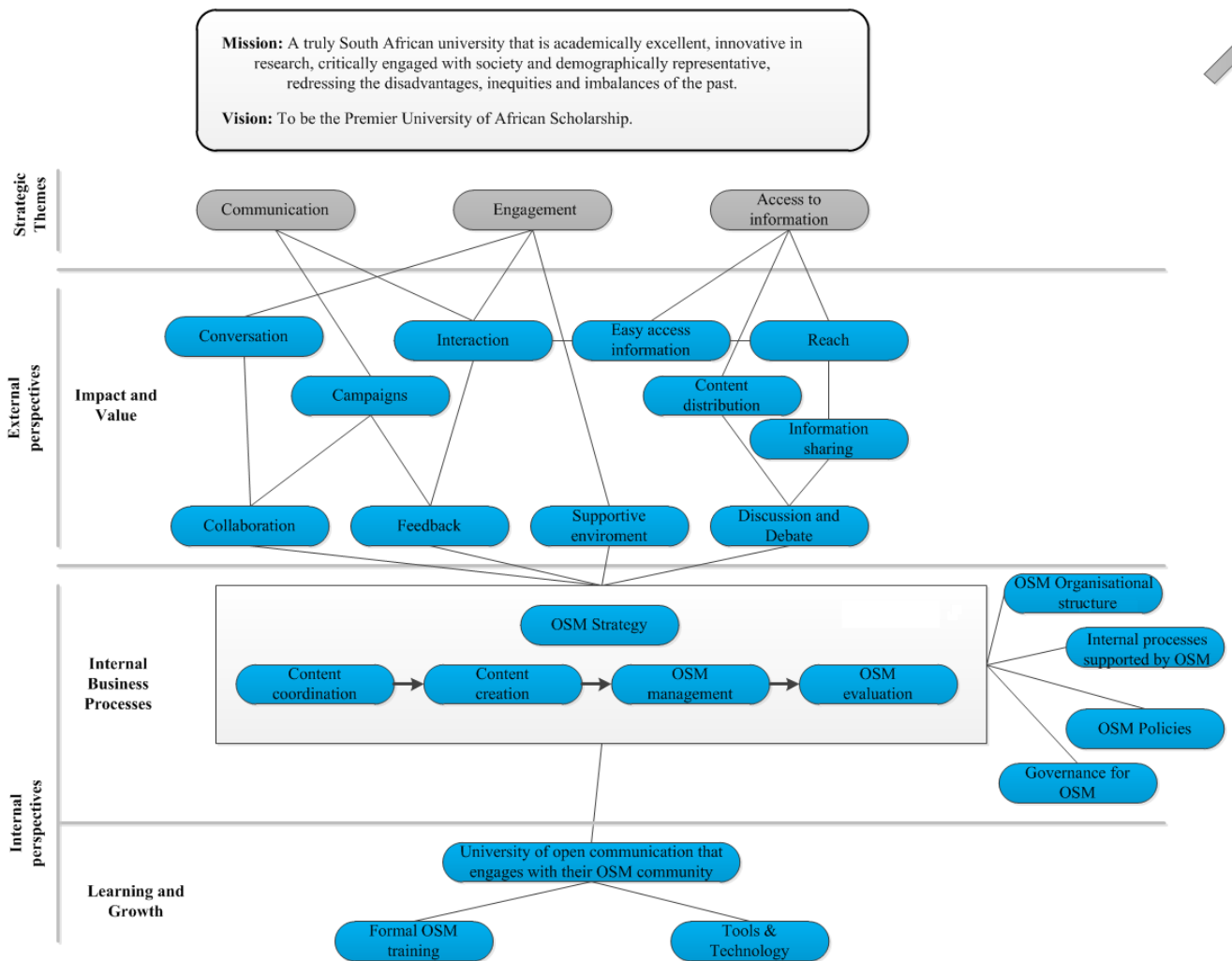


Figure 5.3: UKZN's Strategy Map (Author's own construction).

5.2.3.1 Internal Perspectives

Internal initiatives are important when wanting to successfully achieve the goals for OSM that are part of UKZN's strategic plan. The learning and growth perspectives, and the internal business perspectives are key when wanting to identify and measure the aspects which drive value for UKZN and students at present and in the future.

5.2.3.1.1 Learning and Growth

The learning and growth perspectives focuses on intangible assets like the internal skills and capabilities of staff that support the value creating internal processes. This perspective is important to create and evolve UKZN into a university that engages with its community. The main objectives identified were:

- Create a University of open communication that engages with its OSM community.

- Have more formal OSM training for staff.
- Use more tools and technologies for OSM.

5.2.3.1.2 Internal Business Processes

The internal business processes are key to how UKZN operates on OSM. For this perspective, tasks were identified for managing UKZN's OSM accounts which are supported by the internal processes, policies, governance and organisational structures. The main objectives identified were:

- Have more internal processes supported by OSM beyond communication.
- Implement OSM specific policies of how to operate on OSM.
- Establish a governance for OSM.
- Have organisational structures more focused towards OSM.

5.2.3.2 External perspective

External initiatives relate to selecting measures that capture the value created for students from UKZN's OSM activities, with this evaluation being reported to University Executives. As previously discussed, there were no objectives for UKZN's main OSM accounts, while the Health Science's OSM accounts had some OSM objectives. However, interviews with staff from both accounts and analysis of strategic documents, showed there were a series of interlinked themes which both accounts want to achieve on OSM.

There were 3 strategic themes determined which are briefly outlined as it is part of the BSC framework although a detailed explanation of how these themes are discussed later in this chapter.

5.2.3.2.1 Communication

The first strategic theme is communication which appears when analysing the semi-structured interviews and strategic documents. It was determined that communicating campaigns to UKZN's OSM community was important.

5.2.3.2.2 Engagement

The second strategic theme revealed is engagement via UKZN's OSM accounts. Across the strategic documents and interviews, it has been established that the OSM platform is to be used

for conversation, discussion and open communication to foster engagement with UKZN's OSM community.

5.2.3.2.3 Access to Information

The third and final strategic theme relates to access to information via UKZN's OSM accounts, with this information being in the form of text, videos and images.

5.2.4 Step 5: Balanced Scorecard

Figure 5.4 shows the BSC for UKZN's OSM activities including measures for potential objectives, methods of data collection and analysis. The internal perspectives had measures which aimed to show the progress of utilising OSM at UKZN, and evaluate the organisational change at the University. These measures were from strategic documents and qualitative data gained through interviews with staff who work on UKZN's OSM accounts.

The external perspectives had measures which aimed to assess the impact on students using UKZN's OSM accounts through quantitative data analysis. Quantitative data includes number of likes, followers and traffic from UKZN's OSM accounts, and data gathered from the students' questionnaire. Additionally, strategic documents and qualitative data from the interviews were also used to determine these external objectives.

OBJECTIVES	MEASURES	METHOD	INITIATIVE
Learning & Growth			
Create a University of open communication that engages with its OSM community	Number of OSM projects encouraging engagement Change to a two-way communication platform with OSM community	Staff interviews Fact finding questionnaire List of users OSM tools used	OSM performance reviews, OSM training and formal task descriptions for staff as well as communication
Have more formal OSM training for staff	Number of hours staff have attended OSM training		
Use more tools and technologies for OSM	Number of computers with OSM tools used by staff		
Internal Business processes			
Have more internal processes supported by OSM beyond communication	Number of OSM internal processes		
Implement OSM specific policies of how to operate on OSM	Number of OSM policies	Staff interviews	OSM Strategy(including internal processes, policies, governance and organisational structure)
Establish a governance for OSM	Amount of OSM governance		
Have an organisational structure more focused towards OSM	Number of staff in the OSM network		
Students			
Communication - Create campaign awareness	Student awareness of campaigns via OSM		
Engagement - Increase engagement	Level of engagement	Student questionnaire Gephi OSM analytics	OSM Strategy
Access to information - Increase access to information	Ease of accessing information		

Figure 5.4: UKZN's Balanced Scorecard (Author's own construction).

5.3 Sub Research Questions

With the BSC created for UKZN's OSM activities, the research questions can be answered using UKZN's strategy map and UKZN's BSC to draw conclusions from this study.

5.3.1 What is the Online Social Media Strategy used by UKZN?

The steps from the BSC framework created UKZN's strategy map which was shown in figure 5.3. It was revealed that UKZN's OSM strategy was part of the overall strategy, with OSM use and the goals for this platform being described to some extent in its strategic plan.

