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Social Media in Higher Education

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I hereby declare that this dissertation is my own work:

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Table of Contents

Abstract	5
Chapter 1	6
Introduction	6
Research Focus:	7
Research Background:	7
The Research context:	7
Research Question:	8
Research Objectives:	8
The Methodology	9
The research findings	10
The final chapter	10
Chapter 2	11
Literature Review	11
Origins of Social Media.	12
Social Media norms	13
Benefits of Social media in education	14
Personal Learning tools	14
Transitioning to college life & Well Being	16
Students Engagement:	19
Characteristics of first-generation students and Genera	ation Z21
Challenges of Social Media in Higher Education	23
Peer-to-Peer Platforms	23
Awareness and Boundaries:	24
Technology Affordance in Higher Education	25
Literature review summary	27
Chapter 3	30
The research methodology	30
The research question:	31
Researcher Positionality:	32
Ethics:	33
Philosophical orientations:	35
Social media platforms today:	36

Current issues regarding usage of social media:	38
Study to meet the objectives:	39
Method for identifying the sources:	39
The mixed methodology qualitative analysis process:	39
The methodology in practice:	42
Peer-reviewed papers:	44
The usage of business metrics:	45
Investigative routines for data collection using a Netnography	
approach:	
Simplify	48
Search	48
Scout	48
Select	48
Save	49
Qualitative Content Analysis:	50
Chapter 4	5 1
The Research Findings.	5 1
Findings and discussions using PESTEL analysis techniques	
Political:	5 5
Economic:	56
Social:	57
Technology:	58
Environment	59
Legal:	60
Findings and discussions using SWOT analysis techniques	62
Strengths:	63
Weaknesses:	63
Threats:	64
Opportunities:	64
Chapter 5	67
Conclusion, Discussion and Recommendations	67
The Conceptual Model:	68
Aligning themes to Maslow's Hierarchy of Needs	68
The research question revisited	71
Research objectives:	71

Page 4 of 92

R	Recommendations:	72
T	The conceptual model for HEI- Student social media engageme	ent73
	Step 1	74
	Step 2	75
	Step 3	76
	Step 4	77
	Step 5	78
	Step 6	78
S	Summary	80
F	Further Study	83
Iı	mplementation Advice:	84
Ap	pendices	85
В	Bibliography	85
T	Γable of Figures	89
L	List of research #Hashtags	90
R	Research Keywords & Themes	91

Abstract

The study explores whether higher education institutes strategic usage of social Media fosters a stronger relationship with students. Almost every higher educational institute uses social Media for numerous reasons. Research conducted in this study will examine the use of social media for the student experience, enabling students to grow social capital to bridge their student experience on a digital journey to professional social media platforms. Using this approach to engage students in a meaningful way creates a stronger relationship with alumni. The research has met the objectives by examining the use of social media in higher educational institutes and exploring the effectiveness of social media platforms regarding increasing student engagement.

The research is not concerned with social media as a pedagogical tool. While there are references to lecture halls, the overarching objective is used for student services reaching out to students using social media. The research has used a mixed methodology, using peer-reviewed papers and Netnography. The research findings are described using PESTLE and SWOT analysis. The theme of Maslow's hierarchy of needs came through in the research findings, and a conceptual model has been constructed around this theme.

The research concludes by offering implementation advice on the strategic usage of social media platforms in higher education and notes that further research is needed.

Chapter 1

Introduction

In over a decade, advances in digital media development have profoundly affected the way we communicate. Social media has empowered people in a way that has never been before. Social media's active use has already changed how we work and has changed how we interact as a society and is gradually changing our education structure. Social media is a term used to describe various networked technologies developed primarily for social use.

Many work practices changed with the pandemic of 2020-21 outbreak; social media platforms assisted work and education practices to continue incorporeally. Some HEIs transformed their curriculum into a digital format and engaged social media to allow students to connect to the institute.

There is significant academic interest in using social media within higher education; much of this research is based on social media's impact on the student experience(Gross, 2020). Higher education institutes cannot afford to lag as these platforms offer valuable insights into the student journey. Therefore, it is vital to determine how social media is blended into the student experience and their educational journey.

Some educators may be reluctant to use social media and prefer the traditional approach of using email. Social media is polarising because we all use it differently as individuals in our daily lives; similar polarising debates occur in the educational community (Stoller, 2017).

Research Focus:

The research question articulates the focus of the research; 'How can higher education institutes' strategic usage of social media foster a stronger relationship with students?'

The research examines social media usage in higher education and investigates how to create a stronger relationship with students using innovative social media practices.

With this, the research focuses on the strategic use of social media in fostering a stronger relationship with students. The research will examine the use of social media for the student experience.

Research Background:

Today's generation of students uses social media on mobile phones. Given social media's widespread popularity, it is essential to understand users' attitudes and behaviours toward socially networked platforms. Evaluating social media usage increases a greater understanding and can direct these technologies' effective positioning to build mutual value (Vaterlaus *et al.*, 2016).