The strategy map determined more specific objectives for OSM from the data gathered. The first strategic objective determined for UKZN's OSM accounts is to use OSM for communication with its OSM community. Interviews with staff and strategic documents revealed that one of the main uses for UKZN's OSM accounts is to communicate campaigns to its OSM community. Additionally, assessing data from these OSM accounts revealed this to be true, with many posts on these accounts being about campaigns. Campaigns were developed and posted on OSM by UKZN's marketing and public relations staff. These campaigns were used to create awareness for the OSM community on specific topics or activities taking place. Staff mentioned that part of their daily duties were to constantly communicate and keep their OSM community up to date. Additionally, looking at the requirements posted for an OSM assistant at UKZN, showed online analytics should be checked at least once a week to inform campaign activities and ensure that there is close coordination between departments to craft textured campaigns. Finally, creating campaign summary reports for major campaigns were also part of the responsibilities for this OSM assistant.

The second strategic objective revealed was engagement with UKZN's OSM community. In UKZN's strategic plan it was stated that the goal for OSM was to engage meaningfully with students. Effective two-way communication was important to engage with students on a more personal level. Additionally, it was important to promote effective student participation in decision making, and foster critical engagement to improve students' university life through UKZN's OSM accounts. In interviews with staff who worked on OSM, it was mentioned repeatedly that OSM was to be used for two-way communication and to engage with the OSM community on a regular basis. Finally, the responsibilities for OSM assistants were to post a minimum of 3 posts online which encourage engagement, and to monitor and engage in brand related online conversations. OSM assistants also needed to maximise the online presence of

UKZN by using techniques which will leverage a higher level of interactivity with students and community members on UKZN's OSM accounts.

The final objective determined was to provide access to information to UKZN's OSM community by utilising the University's OSM accounts. Interviews with staff revealed that one of the main uses for OSM was to provide information to the OSM community. Staff mentioned in interviews that many students use OSM to ask for information relating to UKZN. Additionally, assessing these OSM accounts revealed this to be true as many people asked questions on OSM which required feedback from staff. Online social media is effective for this as it allows staff to instantly reply when this question is posted. Staff also mentioned that many students and potential students ask for clarification related to certain questions which are privately messaged on OSM. During times of crisis, these OSM accounts are also leveraged to instantly convey important information to UKZN's OSM community with students sharing this information and staff responding to queries. Finally, strategic documents revealed that part of the responsibilities for OSM assistants were to manage and respond to all queries across UKZN's OSM.

With the OSM strategy for UKZN being established, the manifestation of this strategy will now be explained in detail as it was summarised in UKZN's BSC (figure 5.4).

5.3.2 How is this Online Social Media Strategy manifested?

The manifestation of this OSM strategy provides measures on the effects exhibited when this strategy is used, and provides a basis of measuring the effectiveness of OSM in the next question. The effects manifested from this strategy are from the University's perspective and the students' perspective. The UKZN's BSC shows how its OSM strategy is manifested from the University's perspective by assessing strategic documents and interviews with OSM staff.

First the learning and grown initiatives are analysed which are manifested through OSM training, tools and technology, and creating a University of open communication which engages with its OSM community. The measures for creating a University of open communication which engages with its OSM community were determined to be the number of OSM projects which encouraged engagement, and a change to using OSM as a two-way communication platform. The measures for having more formal OSM training for staff were determined to be the number of hours staff attend OSM training. Finally, the measures for the

objective of using more tools and technologies were determined to be a list detailing the staff and computers they used which had OSM tools.

The second initiative looked at is internal business processes which is manifested through internal OSM business processes, OSM policies, governance for OSM and an OSM organisational structure. For this objective, it was important to have more internal business processes supported by OSM beyond communication, and to implement more OSM policies of how to operate on OSM. The measures for this objective were determined to be the number of OSM internal processes and number of OSM policies implemented. Finally, for the objectives of establishing a governance for OSM and having organisational structures focused around the OSM landscape, the measures were determined to be the amount of OSM governance established and the number of staff in the OSM network at UKZN.

Looking at strategic documents, interview with staff, student questionnaires and OSM analytics revealed how this OSM strategy is manifested from the students' perspective. The objectives from this perspective were communication, engagement and access to information. For the objective of communication, measures which relate to the amount of student awareness created using campaigns via UKZN's OSM accounts were determined.

Next the objective of engagement was examined, in specific increasing engagement. The measures determined for this objective were the level of engagement felt on UKZN's OSM accounts.

Finally, the objective relating to increasing access to information using OSM was looked at. The measures selected relate to how easy it is for students to access information when using UKZN's OSM accounts.

With the measures exhibited when using this OSM strategy, the effectiveness of this strategy can now be examined.

5.3.3 How Effective is this Online Social Media Strategy?

5.3.3.1 *From the University's Perspective*

This perspective looks at the effectiveness of UKZN's OSM strategy from the University's perspective, with conclusions from staff interviews being discussed.

First, learning and growth initiatives at UKZN relating to OSM revealed there was no formal training for staff. An interviewee expressed that staff had no OSM training of how to operate on online beyond them knowing how to run their personal OSM accounts. Regarding tools and technologies used, only the built-in analytics software like Facebook's Insight and Twitter analytics are used. This built-in software provided simple analytic information which helped manage these accounts. Looking at various other types OSM software, showed there were more advanced tools and technologies that can be used. These showed engagement rates, created more in-depth graphs, and helped organisations assess how its OSM accounts are managed and how to improve. Additionally, interviews revealed that it was important to keep up with the latest OSM trends, however this is not the case as UKZN's Instagram account was not being utilised a lot when compared to its Twitter account. The student questionnaires also showed there were more students who used Instagram compared to Twitter. A brief look at posts across both these accounts, revealed students expressed a more positive response to posts on UKZN's Instagram compared to Twitter. However, UKZN posts more frequently on Twitter than on Instagram, with posts on Instagram being sporadic. Finally, a study revealed that users leveraged Instagram more and had more engagement on Instagram when compared to Twitter (Allen, 2017).

The internal business processes were analysed and it was determined that there were no internal processes supported by OSM beyond communication. While communicating on OSM is important, OSM can also provide and support many other processes. It was determined that UKZN did not utilise OSM for risk management other than sending out notices to its OSM community. The OSM platform provides many opportunities to help with business continuity planning and disaster risk management. By monitoring what students have to say about the University on OSM, can reveal the problems students are facing and allow corrective measures to be taken before these issues get out of control. Additionally, due to the personal level of engagement created through OSM, UKZN can keep up to date and support students in a better manner than before.

It was determined that there were no OSM policies of how UKZN is to operate on its OSM accounts. Online social media policies can ensure staff who utilise OSM are aware of the expectations of the University with regards to its communication and behaviour on OSM. When there is no guidance in terms of using OSM, there can risks for UKZN which needs to be mitigated by using OSM policies. In terms of governance for OSM, there were none

established related to OSM. Establishing a governance framework can manage the legal risks when communicating to UKZN's OSM community. It can also manage the brands risk beyond the official OSM accounts as OSM is easily accessed by UKZN's staff who can misuse their personal accounts.

The University of KwaZulu-Natal's organisational structure was more focused towards a traditional form of marketing and public relations, with no dedicated staff for OSM. Staff who worked on OSM also handled other communication platforms. According to an interviewee, UKZN's use of the main OSM accounts was just an extension of the University's notice system. Information was not crafted for OSM and is simply just reposted from this internal notice system.

When staff were asked what image does UKZN want to create on OSM, it was revealed that they wanted to create a University of open communication that engages with its OSM community. However, when asked if staff thought they had achieved the objectives of being more engaging with students and improving students' university life, UKZN's main OSM accounts felt they had not achieved this. While UKZN's Health Science accounts thought they had achieved this. This could be due to the main OSM accounts having an OSM strategy which was part of the overall strategy, while the Health Science accounts had some objectives which is part of its communication strategy.

The strategic documents revealed that it was important for OSM assistants to post 3 interactive posts per day on UKZN's OSM accounts. Looking at the Facebook analytics from figure 4.25 showed that UKZN only posts 1.2 posts per day and were not meeting the requirements it set. Additionally, Facebook and Twitter require posts to be crafted specifically to these sites, with Facebook having more images and text when compared to Twitter which limits posts to 140 characters. For posts to be interactive on these unique OSM sites, posts need to be crafted specifically to leverage what makes these OSM sites popular. However, this was not the case for UKZN's Facebook and Twitter accounts.

In conclusion, across all the objectives that were determined for OSM from the University's perspective, UKZN was not effectively leveraging its OSM strategy.

5.3.3.2 *From the Student Users' Perspective*

This perspective looks at the effectiveness of UKZN's OSM strategy from the students' perspective.

5.3.3.2.1 Communication

The issue for communication is the lack of students seeing campaigns on UKZN's OSM accounts. While UKZN does post campaigns onto its OSM accounts, students were not seeing these posts which was important. This could be due the ineffective use of the unique traits of the OSM platform. Crafting campaigns which are attractive can allow more students to view these campaigns. Additionally, it is important craft campaigns unique to each OSM site. Instagram leverages pictures and by creating unique pictures can effectively convey campaign information, while Twitter uses limited characters to quickly convey campaign information.

Another issue was hashtag campaigns not creating significant awareness. Online social media sites which leverage hashtags will need UKZN to craft unique hashtags which are simply while still generating awareness. Students felt hashtags created more awareness on the unofficial OSM accounts of UKZN compared to the official OSM accounts. Investigating what makes hashtags trend on OSM and on these unofficial accounts, can help UKZN create trending hashtags which create more awareness on OSM.

In this strategic theme it is important to have improved communication with UKZN via its OSM accounts although this was not the case. This platform can provide instant communication to many students when compared to the traditional communication methods used by UKZN, like emails and internal notices. Taking corrective measures to have better communication with students via OSM and constantly reviewing the impact on students, will ensure that students are happy with the communication aspect on UKZN's OSM accounts.

What was interesting is that majority of students agreed that they were more aware of activities taking place when using UKZN's OSM accounts. Additionally, most students expressed positive responses with being more aware of campaigns when using UKZN's Facebook. However, if most students did not see posts by UKZN's OSM accounts, many students would not be aware of activities taking place or campaigns via OSM. It is good that student who saw posts or campaigns were more aware but it is important for UKZN to better communicate with more students via its OSM accounts.

5.3.3.2.2 Engagement

It was determined that engagement was very important for UKZN although students were not engaging with other students or UKZN via its OSM accounts. It was also revealed that in some instances students expressed more positive responses related to engagement on the unofficial OSM accounts of UKZN when compared to UKZN's official OSM accounts.

The University of KwaZulu-Natal leverages traditional communication, like emails and the internal notice system, which had little engagement as this encouraged one-way communication. Online social media encourages instant two-way communication with students on a more personal level but students were not happy with the engagement on UKZN's OSM accounts. Gephi and OSM analytics elaborated on the potential problems related to the lack of engagement via OSM.

A network visualisation graph for UKZN's Facebook account (figure 4.24) was created using Gephi. This graph showed posts by UKZN and this posts engagement with students. There were few popular posts by UKZN, with most posts showing little interaction and engagement by students. Looking at the most popular posts by UKZN, showed many new students commenting or reacting to these posts. However, many students do not engage with UKZN's Facebook account on a regular basis. While certain posts by UKZN are more popular, like national campaigns or important notices, general posts should have more engagement as UKZN's Facebook page has more than 102000 likes as of October 2017.

Analysis of OSM analytics from UKZN's Facebook page showed that there was not much engagement on UKZN's Facebook account. Assessing the posts by UKZN showed that when students do comment on posts, UKZN seldom replies with only an 8.51% response rate. Additionally, it was determined that many posts per day while not enough to spam students were important although UKZN only posted on average 1.2 posts per day. The suggested engagement rate was 7% for UKZN although for UKZN's Facebook account there was a 1% engagement rate. Finally, users need fast responses to comments which encourage engagement although UKZN take on average 36 hours to reply. Overall, it is very important for UKZN to engage regularly on OSM which in turn encourages student engagement.

5.3.3.2.3 Access to Information

Most students expressed positive responses with regards to looking for information and information being more accessible on UKZN's Facebook account. However, they were not as positive in relation to UKZN's Twitter account. While Facebook is UKZN's most popular OSM account, Twitter provides many innovative ways of finding information and making information more accessible when compared to Facebook. The popularity of hashtags on Twitter provides a simple and effective way of users categorising their posts. Hashtags mark the topic of interest and can provide much more information around a topic, while Facebook uses word searches to find specific information. Word searches can find information which is not relevant due to common words being searched, while hashtags are more unique and specific to the information needed.

It was determined that providing information was important, with OSM allowing the instant sharing of information and an effective way of finding information. However, most students were not happy with the amount of information shared and getting adequate feedback via UKZN's OSM accounts. While it is important to provide information during times of crisis, it is also important to constantly keep the OSM community up to date in general as well. With most students never seeing posts by UKZN's OSM accounts, it is important to get students to see these posts. Once this is done, UKZN can concentrate on interactive and interesting ways of providing this information. Additionally, when students do post and ask for feedback on OSM, there should be quick responses by UKZN.

The University of KwaZulu-Natal's OSM accounts have created OSM communities which mainly include students. These communities can be beneficial to UKZN as students can also provide information on its OSM accounts. However, most students were not encouraged to share information on UKZN's OSM accounts. With staff only working set hours and students accessing UKZN's OSM accounts throughout the day, students can provide the necessary information that others are looking for. It is important for UKZN to also provide faster feedback via OSM as students did not express a difference compared to getting feedback from emails and noticeboards.

In conclusion, students were more neutral and negative across most questions related to communication, engagement and access to information. While there were some positive responses, there were significantly more neutral and negative responses. For UKZN to be

effectively using its OSM accounts there should be significantly more positive responses across most questions. Additionally, there were many instances where students expressed more positive responses related to the unofficial OSM accounts compared to UKZN's OSM accounts. This would indicate that OSM accounts run by students were more effectively communicating, engaging and providing information when compared to UKZN's OSM accounts.

5.4 Primary Research Question

5.4.1 How is the UKZN online social media strategy achieving its stated strategic objectives?

The University of KwaZulu-Natal's OSM strategy was part of the overall strategy for the University, with objectives related to OSM being part of its strategic plan. A BSC for UKZN's OSM activities was created to determine more specific strategy objectives and determine if UKZN's OSM strategy is achieving its strategic objectives. Overall, the conclusions drawn from these objectives are presented.

5.4.1.1 *From the University's Perspective*

According to the data gathered from staff working on UKZN's OSM accounts; UKZN did not create a University of open communication that engages with its OSM community, there was no formal OSM training for staff, and the current use of tools and technologies were for simple analytic data.

Additionally, staff outlined that there were no processes supported at UKZN beyond communicating with its OSM community, no OSM policies of how to operate on OSM, no OSM governance established, and no organisational structures specifically related to OSM.

In conclusion, it can be seen that UKZN's OSM strategy was not achieving its stated strategic objectives from the University's perspective. Additionally, a statistical report from UKZN's OSM accounts is used to convey performance information to executive management at the University. This report is not effective as it lacked detailed data on the level of engagement felt on these accounts and if students' experience of university life was improved which was important. By conducting OSM performance reviews, implementing OSM training programmes, having a more formal set of task descriptions on how staff are to communicate using tool and technologies, and implementing an OSM strategy can achieve the objectives for this perspective.

5.4.1.2 *From the Students' Perspective*

The University of KwaZulu-Natal was successful with certain aspects of creating awareness through campaigns although it was not successful when communicating these campaigns. While it is important to be aware of campaigns, if most students did not see these campaigns many students would not even be aware of these campaigns. Additionally, UKZN was more successful in creating awareness when using its Facebook account compared to Twitter.

The University was not effectively leveraging its OSM accounts across most aspects related to engagement. The only significant positive responses relate to most students expressing they have more collaboration and there being better engagement with UKZN via its Facebook account. However, when combining responses, there were more students that chose neutral and negative responses compared to positive responses related to these questions. Interviews and strategic documents revealed that engagement was very important although UKZN was not leveraging OSM to achieve this objective. Looking at UKZN's OSM accounts there was mostly one-way communication from UKZN to students.

The University was not effective in leveraging OSM across most aspects of providing access to information. While students who looked for information said it was more accessible on UKZN's Facebook account, more students were neutral and negative with being happy with the amount of information shared on UKZN's OSM accounts. Additionally, UKZN did not provide faster feedback on OSM compared to the traditional communication methods it leveraged.

It is important for UKZN to create a good relationship with students via its OSM accounts which will help achieve its strategic objectives for OSM. However, more students felt neutral, unsupportive and had a sense of alienation with UKZN via its OSM compared to feeling supportive and having a sense of belonging on these accounts.

Overall, UKZN's OSM strategy was not achieving most of its stated strategic objectives from the students' perspective as well. This is due to the University having an OSM strategy which is part of the overall strategy, while a formal OSM strategy is needed as there are many followers on UKZN's OSM accounts. Implementing an OSM strategy will provide a more detailed way to leverage these OSM accounts, with objectives being defined and a plan on how to achieve these objectives. Investigating these OSM accounts as of April 2017 and interviews with staff, showed that posts from UKZN's notice systems were reposted to Facebook and

Twitter. A study determined that posts on Facebook which had 40 characters received 86% more engagement when compared to posts with more characters (Lee, 2016). Tweets between 71-100 characters from Twitter received 17% more engagement (Lee, 2016). LikeAlyzer revealed that posts on UKZN's Facebook were on average 168 characters long which was not effective in creating more engagement with users. It is important to craft posts for each OSM site being used as each are unique in how they communicate to users. Therefore, by taking initiatives and crafting posts for each platform can better leverage UKZN's OSM accounts and achieve the stated strategic objectives.