The Research context:

As an employee for over twenty-four years within Irish higher education and monitoring developments in technical applications and having observed social media usage is pervasive amongst young people. Social Media is now a regular part of young adults' life. Considering the popularity of social media with young adults, now is an excellent time to research how it can help strengthen the relationship with students (Vaterlaus et al., 2016).

This research found that most higher education institutions in Ireland have no formalised social media policies and practices with the specific focus of creating a stronger relationship with students. Therefore, all objectives and tactics are informed by current strategic plans within education. Also, the terms higher education institutes and HEIs are used extensively throughout this study interchangeable.

The pandemic of 2020-21 highlights the need for higher education institutes to rethink the use of technologies that provide students with the support needed for success. Social media could be part of a solution to continued disruption and indefinite campus closure. Almost all HEIs examined in this research enabled continuity plans that responded to the

urgent need to reach students online. To advance the online student experience, this is an opportunity to rethink how to engage the students and foster a more substantial relationship (Grajek, 2020).

Research Question:

The research question: 'How can higher education institutes' strategic usage of social media foster a stronger relationship with students?'

Research Objectives:

- Examine the usage of social media in higher educational institutions.
- To explore how the effective usage of social media platforms can increase student engagement.

Mapping a digital journey for the student experience can assist HEIs to develop a stronger relationship with students and alumni.

An essential part will be critical thinking; with all things digital, information literacy is critical to getting students to think about where they are getting the information (Gross, 2020).

The term pedagogical affordance of social Media uses the appropriate technology to support learning, foster practical skills for social media usage, and create a better student experience.

The Literature Review

This literature review examines research advocating social media usage at an institute-wide level. There are various methodologies used in the reviewed papers.

The research papers advocate that social media can provide valuable social capital to students transitioning from home life and coming to higher education institutes. The peer-reviewed papers describe how social media can provide a means by which students can connect with like-minded students that share the same interests. Accordingly, social media is critical when considering connecting with students, given their high efficacy and increased social media usage. Today 95% of teenagers in the U.S. have mobile devices, and 45% are online constantly (Anderson and Jiang, 2018).

The Methodology

This chapter will outline the research question, the research positionality, and the ethics involved in the research. It will also include philosophical orientations. The context of the study will be explained along with the various social media platforms used today. The chapter outlines various social media platforms used today by generation z's and their nuances in their daily lives.

The sections will describe the current usage of social media. It will also describe how the research will meet the study's objectives. The final part of the chapter will describe the methodology used. A qualitative research strategy has been used in the study and is the most appropriate methodology for data collection that meets the research objectives.

The research used a mixed methodology. Desktop research for the peer-reviewed papers assisted with business metrics to help focus and direct the search using keywords. Netnography techniques were used only to observe social media platforms and then mixed business metrics and qualitative content analysis for describing the dataset. The essential unit of analysis are podcasts and YouTube© interviews. Netnography is a form of qualitative research seeking to understand the experiences reflected in social media practices (Kozinets, 2019).

This study will draw from the immersion journal's notes documenting the cultures, interviews, and conferences witnessed on social media over the last nine months.

The research findings

In this study, chapter 4, the research findings chapter will outline the benefits of employing social media technology within education and comprise of two sections. Section one is the PESTLE analysis that aligns with institutional interests in using social media. In section two, the SWOT analysis will outline the student's perspective. Both models are used for scaffolding in presenting the findings.

The final chapter

The final chapter summarises the findings. It will conclude and recommend how student services staff can engage with students using social media to create and sustain stronger relationships. It uses Maslow's theory to help construct the strategic, systemic graduated student journey.

The findings will answer the research question. 'How Can higher education institutes' strategic usage of social media foster a stronger relationship with students?'

It will also suggest objectives that assist HEIs in strategically using social media. It will give an illustration of the student experience using different social media platforms. The model will show the different stages of college life in a digital journey. It will describe an implementation plan for the theory and conclude with notes for further research arising from the study.

Chapter 2

Literature Review

Social Media's introduction and widespread use as an engagement tool in the early part of this millennium has evolved dramatically over the last decade. Today's younger generation is ever-increasingly living their life through a screen. This ubiquitous rise of social media has affected nearly every cohort of society in today's world.

Social Media is now challenging how higher education institutions support students as they progress through third-level education. No longer is the focus on a one-to-many broadcast but is now driven by users using many-to-many connectivity. This review aims to outline the key elements at play supporting students as they progress through third-level education using social media.

This study aims to fashion an archetypal plan of action to be used ethically to build a stronger relationship with students and answer the research question. 'How can higher education institutes' strategic usage of social media foster a stronger relationship with students?'