5.5 Contributions of the Study

This research study contributes to the field of research by showing how the BSC can be used to determine a University's OSM strategy, determine OSM measures to assess OSM effectiveness, and show how effective is a University when leveraging OSM. Overall, this research study gives evidence on analysing OSM strategy and using the BSC to assess if a university's OSM strategy is achieving its objectives.

5.6 Limitations

The study did not investigate the marketing coordinator and two interns working on UKZN's main OSM accounts due to no response to interview requests. This would have provided a more in-depth analysis from staff who run the main OSM accounts, and provide more personal insight from them into the current maturity and how these accounts will be in the future. However, there is no evidence that their responses would have been significantly different from those already obtained.

The study did not assess the content which is shared on UKZN's OSM accounts. A content analysis would have helped determine the quality of content that was posted on OSM. While it was determined that content is reposted from the internal notice system, a content analysis would have provided more in-depth data on the type of content posted and how students reacted to it.

5.7 Delimitations

The researcher wanted to gain as many semi-structured interviews as possible although only those who replied and were willing to participate were included. Due to lack of responses over

a long period, the researcher had to proceed and use the four semi-structured interviews which were successful.

The researcher also chose not to include the other OSM accounts of UKZN in the data analysis. This was due to Facebook and Twitter at the time being substantially more popular and being used more frequently by UKZN. Additionally, with it being important to draw inferences between the official and unofficial OSM accounts of UKZN, the OSM sites with unofficial accounts were included.

5.8 Recommendations

This section provides UKZN with a recommendation list for OSM:

- First it is important for UKZN to develop a specific strategy for OSM which aligns with the University's mission, vision and culture. The BSC framework can aid UKZN in OSM strategy development and measuring its success on OSM.
- This OSM strategy must include main objectives for using OSM, individual objectives specific to each OSM site being leveraged, and how the University intends on achieving these goals.
- Additionally, this OSM strategy must detail an OSM structure at UKZN, OSM specific policies and OSM governance.
- It is important for UKZN to use more in-depth statistics software beyond the built-in software. Advanced analytics software can show engagement rates, develop OSM network visualisations and other more detailed OSM measures.
- Additionally, the reporting needs for UKZN must be more than a simple statistics report of its OSM accounts. Instead there must be a detailed list of key performance areas related to OSM which will need to be measured regularly.
- For UKZN to effectively leverage OSM, it is important that there are more staff working on OSM and have a specific OSM department concentrating only on this media platform. Staff also need to attend more training on how to operate on OSM.
- A content analysis of UKZN's OSM accounts would benefit the University by determining the content it posts to OSM. This can be used to compare content with other universities to determine how effectively UKZN is using OSM and capturing its audiences' attention.

- For future research, the implemented changes can provide beneficial data on the effects of using a detailed OSM strategy for UKZN which was created using the BSC. This can show the differences between UKZN having an OSM strategy which is part of the overall strategy and UKZN implementing a detailed OSM strategy.

5.9 Conclusion

The main findings showed that UKZN was not effective across most aspects of communicating campaigns to students, creating engagement with students, and providing information to students via UKZN's OSM accounts. With UKZN's OSM strategy being part of the overall strategy of the University, there was no detailed OSM strategy which outlines objectives, OSM policies, OSM governance, OSM organisational structure, and internal processes supported by OSM. There were some objectives which were part of UKZN's strategic plan although to effectively leverage OSM there needs to be an OSM strategy which outlines objectives for this platform, how UKZN will achieve these objectives and measures to determine if these objectives have been achieved or not. Findings also showed that in some aspects students felt that the unofficial OSM accounts of UKZN were better when compared to UKZN's OSM accounts. While OSM analyses and OSM analytics also showed a low level of engagement relative to the size of UKZN's OSM community.

5.10 Overview of Chapters

Chapter one outlined the context of the research study and showed the problem statement which provides justification to analyse UKZN's OSM strategy. The research objectives for this study are outlined which influenced the research questions. The importance of this research study is discussed to show how this study can benefit the field of research. Finally, the BSC is introduced which underpins this study and provides steps that can be used for OSM analysis.

Chapter two provides literature relating to the focus areas of this study and establishes the gap in literature. The chapter begins by introducing OSM which also highlights the features and value of OSM. Next the university-students relation is explained with this developing into how universities leverage OSM. Students use of this platform, and the opportunities and challenges of universities using this platform are outlined. The University of KwaZulu-Natal using the OSM platform is detailed and the unofficial OSM accounts of UKZN are introduced. Finally,

OSM strategy is detailed which outlines its importance, with the ways OSM strategy succeeds and fails also being outlined.

Chapter three introduces the BSC framework, with its use being detailed and its weaknesses being assessed. The non-profit BSC is adopted to assess UKZN's OSM strategy. Literature which links OSM strategy and the BSC is outlined to show justification for using the BSC in OSM strategy assessment. A BSC for UKZN is also discussed, with the steps of the BSC being linked to the research questions. The research design is introduced to show how this study was conducted. The research populations and sampling methods used are also shown. The data collection methods are justified and the data analyses methods are detailed. Finally, the data quality control measures are presented, with ethical requirements for conducting this study concluding the chapter.

Chapter four looks at the research findings which will answer the research questions of this study. First the data is assessed to ensure it is both reliable and valid. Once this is done, figures were created which conveyed the demographic information collected. Descriptive statistics were then used to create figures which showed the data from the students' questionnaire, with descriptions and cross tabulations examining the data. The Chi-Square goodness-of-fit tests were performed with tables being created to show which responses were chosen significantly more or less than expected. The qualitative findings from the semi-structured interviews with staff from UKZN's OSM are then presented. Finally, a network visualisation using Gephi is presented and explained, with OSM analytics being provided.

Chapter five starts by creating a BSC for UKZN. Step one and two establishes UKZN's mission and vision. In step three the strategic documents and staff interviews are assessed which creates a figure describing the current state of maturity and how this will be in the future. Step four creates the strategy map which links the key strategic themes with the themes from the students' and University's perspectives. The creation of UKZN's BSC concludes step five, with the BSC figure being presented which outlines objectives, its measures, the methods and initiatives used. The sub research questions and the primary research question are then answered. The contributions to the field are detailed to provide justification for this study. The limitations and delimitation are then explained. Finally, the recommendations for UKZN are shown and the main findings are presented in the conclusion.

Chapter five provides justification in using the BSC for non-profit OSM assessment. The step by step framework provides researchers with a simple way to sort and compile the data in a meaningful way for OSM analysis. This chapter provides justification on the type of research questions that can be used to assess OSM strategy at universities, while also linking well with the steps in the BSC to answer these questions. The use of secondary research questions also provides others with a way to answer the primary research question on whether a university's OSM accounts is achieving its objectives.

References

- Allen, R. (2017). How popular is Facebook vs Twitter vs Instagram vs Snapchat vs Pinterest? *Social media*, (09/04/18). Retrieved 09 April 2018, from <https://www.smartinsights.com/social-media-marketing/social-network-landscape-chartoftheday/>
- Ananda, A. S., Hernández-García, Á., & Lamberti, L. (2014). *RENL: A Framework for Social Media Marketing Strategy*. Milano, Italy.
- Anastas, J. W. (2000). *Research Design for Social Work and the Human Services* (2nd ed.). Columbia University: Columbia University Press.
- Angus, K. (2013). How To: Create Your Qualitative Interview Guide. Retrieved 09/04/18, from <http://www.askingsmarterquestions.com/how-to-creating-your-qualitative-interview-guide/>
- Anney, V. N. (2014). Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272-281.
- Atkinson, R., & Flint, J. (2001). Accessing Hidden and Hard-to-Reach Populations: Snowball Research Strategies. *Social Research Update*, 33, 36-58.
- Balm, J. (2014). The power of pictures. How we can use images to promote and communicate science. Retrieved 09 April 2018, from <http://blogs.biomedcentral.com/bmcblog/2014/08/11/the-power-of-pictures-how-we-can-use-images-to-promote-and-communicate-science/>
- Baltar, F., & Brunet, I. (2012). Social research 2.0: virtual snowball sampling method using Facebook. *Internet Research*, 22(1). doi:<http://dx.doi.org/10.1108/10662241211199960>
- Barbu, O. (2014). Advertising, Microtargeting and Social Media. *Procedia - Social and Behavioral Sciences*, 163(1), 44-49. Retrieved 09/09/2018, from https://ac.els-cdn.com/S187704281406385X/1-s2.0-S187704281406385X-main.pdf?tid=f445d719-7eac-4baa-92a6-dd8e937f0843&acdnat=1538849728_b91dfff04d895cdb45e27dcf0b7db8a9
- Bastian, M., Heymann, S., & Jacomy, M. (2009). Gephi: an open source software for exploring and manipulating networks. *International AAAI Conference on Weblogs and Social Media*, 361-362. Retrieved 09/04/18, from <http://www.aaai.org/ocs/index.php/ICWSM/09/paper/view/154>
- Beal, V. (2017). The Difference Between the Internet and World Wide Web. *Internet*. Retrieved 09/04/18, from http://www.webopedia.com/DidYouKnow/Internet/Web_vs_Internet.asp
- Beattie, A. (2011). What is the difference between social media and Web 2.0? *Social media*. Retrieved 09/04/18, from <https://www.techopedia.com/2/27884/internet/social-media/what-is-the-difference-between-social-media-and-web-2-0>
- Beese, J. (2016). 6 Social Media Trends That Will Take Over 2016. *SOCIAL MEDIA MANAGEMENT*. Retrieved 09 April 2018, from <https://mysocialworks.org/2016/09/05/6-social-media-trends-that-will-take-over-2016/>
- Benfield, J., & Szlemko, W. (2006). Internet-based data collection: Promises and realities. *Journal of Research Practice*, 2(2), Article D1.

- Bird, D. (2009). The use of questionnaires for acquiring information on public perception of natural hazards and risk mitigation – a review of current knowledge and practice. *9*(4), 1307-1325
- Bitsch, V. (2005). Qualitative research: A grounded theory example and evaluation criteria. *Journal of Agribusiness*, *23*(1), 75-91.
- Bloom, M., & Fischer, J. (1982). *Evaluating practice: Guidelines for the accountable professional*. Englewood Cliffs: NJ: Prentice Hall.
- Boeije, H. R. (2009). *Analysis in Qualitative Research*. California: SAGE Publications Ltd.
- Boone, H. N. (2012). Analyzing Likert Data⁵⁰. Retrieved 09/04/18, from Tools of the Trade website: <http://www.joe.org/joe/2012april/tt2.php>
- Bowling, A. (2005). Mode of questionnaire administration can have serious effects on data quality²⁷(3), 281–291. Retrieved 09/04/18, from <http://pubhealth.oxfordjournals.org/content/27/3/281.full>
doi:<https://doi.org/10.1093/pubmed/fdi031>
- Bridgestock, L. (2013). What Drives Students' Social Media Usage? *Social media*. Retrieved 09/04/18, from <http://www.topuniversities.com/blog/what-drives-students-social-media-usage>
- Brown, J. D. (2011). Likert items and scales of measurement? *SHIKEN: JALT Testing & Evaluation SIG Newsletter*, *15*(1), 10-14.
- Bryman, A., & Bell, E. (2011). *Business Research Methods* (3rd ed.). Oxford, United Kingdom: Oxford University Press.
- Brynley-Jones, L. (2016). 23% of people complain online out of vengeance. Retrieved 09/04/18, from <http://oursocialtimes.com/23-of-people-complain-online-out-of-vengeance/>
- Campbell, T. (1997). Technology, Multimedia, and Qualitative Research in Education. *Journal of Research on Computing in Education*, *30*(2), 122-132.
- Chandy, R. (2014). Making your social media strategy work. *BUSINESS STRATEGY REVIEW*, *25*(1), 77. doi:<https://doi.org/10.1111/j.1467-8616.2014.01035.x>
- Ciuffetelli, J. (2018). Yellow Social Media Report 2018. *Part One – Consumers*. Retrieved 12/11/2019, from <https://www.yellow.com.au/wp-content/uploads/2018/06/Yellow-Social-Media-Report-2018-Consumer.pdf>
- Clements, J. C. (2015). Using Facebook to Enhance Independent Student Engagement: A Case Study of First-Year Undergraduates *5*(4). Retrieved 19/04/18, from <http://dx.doi.org/10.5539/hes.v5n4p131>
- Cohen, D., & Crabtree, B. (2006). Qualitative Research Guidelines Project. Retrieved 09 April 2018, from <http://www.qualres.org/HomeSemi-3629.html>
- Cook, J. (2015). #Winning at Social Media: It's all about the interaction, 182. Retrieved 20/08/2018, from <https://www.amazon.com/Winning-Social-Media-about-interaction-ebook/dp/B00Z4EZEPS>
- Cooper, D. R., & Schindler, P. S. (2011). *Business Research Methods* (3rd ed.). USA: McGraw-Hill/Irwin.

- Corliss, R. (2012). Photos on Facebook Generate 53% More Likes Than the Average Post [NEW DATA]. Retrieved 09 April 2018, from <https://blog.hubspot.com/blog/tabid/6307/bid/33800/Photos-on-Facebook-Generate-53-More-Likes-Than-the-Average-Post-NEW-DATA.aspx#sm.00qerh1l1e3sfdo11sv1w3to911uh>
- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How Large U.S. Companies Can Use Twitter and Other Social Media to Gain Business Value. *MIS Quarterly Executive*, 9(4), 244-259.
- Danesi, M. (2008). *Dictionary of Media and Communications*. New York: M.E. Sharpe, Inc.
- Darban, A., & Li, W. (2012). *The impact of online social networks on consumers' purchasing decision*. (Master's thesis within Business Administration), Jonkoping university.
- Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Social Media Update 2014. Retrieved 09/04/18, from <http://www.pewinternet.org/2015/01/09/social-media-update-2014/>
- Duggan, M., & Lenhart, A. (2015). Frequency of Social Media Use. *PewInternet*. Retrieved 09 April 2018, from <http://www.pewinternet.org/2015/01/09/frequency-of-social-media-use-2/>
- Ennis-O'Connor, M. (2019). How Much Time Do People Spend on Social Media in 2019? [Infographic]. *Social media*. Retrieved 12/11/19, from <https://medium.com/@JBBC/how-much-time-do-people-spend-on-social-media-in-2019-infographic-cc02c63bede8>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. doi:10.11648/j.ajtas.20160501.11
- Fagioli, L. P., Rios-Aguilar, C., & Deil-Amen, R. (2015). Changing the Context of Student Engagement: Using Facebook to Increase Community College Student Persistence and Success. *117*, 42. Retrieved 15/04/2018, from https://www.coe.arizona.edu/sites/coe/files/HED/Changing%20the%20Context%20of%20Engagement_0.pdf
- Fita, M. (2012). 6 Reasons Why Social Networking is So Popular These Days. *Social Media Marketing*. Retrieved 09/04/18, from <http://www.brandignity.com/2012/11/6-reasons-why-social-networking-is-so-popular-these-days/>
- FoodRiscResourceCentre. (2016). Mixed methods research. Retrieved 09 April 2018, from http://resourcecentre.foodrisc.org/mixed-methods-research_185.html
- Fox, G. (2014). What is a social media strategy definition and thoughts. Retrieved 09/04/18, from <https://www.tribalcafe.co.uk/what-is-social-media-strategy-definition/>
- Gilfoil, D. M., & Jobs, C. (2012). Return on Investment For Social Media: A Proposed Framework For Understanding, Implementing, And Measuring The Return. *Journal of Business & Economics Research*, 10(11), 637-650. doi:10.19030/jber.v10i11.7363
- Gligorijevic, B. (2013). *CONSUMER CREATED REVIEWS AND RATINGS: THE IMPORTANCE OF WORD OF MOUTH IN INFORMATION SEARCH* (Doctor of Philosophy), Queensland University of Technology, Brisbane, Australia.
- Golafshani, N. (2003). Understanding Reliability and Validity in