In the Irish higher education sector today, there are two issues of some concern facing higher education; the first is the pandemic COVID-19, and the second issue is that some HEIs are merging. Connecting with students using appropriate social media platforms has become more critical for all stakeholders in the current situation. Student services are at the coal face of sustaining relationships with students who may feel isolated because of distributed campuses. Student services will need to provide consistent support to students across the various campuses (Vincent, 2016).

Recent research on the outbreak of coronavirus 2019 (COVID-19) pandemic has focused on the ability of social media to convey a sense of unity and belonging by reaching broad audiences in a time of crisis. The authors state that social media are significant vehicles for spreading information, but social media can spread fake news and create panic in certain situations. Therefore, it is vital to be conscious that social media posts may be misleading and hyperbolic on issues of public concern (Wajahat Hussain, 2020).

Accordingly, individuals can use the flexibility and pervasiveness of social media to increase safety and belonging within communities to combat the threat. During times of crisis, urgent questions arise that require immediate responses. Different social media platforms can promote adaptive responses that create positive attitudes throughout a crisis. (Wajahat Hussain, 2020).

Origins of Social Media.

The history of social media starts with the founding of the Internet in the 1960s and decades later with hypertext development that linked documents together into the World Wide Web. The Internet is a worldwide network of interconnected computers that started in the 1960s when the U.S. Department of Defense launched the Advanced Research Project Agency Network and began to network the computers of the major universities in the U.S. CompuServe was the first commercial online internet service provider that offered multi-user text chat, bulletin boards and games. Two American universities started Usenet for an online social experiment as a distributed networked discussion system. Staff and students posted messages into categorised newsgroups; this provided a social experience and the origins of social media (Waite and Wheeler, 2020).

Currently, most internet users were consumers of information, and there were limited content creators. Internet use was seen as appropriate for higher education, as teachers, student services, and staff could generate content and distribute it to students. In 1989, hypertext development allowed documents to be linked. Later in 1993, the world's first browser Mosaic Netscape was launched and enabled the Internet to be assessed by the masses. These decades were the first age of electronic communications. This model adapted was one-to-many communication and is now referred to as internet 1.0. (Waite and Wheeler, 2020).

During the dot.com bubble, companies invested significant sums of money in internet technology; the bubble burst and swept away the hype generated by the venture capitalists. Thus, a new era started with Internet technology, and companies adapted to a new online model using more individualised content. This new strategy changed the business model producing user-generated content and graphics with a community focus. Today, more media companies are connected to the Internet, which is now referred to as web 2.0. These new forms of communication allowed users to gain audiences and were the first wave of social media (Waite and Wheeler, 2020).

Social Media norms

Social media platforms can cultivate healthy beliefs about higher education among incoming students and model positive social norms (Clark and Melancon, 2013). Social media can influence students' adjustment to the higher education institute and play an essential role in shaping their selfbeliefs and social norms. Findings from studies conducted on social media usage in HEIs presented in this literature indicate that social media positively fosters relationships in the HEIs (Clark and Melancon, 2013).

The research methodology for the above study was collected via an online survey of undergraduate and postgraduate students. Data collection yielded 240 usable questionnaires. The response rate was low, considering the HEIs have a student population of eleven thousand. The paper offers recommendations on the number of daily posts on each of the social media platforms. Students' low response rate suggests that it may be challenging to attract participants to these research questionnaires and could be problematic to recruit participants in an Irish study (Clark and Melancon, 2013).

Benefits of Social media in education

This research explores social media usage in higher education institutes and analyses ways HEIs can develop strategies to enhance both students and the institute's relationship.

This section of the literature review has three themes. These themes will provide a framework for reviewing social media usage in higher education.

- Personal Learning tools.
- Transitioning to college life and Well-Being.
- Students' Engagement.

Personal Learning tools

"I never teach my pupils; I only provide the conditions in which they can learn."

Albert Einstein 1879-1955

Personal learning is a framework of social media tools provided to learners enabling them to create, organise, and share content and gain competence and knowledge. The practice provides for collaboration with other students on class projects. A vital feature of personal learning is that the student develops an online identity where the personalised learning tool provides cues that prompt the student on what to share and what not to share, whom they choose to share, and how to merge formal and informal learning effectively (Manca, 2020)(Stoller, 2019).

These personal learning tools can change how HEIs engage with students using technology. Students are already familiar with and use Social Media platforms daily. These learning tools can serve as a framework for integrating formal and informal learning. The HEIs use of these platforms can foster self-regulated learning. Many papers advance the benefits that various social media platforms offer to higher education (Manca and Ranieri, 2016).

The paper examined the affordances of social media in higher education, outlined their appropriate use and acknowledged that social media could generate opportunities for all stakeholders. Using a different approach to social media could foster a stronger relationship between the students and the educational institution, increase social and academic learning, and grow self-efficacy (Manca and Ranieri, 2016).

Interestingly the study employed a different research methodology when reviewing personal learning environments. Dabbagh conducted a desktop

literature review, referring to 50 cited academic studies and the authors' previous research supporting the arguments. The study has not been empirically tested. The author acknowledges that more studies need to be conducted to consider students' self-efficacy and learning styles since personal learning environments are individual by design. Such studies could inform HEIs whether they can be a helpful learning tool (Dabbagh and Kitsantas, 2012).

(Manca, 2020) conducted a theoretical analysis of peer-reviewed papers, and the objective was to examine four social media platforms as learning tools (Manca, 2020). The selection process was focused on students with no prior knowledge of using social media for educational purposes; however, the students had used social media for socialising. The search was limited to the Web of Science and Scopus databases, two major academic databases. The search used four keywords and search criteria of 'English language' articles, with no year limitation—the keywords used in the search criteria were Instagram©, Snapchat©, Pinterest© and WhatsApp© (Manca, 2020).

Key findings concerning the platforms were to consider going beyond the mainstream or more iconic platforms such as Facebook© and look at the educational benefits of other platforms, not least because they are now surpassing the likes of Facebook© and Twitter© (Manca, 2020).

In the current climate concerning COVID 19, studies confirm the value social media platforms offer for communication, connectivity, and community building. Thus, social media usage maintains students' satisfaction and develops students socially. This study contends the value of effective social media usage for engagement and influencing a positive student experience (Sobaih, Hasanein and Elnasr, 2020).

These online learning environments can foster a better student experience allowing students to interact, collaborate and take responsibility for their learning. During lockdowns in higher education, these tools offer motivation and encourage self-directed learning (Ali, 2020).

Transitioning to college life & Well Being

The need for safety and well-being is essential in choosing appropriate social media platforms where students can communicate and voice their opinions. Dabbagh and Kitsantas noted that facilitating an appropriate social media platform for use inside and outside the lecture halls creates excellent learning opportunities leading to increased positive outcomes and significant benefits around academic and student services (Dabbagh and Kitsantas, 2012).

Today, social media platforms' positive sides follow trends that efficiently broadcast awareness on society's critical issues around ethical and safety concerns. Social Media constitutes an essential background in which students live their daily lives. Conversely, people that encounter negative emotions react respectively. The misuse of social media platforms could set the seed for the appropriate legal protections for online safety (Stoller, 2013).

The level to which higher education students use social media to connect to new peers based on shared interest is researched in the U.S When students come to college, they face transition, new study environments, new academic expectations, and new friendships. Social media can help bridge students expectations (Griffin, 2015).

Another paper identified many factors which influence student's adaptation to social media. Students experiencing the transition to college life may struggle, feel isolated, suffer from anxiety, and are homesick. The paper is a narrative on a student who felt disconnected for numerous reasons and how the HEIs pedagogical affordance assisted student retention using social media (Vincent, 2016).

Students entering this new environment and lifestyle are looking to identify with peers for inclusion and need of belonging. Unfortunately, many students fail to develop adequate social skills or social capital to bridge this gap. In HEIs, where the institute staff engage with and assist students with social media, helping students gain a sense of inclusion, belonging can enjoy the student experience and achieve higher social and academic skills. The study demonstrates how social media usage enables a richer student experience (Vincent, 2016).

All returning students may experience disconnection from their HEIs and may benefit from transitioning initiatives using social media to kick start the students' experience (Vincent, 2016)

In higher education, with COVID-19 or colleges with distributed campuses, student counsellors and student services may no longer be able to communicate or interact face-to-face with students. With this, student services staff need to remain contemporary to serve their students' needs best. (Vincent, 2016) explores companionship, belonging and

connections forged through social media usage in improving student social skills lending to high academic performance and increased retention rate for the higher education institute (Vincent, 2016).

The disjointed usage of the diverse range of social media platforms across higher education institutions can lead to students not engaging in the appropriate platform. (Hurst, 2018) experienced the limitations associated with specific platforms, which leads to frustration; if social Media is employed strategically, these issues can be averted (Hurst, 2018)

Social media usage extends certain psychological and emotional comforts; it helps strengthen friendship bonds, it can provide a medium for information disclosures, such as the person's adventurous nature, online code and morals, and so forth (Prakash Yadav and Rai, 2017). Understanding the role social media plays in individual life transitions like emotions and ethical issues is essential. (Prakash Yadav and Rai, 2017).

Vincent (2018) states that higher education, principally, is a setting where social Media is gaining attention; many students struggle to grow the appropriate skill level to reach self-efficacy and self-actualisation to engage social media and contribute to social conversations. Social media platforms include features that students can connect with to develop their social media profile, enabling them to share posts based on their personalised profile. The study only focused on counselling staffs' use of social media to help students achieve their higher education needs. (Vincent, 2016).

The practice of engaging social media allowing students to communicate and share the content of interest with like-minded students. These platforms allow students to join groups organised around their interests and geographical location, each with its forum, event calendar, and member directory. The initiative was promoted to students by email sent during the summer, with subsequent emails promoting sharing information. The site's features were designed to facilitate interaction and disseminate helpful information to students before arrival on campus. These initiatives assisted students in communicating with each other in a safe environment and help establish a sense of belonging. (Deandrea et al., 2012).