- Qualitative Research. *The Qualitative Report*, 8(4). Retrieved 09/04/18, from <http://nsuworks.nova.edu/tqr/vol8/iss4/6>
- Gomes, R. C., & Liddle, J. (2009). The Balanced Scorecard as a Performance Management Tool for Third Sector Organizations: the Case of the Arthur Bernardes Foundation, Brazil. *Brazilian Administration Review*, 6(4), 354-366. doi:<https://dx.doi.org/10.1590/S1807-76922009000400006>
- Gray, D. (2004). *Doing Research in the Real World*. (2nd ed.). California: SAGE Publications.
- Hagar, C. (2013). Crisis Informatics: Perspectives of Trust – Is Social Media a Mixed Blessing? *SLIS Student Research Journal*, 2(2), 5.
- Haughn, M. (2015). Web 2.0. *Definition*. Retrieved 09/04/18, from <http://whatis.techtarget.com/definition/Web-20-or-Web-2>
- Henderson, G. (2018). 34 Insane Facebook Stats Your Brand Can't Ignore. *General Facebook Stats*. Retrieved 12/11/19, from
- Hicks, K. (2011). Developing and executing strategy: Using the balanced scorecard for alignment and accountability. *Performance Improvement Quarterly*, 50(8), 41-47. doi:10.1002/pfi.20240
- Hogan, B., & Quan-Haase, A. (2010). Persistence and Change in Social Media. *Bulletin of Science, Technology & Society*, 30(5), 309-315. doi:doi:10.1177/0270467610380012
- Holtzhausen, S. (2001). Triangulation as a powerful tool to strengthen the qualitative research design: The Resource-based Learning Career Preparation Programme (RBLCPP) as a case study. Retrieved 09/09/18, from <http://www.leeds.ac.uk/educol/documents/00001759.htm>
- Hornby, A. S., & Wehmeier, S. (2000). *Oxford Advanced Learner's Dictionary of Current English*: Oxford University Press.
- Kajornboon, A. B. (2005). Using interviews as research instruments. Retrieved 09/04/18, from <http://www.culi.chula.ac.th/research/e-journal/bod/annabel.pdf>
- Kandiko, D. C. B., & Mawer, D. M. (2013). Student Expectations and Perceptions of Higher Education: Executive Summary. *A STUDY OF UK HIGHER EDUCATION*. Retrieved 20/08/2018, from <https://www.kcl.ac.uk/study/learningteaching/kli/people/research/dl/qaasummary.pdf>
- Kane, G. C. (2013). What Is Social Media, Anyway? (And Why Managers Should Care). *Big Idea: Social Business*. Retrieved 09 April 2018, from <http://sloanreview.mit.edu/article/what-is-social-media-anyway-and-why-managers-should-care/>
- Kaplan, R. S. (2001). *Strategic Performance Measurement and Management in Nonprofit Organizations* (Vol. 11). United Kingdom: Wiley.
- Kaplan, R. S. (2010). Conceptual Foundations of the Balanced Scorecard. Retrieved 09/04/18, from <http://www.hbs.edu/research/pdf/10-074.pdf>
- Kaplan, R. S., & Norton, D. P. (1992). *The Balanced Scorecard – Measures that Drive Performance*. Massachusetts: Harvard Business Review.

- Kaplan, R. S., & Norton, D. P. (1996a). *The Balanced Scorecard: Translating Strategy into Action*. Massachusetts
Harvard Business Review Press.
- Kaplan, R. S., & Norton, D. P. (1996b). Linking the Balanced Scorecard to Strategy. *California Management Review*, 39(1), 53-79. doi:<https://doi.org/10.2307/41165876>
- Kaplan, R. S., & Norton, D. P. (2007). *Using the Balanced Scorecard as a Strategic Management System*. Massachusetts: Harvard Business Review.
- Karsenty, S. (2009). *Facebook and Information Trust: Facebook as a tool of information seeking and trust in the information gathered*. (Master of Science Thesis/ Thesis Work in Communication), University of Gothenburg, Gothenburg, Sweden. (2013:039)
- Klamm, D. (2011). 6 Best Practices for Universities Embracing Social Media. *Digital Marketing Series*. Retrieved 09/04/18, from <http://mashable.com/2011/10/10/universities-social-media/#BEo9vvbQV5qf>
- Knupfer, N., & McLellan, H. (1996). DESCRIPTIVE RESEARCH METHODOLOGIES. *Handbook of research for educational communications and technology*, 1196-1212.
- Latham, B. (2007). Quantitative Research Methods. *Sampling: What is it?* Retrieved 09/04/18, from [http://webpages.acs.ttu.edu/rlatham/Coursework/5377\(Quant\)\)/Sampling_Methodology_Paper.pdf](http://webpages.acs.ttu.edu/rlatham/Coursework/5377(Quant))/Sampling_Methodology_Paper.pdf)
- Lavrusik, V. (2009). 10 Ways Universities Share Information Using Social Media. Retrieved 09/04/18, from <http://mashable.com/2009/07/15/social-media-public-affairs/#SQr2lldEV8qA>
- LearnHigher, & MMU. (2008). Developing your data collection skills. Retrieved 09 April 2018, from <http://archive.learnhigher.ac.uk/collectthis/main/desstrat2.html>
- Leedy, P., & Ormrod, J. (2005). *Practical Research Planning and Design* (8th ed.). Upper Saddle River, N.J.: Prentice Hall.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *J Family Med Prim Care*, 4(3), 324-327. doi:10.4103/2249-4863.161306
- Levin, I. P. (1999). *Relating statistics and experimental design* (Vol. 125). California: Sage Publications.
- LikeAlyzer. (2017). UKZN Report. Retrieved 09 April 2018, from <https://likealyzer.com/report/ukzn1>
- Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. California: Sage Publications.
- Mamoon-Al-Bashir, Kabir, R., & Rahman, I. (2016). The Value and Effectiveness of Feedback in Improving Students' Learning and Professionalizing Teaching in Higher Education. *Journal of Education and Practice*, 7(15), 38-41.
- Mason, J. (2002). *Qualitative Researching* (2nd ed.). California: SAGE Publications.
- Maxwell, J. (1992). Understanding and Validity in Qualitative Research. *Harvard Educational Review*, 62(3), 279-301.

- Merriam-Webster. (2008). *Merriam-Webster's Advanced Learner's English Dictionary*: Merriam-Webster, Inc.
- Mesec, B. (1998). *Uvod v kvalitativno raziskovanje v socialnem delu (Introduction to qualitative research in social work)*: University of Ljubljana.
- Miller, M. J. (2009). RELIABILITY AND VALIDITY. Retrieved 09/04/18, from <http://wenku.baidu.com/view/32012a297375a417866f8f39>
- Moore, K., Cottrell, E., & Chambers, R. (2018). Facebook in general practice: a service evaluation in one health economy. Retrieved 15/04/2018, from <http://bjgpopen.org/content/bjgpoa/1/4/bjgpopen17X101181.full.pdf>
doi:10.3399/bjgpopen17X101181
- Nair, M. (2011). Understanding and measuring the value of social media. *Journal of Corporate Accounting & Finance*, 22(3), 45-51. doi:<https://doi.org/10.1002/jcaf.20674>
- Newson, C., McDowall, D. A., & Saunders, P. M. N. (2011). Understanding the support needs of mature students. Retrieved 20/08/2018, from <http://ecdc.europa.eu/en/publications/Publications/social-media-strategy-guide-for-public-health-communication.pdf>
- Niekerk, D. v. (2011). Introduction to disaster risk reduction. Retrieved 09/04/18, from https://www.preventionweb.net/files/26081_kp1concepdisasterrisk1.pdf
- Nolan, Norton, & Company. (1991). Measuring Performance in the Organization of the Future: A Research Study 10(2), 499-507. Retrieved 09/04/18, from doi:<https://doi.org/10.1002/npr.4040100407>
- Norreklit, H., Jacobsen, M., & Mitchell, F. (2008). Pitfalls in Using the Balanced Scorecard. *The Journal of Corporate Accounting & Finance*, 19(5), 65-68. doi:10.1002/jcaf.20436
- Perrin, A. (2015). Social Media Usage: 2005-2015. *65% of adults now use social networking sites – a nearly tenfold jump in the past decade*. Retrieved 09/04/18, from <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>
- PewResearch. (2014). Social Networking Fact Sheet (Survey). Retrieved 09/04/18, from Pew Research Internet Project <http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/>
- Playle, T. (2011). How can a university best use social media for internal communications? *Higher Education Network Blog*. Retrieved 09 April 2018, from <https://www.theguardian.com/higher-education-network/blog/2011/jun/01/universities-social-media-internal-communications>
- Plowman, K. D. (2018). Strategy and Tactics in Strategic Communication: Examining their Intersection with Social Media Use. *International Journal of Strategic Communication*, 12(2), 125-144. doi:<https://doi.org/10.1080/1553118X.2018.1428979>
- Porter, M. (1996). What is Strategy? *Harvard Business Review*, 74(6), 61-78.
- Power, K. (2015). Social Media in Business Continuity. Retrieved 09/04/18, from <http://www.dri.ca/EXCELLENCE/PDF/SocialMediainBCMrobyn-kristinepower.pdf>