Thus, based on the literature and studies reviewed, social media platforms have been shown to be effective in connecting students, thus creating satisfaction and affiliation with their college, and contributing to bridging their social capital. Thus fostering a stronger relationship with their educational institute, with some HEIs developing social media to reach out to graduate students (Deandrea *et al.*, 2012).

A recent study regarding the extent to which HEIs have adopted social media's formal practice for communication during covid19 disclosed that students' usage of social media promoted a more effective and sustained

Page 18 of 92

usage for college communication. However, there were variances regarding social media practice for supporting students (Sobaih, Hasanein and Elnasr, 2020).

Students Engagement:

Social Media is critical when considering connecting with students; given their high efficacy level and noting that social media usage has increased, many adults use FaceBook© and YouTube©. In contrast, the use of Instagram©, Snapchat and TikTok are prevalent among generation z (Social Media Use in 2021 | Pew Research Center, 2021).

The author describes engagement as conceptual as to the time and effort students invest in educational activities linked to desired college outcomes. It was noted that academic and co-curricular engagement are potent forces in student psychosocial development and academic success. These activities are essential to the student experience, and these activities can lead to self-esteem and a richer student experience (Clark and Melancon, 2013)(Junco, Heiberger and Loken, 2011).

Students' interest in college life will have increased due to building friendships. Policies fostering relationship building with social media could see students graduating from their HEIs using a professional social media platform for networking and alumni. These policies can attract postgraduates henceforward and allow students to share their knowledge and interests and become more creative (Clark and Melancon, 2013).

In another peer-reviewed paper, micro-blogging was used inside and outside the lecture halls. Again, this benefited students' engagement across the campus and academic grades (Junco, Heiberger and Loken, 2011). The paper examined a cohort of students for one semester to determine if microblogging affects student engagement and grades. Using two focus groups, one experimental and another called the control group. The study had the experimental group use Twitter® for various types of co-curricular engagements. As Twitter® is a microblogging platform, it is more amenable to ongoing engagement. Some students dropped out of the research. A limitation of the study is the biased sample of students, and considering the student population in Pennsylvania State University, the study was narrow (Burlingame and Dowhower, 2009).

Improvement in student retention was noted across all cohorts. The research provided the author with evidence that social media can be used academically and facilitate more active participation. The investigation examined the link between educationally relevant social media usage and student engagement. One of the research questions carries the same theme as this research study.

'What effect does encouraging the use of Twitter for educationally relevant purposes have on student engagement?'

(Junco, Heiberger and Loken, 2011)

Neither student group used Twitter© before; both groups belong to generation z. All students were familiar with learning management software and were excused from using such for participating in the study and received cash incentives. This study also included student grades that will not be included in this review. The experimental group of students were taught the basics of using Twitter, using hashtags and reply to posts and showing how to enable privacy settings (Junco, Heiberger and Loken, 2011).

Social media posts were used for book reviews, class reminders, personal support and organising study groups. The students used Twitter© feeds to coordinate all of those as mentioned above. While there appear to be many limitations to the study, the recurring and overall theme is that social media's strategic usage can increase student engagement and retention (Junco, Heiberger and Loken, 2011).

The author stated that more research is needed in this field because of the continuing use of microblogging in higher education. Another example of careful consideration given to the use of social media can lead to better outcomes for all stakeholders. Another essential point is that the paper indicates a limitation on the type of students that participated in the study; all the students were eager. This is the same finding in the U.K. article (Hurst, 2018). Education institutes that assist students with social media increase students' opportunities to engage more with their institute and have the desired outcome (Junco, Heiberger and Loken, 2011).

A recent study during the pandemic measured the effectiveness of social Media for assisting students with their transition to higher education. The study concurs with (Vincent, 2016) that social media stratification is an effective technique for improving students engagement and, in turn, may lead to higher retention rates (Sobaih, Hasanein and Elnasr, 2020).

Another similar study in India explored the impact of social media in reaching and retaining students in HE during the pandemic. It found that students started using different social media platforms for college purposes. So, allowing for the development of student communities based on shared experiences and social media facilitated discussion on current issues in an increasingly socially isolated world. With this, to address retention rates, the study recommends using social media to interact with students beyond the limitations of the lectures (Dutta, 2020).

Characteristics of first-generation students and Generation Z

"Generation Z has arrived-and they're very different from millennials."

Denise Villa, Co-Founder of the Center for Generational Kinetics

Generation Z is the first generation to have the Internet readily available. This demographic grouping born between the 1990s and 2000s is tech-savvy, and swiping, tapping, and scrolling is second nature. They have been exposed to technology in their upbringing and generally are from countries where access to information and communication technology is easily accessible (Prakash Yadav and Rai, 2017).

This cohort has witnessed the rapid change of computer technology, infusing them with flexibility towards life transitions. (Wali and Andy-Wali, 2018)(Armstrong, Opresnik and Kotler, 2016). Social media platforms have created new ways to communicate and engage with generation z students in distinct ways, both inside and outside the lecture hall. Thus, it is essential to understand the impact higher education institutions can make using social media in creating valuable initiatives.

Generation Z are digital natives, naturally comfortable with technology, and interacting with social media plays an essential role in their daily lives. This generation has a strong propensity for online communication, and they prefer to participate and connect to technology using their mobile devices. This behaviour helps this generation break out from their emotional and psychological struggles offline.

With more and more people coming to and engaging with social media, it may be time to ask whether HEIs should strategically use social media to foster a stronger relationship with students. Today the current terrain for social Media offers many ways of communication. The value proposition of using such tools is that generation z are already there (Prakash Yadav and Rai, 2017).

Generation Z belongs to the college student demography with tendencies to prefer online communication and interact with people they know and happy to provide feedback and comments about inclusion issues (Prakash Yadav and Rai, 2017).

Generation z tends to use Peer-to-peer differently in their interpersonal relationships than young adults with career or educational aspirations. Peer-to-peer is an "escape from the public one-to-many communication that is the default on Facebook®" and can facilitate private communication. It can be a step in the relational process that enhances young adults'

Page 22 of 92

relationships and is why this type of social media communication attracts a younger cohort (Vaterlaus et al., 2016).

Challenges of Social Media in Higher Education

This part of the literature review explores the present challenges of using social media within higher education and are discussed under three themes:

- Peer-to-peer Platforms.
- Awareness and Boundaries.
- Technology Acceptances.

Peer-to-Peer Platforms

The growth of social media presents a set of challenges for college practice. Hurst examines a framework for the appropriate usage of peer-to-peer social media to facilitate engagement and promote the contextualisation of undergraduate chemistry laboratory demonstrations to students (Hurst, 2018).

A social media group account was established whereby students could follow the account by viewing images and video updates. The students follow posts about the contextualisation of their course, the practical work involved, its research, and a chemist's life. The author hoped that this would encourage students to become excited about chemistry and provide the cohort with a view into the world of science research, which many students will subsequently partake in at a later stage in their lives (Hurst, 2018).

This study was a pilot project and had a limitation placed on the social media platform's capabilities. Because the project was voluntary, the profile of students and staff who engaged with the tool may skew the study's findings in that students that volunteered were willing to participate for engagement with college events (Hurst, 2018).

Hurst cautions on peer-to-peer social media platforms' limitations, noting that images and videos shared disappear after twenty-four hours, which frustrated instructors and students. Furthermore, a suggestion is that students require knowledge of the platform features, so the class posts would not impinge on their personal use of the social media platform. One recommendation is to create a student account distinct from their private account for academic purposes only. (Hurst, 2018).

The research compares to the Junco paper; the research methodology is similar. Each study selected science students and used social media inside and outside the classroom. However, the critical difference, Hurst used ephemeral social media, which for his use caused issues (Hurst,

2018). SnapChat© is ephemeral social media; the feature allows content to disappear and is suitable for transitory communication.

Another study on SnapChat© found that some social media peer-to-peer platforms have connotations in the press as a platform for sexting. However, European young adults send funny messages of themselves related to what they are currently doing. The paper outlines the different uses of peer-to-peer and how it differs depending on the relationship (Vaterlaus et al., 2016).

Careful consideration is needed to engage students on social media. Choosing the right platform will create a positive outcome for all stakeholders. Ephemeral social media is helpful for students asking transitory questions.

Awareness and Boundaries:

Vaterlaus explored the peer-to-peer behaviours of young adult interpersonal relationships related to Snapchat©. In this exploratory study of young adults' interpersonal relationships' behaviours, the methodology used was focus groups. These focus groups tend to work better with a small number of people, and there may be a variance between what participants say and what they do. The introvert may lose their voice; the group leader may affect what is said. If the group is a small cohort, the findings cannot be generalised (Vaterlaus et al., 2016).

The study outlined the appropriate communication sequence using peer-to-peer platforms for a social relationship or to assist a romantic relationship to develop. Violating these sequences of communication could inhibit the relationship (Vaterlaus *et al.*, 2016).

A new study responding to COVID-19 concerns highlighted that opportunities need to be taken, which allow HEIs to foster an appropriate practice of social media for communication. A policy needs to be established. This similar concern was conveyed by (Hurst, 2018). For the continuous usage of social media, the security of all stakeholders' accounts is a genuine concern. Students may be using personal social media accounts for academic content; HEIs need to provide online training and workshops that ensure the appropriate usage of social media (Sobaih, Hasanein and Elnasr, 2020).