- Protalinski, E. (2016). Facebook passes 1 billion mobile daily active users. Retrieved 09/04/18, from <http://venturebeat.com/2016/07/27/facebook-passes-1-billion-mobile-daily-active-users/>
- Radhakrishna, R. B. (2007). Tips for Developing and Testing Questionnaires/Instruments. Retrieved 09/04/18, from <http://www.ioe.org/ioe/2007february/tt2.php>
- Rampton, J. (2014). Why Most Social Media Strategies Fail. *Tech*. Retrieved 09/04/18, from <http://www.forbes.com/sites/johnrampton/2014/04/22/why-most-social-media-strategies-fail/2/#7421391815e9>
- Raosoft. (2018). Sample size calculator. Retrieved 09/09/2018, from <http://www.raosoft.com/samplesize.html>
- Ray, A. (2010). The ROI Of Social Media Marketing. *A Balanced Marketing Scorecard Thoroughly Validates Social Media Value*. Retrieved 15/08/2018, from <https://frankdiana.files.wordpress.com/.../roi-of-social-marketing-forrester-report.pdf>
- Ridley, D. (2016). How Today's Colleges and Universities are Using Social Media. *Social media*. Retrieved 09 April 2018, from <https://vtldesign.com/inbound-marketing/social-media/how-todays-colleges-and-universities-are-using-social-media/>
- Rohm, H., Wilsey, D., Perry, G. S., & Montgomery, D. (2013). *The Institute Way: Simplify Strategic Planning and Management with the Balanced Scorecard*. Amazon Digital Services LLC: The Institute Press.
- Rubin, I. S., & Rubin, H. J. (2012). *Qualitative Interviewing: The Art of Hearing Data*. California: SAGE Publications.
- Safko, L., & Brake, D. K. (2009). *The social media bible, tactics, tools & strategies for business success*: John Wiley & Sons, Inc.
- Saunders, M., Thornhill, A., & Lewis, P. (2009). *Research Methods for Business Students* (5th ed.). London: Pearson Education.
- Schwandt, T. A., Lincoln, Y. S., & Guba, E. G. (2007). Judging interpretations: But is it rigorous? trustworthiness and authenticity in naturalistic evaluation. *New Directions for Evaluation*, 2007(114), 11-25. doi:<https://doi.org/10.1002/ev.223>
- SeekVisibility. (2016). *Seek Visibility Audience, Blogging, Content, SEO, Social Media* Retrieved 09 April 2018, from <http://www.seekvisibility.com/2016/05/active-on-social-media/>
- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill-Building Approach* (5th ed.). Hoboken, New Jersey: Wiley.
- Smith. (2016a). By the Numbers: 400 Surprising Facebook Statistics (July 2016). *Digital company statistics*. Retrieved 09/04/18, from <http://expandedramblings.com/index.php/by-the-numbers-17-amazing-facebook-stats/>
- Smith. (2016b). Marketing: 96 Amazing Social Media Statistics and Facts for 2016. Retrieved 09/04/18, from <https://www.brandwatch.com/2016/03/96-amazing-social-media-statistics-and-facts-for-2016/>

- Smith, & Anderson, M. (2018). Social Media Use in 2018. Retrieved 12/11/19, from <https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/>
- Statista. (2016). Leading social networks worldwide as of April 2016, ranked by number of active users (in millions). *Social Media & User-Generated Content*. Retrieved 09/04/18, from <http://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>
- Statista. (2018). Number of mobile phone users worldwide from 2015 to 2020. *Telecommunications*. Retrieved 12/11/19, from <https://www.statista.com/statistics/274774/forecast-of-mobile-phone-users-worldwide/>
- Stokes, R. (2014). *eMarketing: The essential guide to marketing in a digital world* (6th ed.). Red & Yellow: Quirk eMarketing (Pty) Ltd.
- Swain, H. (2011). Social media presents challenge to universities. *Higher education*. Retrieved 09 April 2018, from <https://www.theguardian.com/education/2011/jun/20/universities-social-media-reputation>
- Syalom. (2015). Design of a Balanced Scorecard on Nonprofit Organizations (Study on Yayasan Pembinaan dan Kesembuhan Batin Malang). *IOSR Journal of Business and Management (IOSR-JBM)*, 17(12), 7-14. doi:10.9790/487X-171220714
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 1(2), 53-55. doi:10.5116/ijme.4dfb.8dfd
- Thogmartin, R. (2016). Your Unofficial Facebook Page May Be a Business Killer. Retrieved 09 April 2018, from <http://disruptmedia.co/your-unofficial-facebook-page-may-be-a-business-killer/>
- Thomson, S. B. (2011). Qualitative Research: Validity. *JOAAG*, 6(1), 77-82.
- Tongco, M. (2007). Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research & Applications*. Retrieved 09 April 2018, from <http://journals.sfu.ca/era/index.php/era/article/viewFile/126/111> doi:5:147-158
- Tripathi, R. (2016). 'Unofficial' Presence of Higher Education Institutions in India on Social Media: Good or Bad? Paper presented at the 15th Conference on e-Business, United Kingdom.
- UKZN. (2012). Strategic Plan. Retrieved 09/04/18, from <https://www.ukzn.ac.za/wp-content/miscFiles/publications/strat%20plan%20low%20res.PDF>
- UKZN. (2017a). Marketing & Social Media Assistant (Intern). Retrieved 09 April 2018, from <https://notices.ukzn.ac.za/content/GetFile.aspx?id=17359>
- UKZN. (2017b). Vision & Mission. Retrieved 09 April 2018, from <http://www.ukzn.ac.za/about-ukzn/vision-and-mission/>
- Villaespesa, E. (2015). An evaluation framework for success: Capture and measure your social-media strategy using the Balanced Scorecard. Retrieved 09/04/18, from MW2015: Museums and the Web 2015 website: <http://mw2015.museumsandtheweb.com/paper/an-evaluation-framework-for-success-capture-and-measure-your-social-media-strategy-using-the-balanced-scorecard/>

- Wallendorf, M., & Belk, R. W. (1989). Assessing Trustworthiness in Naturalistic Consumer Research, 69-84. Retrieved 01/09/18, from <http://acrwebsite.org/volumes/12177/volumes/sv07/SV-07>
- Walsham, G. (2006). Doing interpretive research. *European Journal of Information Systems*, 15(3), 320–330. doi:10.1057/palgrave.ejis.3000589
- Weinberg, T. (2009). *Marketing to the Social Web: How Digital Customer Communities Build Your Business* (2nd Ed.): John Wiley & Sons, Inc.
- Werder, K., Helms, R. W., & Slinger, J. (2014). SOCIAL MEDIA FOR SUCCESS: A STRATEGIC FRAMEWORK92. Retrieved 27/10/2019, from <http://aisel.aisnet.org/pacis2014>
- Woods, N. F., & Calanzaro, M. (1980). *Nursing Research: Theory and Practice*. the University of Michigan: Mosby.
- WorldWideWorx, & StudentBrands. (2013). Social media 'integral' to SA students' lives. Retrieved 09/04/18, from <https://www.brandsouthafrica.com/south-africa-fast-facts/media-facts/social-media-121113>
- Yin, R. K. (2010). *Qualitative Research from Start to Finish* (1st ed.). New York City: The Guilford Press.
- Zorn, T. (2016). Designing and Conducting Semi-Structured Interviews for Research. Retrieved 09/04/18, from <http://home.utah.edu/~u0326119/Comm4170-01/resources/Interviewguidelines.pdf>

Appendix A: Student's Questionnaire

Please indicate your response to the question by ticking (✓) the appropriate box.

About yourself.

Please indicate if you are a student of UKZN to proceed? *

Yes

No

1) Your gender?

Male

Female

I prefer not to say

2) Year of study at UKZN?

1st Year

2nd Year

3rd Year

4th Year

5th Year

Other (Please specify.) _____

3) Which online social media sites do you use? (Check all that apply.)

Facebook

Twitter

Instagram

LinkedIn

Reddit

Others (Please specify.) _____

Questions about the use of online social media

	Never	Once a month	Twice a month	Once a week	Daily
How frequently do you access your:	1	2	3	4	5
Facebook account?					
Twitter account?					
How frequently do you view UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					

Questions about online social media

	Never				Very frequently
How frequently do you see posts on your timeline by UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How frequently do you comment on these posts by UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How frequently do you share these posts by UKZN's:	1	2	3	4	5

Official Facebook account?					
Official Twitter account?					
How frequently do you share content you created with UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How frequently do you participate in discussions on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How frequently do you voice your opinion on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How frequently do you see campaigns on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How frequently have you interacted with other students on UKZN's:	1	2	3	4	5
Official Facebook account?					

Official Twitter account?					
How frequently have you looked for information on UKZN's	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am happy with the amount of information shared on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I am happy with the discussions via UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I get adequate feedback from UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I enjoy an active and collaborative learning experience via UKZN's:	1	2	3	4	5
Official Facebook account?					

Official Twitter account?					
Information relating to UKZN is more accessible on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I enjoy a supportive university environment via UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I actively participate on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I am encouraged to share information on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
The hashtag campaigns (#UKZNMandelaDay, #UKZNGrad16), creates more awareness on issues when using UKZN's:	1	2	3	4	5
Official Facebook account?					