These policies need to promote positive social media usage for formal communication across the HEI. In addition, the policy should promote the institutes' values and offer guidance that can foster a stronger relationship with students. This policy needs to be published on a public website with feedback to be acknowledged. One such policy could be peer-assisted learning for social media (Sobaih, Hasanein and Elnasr, 2020).

Technology Affordance in Higher Education

"Our future success is directly proportional to our ability to understand, adopt and integrate new technology into our work."

Sukant Ratnakar, Author

Higher education institutes using new technology to engage with the students is not a new phenomenon; France was engaging digitally with students in the 1990s. In Europe, the French-owned Minitel was introduced, which started the internationalisation of online services. Minitel allowed users to create and distribute content on different topics. In addition, French universities started to coordinate student registration, course delivery and other services giving students access to help from teachers (Cats-Baril, 1992).

The term pedagogical/technology affordance of social media is the use of appropriate technology to support learning, foster the development of practical skills for social media use, and create a better learning experience for the students. The term is becoming the holy grail of education technology. Higher education is interested in identifying features of social media platforms that add value to the learning experience. The authors' emphasis on ICT tools was asking not what the tool can do but what their students can do with the tool? (Burden and Atkinson, 2008).

The author mentions that further research could include education-specific databases, google scholar, and other sources, including non-English languages. It concluded that additional research on social media platforms is needed to learn the value social media have across different geographical areas and provide context for their value in formal and informal learning settings (Manca, 2020).

A typical marketing theme higher educational institutions fashion is a student-centred narrative. However, connecting with students through the practical use of social media platforms can advance student institution relationships. Accordingly, the study demonstrates how strategic social media could bridge social skills for academic advancement (Vincent, 2016).

In Clark's (2013) research, the higher education institute had nine different social media platforms available to students. The research is divided into three components: relationship satisfaction, trust, and commitment. One fundamental interest is the connection between relationship quality and social media within the context of higher education. An important conclusion was drawn that social media has a positive role in fostering relationships between students and HEIs but needs senior management support; this may allow further support across the whole of HEI. According to the author, the relationship between students and their HEIs

is strengthened by students accessing valuable resources via HEIs social media sites. Furthermore, student engagement with these resources prompts a sense of commitment to return good faith behaviours, which leads to stronger relationships with their higher education institute (Clark and Melancon, 2013).

Several papers report the positive affordance of social media. However, Manca and Ranieri, 2016 raises the need to be aware of the boundaries between the classroom and social media openness. Manca and Ranieri also conducted several surveys, which indicated that despite the widespread use of social media among the student cohort, HEI staff are reluctant to adopt these teaching tools. The reasons can be cultural, pedagogical, and institutional policies. Without a rigorous social media institute-wide policy, the traditional power structures may be subverted, leading to unforeseen consequences (Manca and Ranieri, 2016).

Against the background of COVID-19, many HEIs responded with incorporeal lectures. As COVID-19 has made the future more unpredictable, HE now needs flexible and resilient education systems. New research reveals that staff readiness and student accessibility play vital roles in integrated learning. In a lockdown, HEIs should use technology and technological devices that enhance learning (Ali, 2020).

Accordingly, most HEIs have implemented online learning with the necessary tools, which has resulted in less disruption. However, the findings include that HEIs may need to revisit their curriculum and offer students the skillset to use ICT to engage more effectively with their HEI (Ali, 2020).

Literature review summary

This literature review documents significant evidence from previous studies, which all point to the ability of social media to assist HEIs to perform an active role in helping students communicate and help foster a stronger student and higher education institution relationship.

There are various research methodologies used in the reviewed papers. Higher education can reach out to students using social media who feel disconnected from college life and help assuage issues with transition to college life.

Many studies have focused on students' social media usage in higher education, and there are many factors at play in recommending their affordance. Some social media platforms can support instant messaging in crisis management for the weather, security, and health alerts. These social media platforms can be integrated with the institute's website.

Micro-blogging allows discussion on shared interests and alerts for upcoming events about college life that provide a richer student experience. Creating user group message boards allows staff to communicate directly to individuals or groups using effective communication channels (Junco, Heiberger and Loken, 2011).

Students learn to demonstrate the practical steps in the laboratory and college, providing insights into research and life as an academic in chemistry. Social media can aid the accessibility of such interactions by facilitating facile communication between users. In addition, social media affords students the skillset and technology to share their knowledge and contextualise subject theory in the real world, giving them a sense of self-esteem (Hurst, 2018).

"Usually, the people who get the most upset about any predictions about the death of email are the email marketers, the ones still relying on this form of communication to reach young people. They know the entire field is dying, that a 20-year-old is about as likely to buy a luxury car tomorrow or dine at a supper club as read an email from a stranger filled with promotional content. If they don't know it's dying, they're not paying attention."

(It's 2018 and Email is Already Dead. Here's Who Zapped It Into Extinction | Inc.com)

The arrival of Web 2.0 and all it encompasses allows for the argument "email is dead". Generation Z were born after email was made widely available. The cohort may not read email like older generations. With widespread marketing campaigns using email for sales promotion, it may have made it less attractive to younger cohorts who prefer social media (It's 2018 and Email is Already Dead. Here's Who Zapped It Into Extinction | Inc.com, no date).