Official Twitter account?					
I engage more with other students, compared to emails and face to face interactions, on UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					

Engagement with UZKN on online social media:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is faster feedback from UKZN, when compared to emails and noticeboards, via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
There is improved communication between UZKN and me when using their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
There is a better connection between UZKN and me, when compared to face-to-face interactions, via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					

I am more aware of activities taking place at UKZN when using their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
I am more aware of campaigns at UKZN when using their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
The information shared by UKZN is more helpful to me when posted via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
There is more collaboration between UKZN and me via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
There is more interaction between UKZN and me when using their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					

I experience a better university life when using UKZN's:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
There is better engagement between UKZN and me via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					

Quality of engagement on online social media

	Poor	Mediocre	Fair	Good	Excellent
How would you evaluate the quality of the relationship between UKZN and you via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How would you evaluate the quality of the interaction between UKZN and you via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
How would you evaluate the quality of discussion	1	2	3	4	5

between UKZN and you via their:					
Official Facebook account?					
Official Twitter account?					
How would to evaluate the quality of engagement between UKZN and you via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					
	Sense of alienation	Un-supportive	Neutral	Supportive	Sense of belonging
What best represents the relationship between UKZN and you via their:	1	2	3	4	5
Official Facebook account?					
Official Twitter account?					

Unofficial UKZN accounts on online social media

Do you follow the unofficial UKZN online social media accounts:	Yes	No
<u>On Facebook:</u>		
UKZN confessions?		
UKZN TEST AND EXAM TIPS?		
UKZN Stolen PICS?		
UKZN PMB SRC 2013/2014/2015/2016?		
<u>On Twitter:</u>		

@UkznClassifieds?		
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Questions about these unofficial accounts

	Never	Once a month	Twice a month	Once a week	Daily
How frequently do you view the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter accounts?					
	Never				Very frequently
How frequently do you see posts on your timeline by the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently do you comment on these posts by the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently do you share these posts by the:	1	2	3	4	5

Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently do you share content you created with the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently do you participate in discussions on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently do you voice your opinion on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently do you see campaigns on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					

How frequently have you interacted with other students on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
How frequently have you looked for information on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am happy with the amount of information shared on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
I am happy with the discussions via the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					

I get adequate feedback from the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
I enjoy an active and collaborative learning experience via the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
Information relating to UKZN is more accessible on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
I enjoy a supportive university environment via the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
I actively participate on the:	1	2	3	4	5

Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
I am encouraged to share information on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
The hashtag campaigns (#feesmustfall and #UkznStudentsLivesMatter), creates more awareness on issues when using the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					
I engage more with other students, compared to emails and face to face interactions, on the:	1	2	3	4	5
Unofficial UKZN Facebook accounts?					
Unofficial UKZN Twitter account?					

Appendix B: Management's Interview Guide

Interview questions

Introduction

The interview will start with a general discussion around UKZN's mission and vision.

Specific points to discuss will relate to UKZN using the different online social media sites. This will look for a deeper understanding on the internal strategic role that online social media plays at UKZN which will help understand their strategic objectives for this platform.

The questions below will guide the interview.

1. General details of UKZN:

- a. Interviewee details (Name)

2. Online social media use

2.1 Can you discuss your managerial role relating to UKZN's online social media accounts?

Probing questions:

- How do you leverage the features of online social media for your job?
- How do you keep track of the staff that work on UKZN's online social media accounts?

2.2 Can you discuss UKZN's strategic objectives for the online social media platform?

Probing questions:

- Main objectives?
- Individual objectives for the different online accounts used?
- How does UKZN intend on achieving these objectives?

2.3 Can you please elaborate on the reporting needs for your job? What performance indicators are used?

2.4 In the UKZN strategic plan it is stated that the use of the online social media platform was to be more engaging with students and improve students' university life. Do you think this has been achieved?

3. Learning and growth perspective

3.1 Learning and growth focuses on intangible assets like the internal skills and capabilities of staff which support the value creating internal processes. This is used by organisations to learn and improve to achieve their mission and vision. Can you discuss the learning and growth initiatives at UKZN related to online social media?

Probing questions:

- Tools and technology used for your job?
- How is staff's skills and abilities related to online social media increased?

3.2 In your opinion, the use of online social media by UKZN will create a University of "what" on online social media?

4. Internal processes perspective

4.1 The internal business processes are key to how an organisation operates. Specifically, this study we will be assessing these processes related to online social media.

Questions:

- Can you discuss the internal processes that are supported by online social media?
- Can you discuss the policies implemented for UKZN's online social media accounts?
- Describe the governance and organisational structure that is established at UKZN?

4.2 Can you discuss the role that online social media plays with regards to risk management (business continuity planning and disaster risk management)?

5. Future use of online social media

5.1 Think about the current use and development of online social media at UKZN. In your opinion how do you see UKZN's use of online social media change in the future?

Probing questions:

- Change in organisational structure at UKZN?
- Change in staff per department using online social media?
- Change in processes of how to operate on online social media?

- Change in tools and technologies used?
- Change in evaluation needs?
- Change in platforms being used?

5.2 Do you have any comments or do you want to add anything more regarding the internal use of online social media at UKZN?

Appendix C: Staff's Interview Guide

Interview questions

Introduction

The interview will start with a general discussion around UKZN's mission and vision.

Specific points to discuss will relate to UKZN using the different online social media sites. This will look for a deeper understanding on the internal strategic role that online social media plays at UKZN which will help understand their strategic objectives for this platform.

The questions below will guide the interview.

1. General details of UKZN:

- a. Interviewee details (Name)

2. Online social media use

2.1. Think of how you use UKZN's online social media accounts. Can you describe what a typical week entails?

Probing questions:

- How frequently do you access these accounts?
- How do you keep track of your work?
- How do you use the features of online social media?

2.2 Can you discuss UKZN's strategic objectives for the online social media platform?

Probing questions:

- Main objectives?
- Individual objectives for the different online accounts used?
- How does UKZN intend on achieving these objectives?

2.3 Can you please elaborate on the reporting needs for your job? What performance indicators are used?

2.4 In the UKZN strategic plan it is stated that the use of the online social media platform was to be more engaging with students and improve students' university life. Do you think this has been achieved?

3. Learning and growth perspective

3.1 Learning and growth focuses on intangible assets like the internal skills and capabilities of staff which support the value creating internal processes. This is used by organisations to learn and improve to achieve their mission and vision. Can you discuss the learning and growth initiatives at UKZN related to online social media?

Probing questions:

- Tools and technologies used to monitor and manage the online social media accounts of UKZN?

3.2 In your opinion, the use of online social media by UKZN will create a University of “what” on online social media?

4. Internal processes perspective

4.1 The internal business processes are key to how an organisation operates. Specifically, this study we will be assessing these processes related to online social media.

Questions:

- Can you discuss the internal processes that are supported by online social media?
- Can you discuss the policies implemented for UKZN's online social media accounts?
- Describe the governance and organisational structure related to online social media that is established at UKZN?

5. Future use of online social media

5.1 Think about the current use and development of online social media at UKZN. In your opinion how do you see UKZN's use of online social media change in the future?

Probing questions:

- Change in organisational structure at UKZN?

- Change in staff per department using online social media?
- Change in processes of how to operate on online social media?
- Change in tools and technologies used?
- Change in evaluation needs?
- Change in platforms being used?

5.2 Do you have any comments or do you want to add anything more regarding the internal use of online social media at UKZN?

Appendix D: Ethical Clearance



29 September 2016

Mr Preshen Moodley (209516217)
School of Management, IT & Governance
Westville Campus

Dear Mr Moodley,

Protocol reference number: HSS/1536/016M

Project title: An analysis of the online social media strategy of the University of KwaZulu-Natal

Full Approval – Expedited Application

In response to your application received on 15 September 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



.....
Dr Shenuka Singh (Chair)

Appendix E: Gatekeeper's Letter



6 September 2016

Mr Preshern Moodley (SN 209516217)
School of Management, IT & Governance
College of Law and Management Studies
Westville Campus
UKZN
Email: 209516217@stu.ukzn.ac.za

Dear Mr Moodley

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"An analysis of the online social media strategy of the University of KwaZulu-Natal"

It is noted that you will be constituting your sample as follows:

- with a request for responses on the website. The questionnaire must be placed on the notice system <http://notices.ukzn.ac.za>. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to (govenderlog@ukzn.ac.za) or (ramkissoob@ukzn.ac.za).
- Handing out questionnaires and/or conducting interviews with members of staff who work on UKZN's social media accounts.

Please ensure that the following appears on your questionnaire/attached to your notice:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

Data collected must be treated with due confidentiality and anonymity.
You are not authorized to distribute the questionnaire to staff and students using Microsoft Outlook address book.

Yours sincerely

A handwritten signature in black ink, appearing to read 'S S Mokoena', is written over a horizontal line.

**MR S S MOKOENA
REGISTRAR**