The social web helped coin the phrase Web 2.0, including interactive websites and all social media platforms. Social media platforms offer higher education many uses and are a valuable engagement tool; their potential is vast and understated. Many of the social media platforms rereviewed offer an effective means of communication. Higher education institutes can engage social media in their marketing efforts, teaching, and student services.

Social Media allows students to build their own social networks and develop professional networks supporting career advancement and enriching their experience. The strategic usage of social Media assists students to construct all of these concepts and digital identities (Stoller, 2019).

The reviewed papers indicate that HEIs can use these tools for recruitment, retention, marketing, and outreach by integrating social media into the higher education strategy. The institution needs to manage social media with the appropriate resources (Gross, 2020).

Social media development reflects how the students communicate and bring both parties up to date in the conversation. Social media can help advance students' information technology skills and be a valuable tool for distance learning. Social media can create pathways for higher education institutions to develop alumni services. When trying to reach a target audience, Students services staff could consider how they use social media (Vaterlaus et al., 2016).

It is essential to go beyond the leading social media platform such as Facebook© and Twitter© and evaluate the pedagogical affordances of other emerging social media platforms for use in higher education (Manca and Ranieri, 2016).

Because of the growth of the social media landscape with the younger cohort, HEIs should consider these innovative educational tactics. Higher education institutes should consider social media's best use, their features, their nuances, and how they can influence current and prospective students both within and outside the classroom. Further research is needed to investigate how their popularity in various geographical areas may be relevant in higher Education (Manca and Ranieri, 2016).

There are numerous challenges at the Institute-wide and department level in the effective use of social media. First, the institute needs to afford adequate resources for its use. Appropriate resources will significantly influence the success of social media within or outside the classroom in higher education. The literature suggests that institutes may strengthen student retention by strategically targeting social media by fostering a closer student relationship.

Students are very good at communicating their values and behaviours on social media. Higher education Institutes can have a role and should take the opportunity to help students develop necessary skills in creating content and using platforms that bridge higher education learning with their interests and improve their social capital.

Summarising the debates, reports and conclusions of previous studies reviewed in the literature reveals significant support for social media as an instrument for creating stronger relationships. These findings indicate that social media can create a stronger relationship between HEIs and students.

There are some initiatives in Irish HEIs using social media in the firstyear student orientation in the residence halls, and some research is needed on their effectiveness.

Chapter 3

The research methodology

This research aims to explore the strategic usage of social media to determine how HEIs can use it to foster a stronger relationship with their students. Practical usage of social media takes time and considerable effort. Many HEIs have separate departmental social media accounts; some are infrequently updated while others are inactive. This research aims to deliberate on how educational institutes could critically rethink approaches to engaging students through social media, and it will examine the nature of engagement that promotes collaboration with students and student services. The potential audience is student services staff who create social media posts that reach out and advise students.

While there is a substantial volume of research conducted on social media usage inside lecture halls, as noted in the peer-reviewed paper (Hurst, 2018), this research will focus on social media usage outside lecture halls. Thus, this study has used a mixed methodology to probe deeper into research currently in the field.

The research question:

The literature review indicated that there is a real advantage for all stakeholders engaging with social media. Therefore, due to the pace of change and growth of social media platforms, HEIs may need to increase their understanding and gain insights into their contextual and nuanced practices.

Accordingly, the following research question has been developed to focus this study: 'How can higher education institutes strategic usage of social media foster a stronger relationship with students?'

Researcher Positionality:

The researcher is working in higher education for the last 24 years as a technical officer in computing services. This role involves daily contact with student services staff and students in providing various aspects of computing services. Over the years, the researcher has gained an indepth understanding of the related field.

Accordingly, the researcher will endeavour to ensure, through the mixed research methodology, that no conflicts of interest have an impact on the research. Any insider bias or potential subjective interpretation will be mitigated by employing a robust mixed methodological and in-depth review of the data collected.

Consequently, the mixed methodology approach has employed both qualitative and quantitative datasets. The quantitative approach used the analytics software within the Mendeley platform to determine the optimum selection of literature and documents for the literature review and journal and document analysis. The metrics in this software guided the selection of the social media and podcast samples for qualitative analysis.

The qualitative analysis began with a systematic step by step process of sample selection and data immersion. This systematic qualitative analysis was guided by the Netnographic approach. However, the researcher did not use netnography as a methodology for this research; it was only used to guide the systematic approach to the social media dataset. Once the data was gathered, a qualitative content analysis of the data was undertaken.

Thus, this comprehensive qualitative content analysis ensured that any potential bias or subjective interpretation of the data had been minimised.

Ethics:

A thorough consideration of the ethical implications of the research was undertaken.

The first step involved in the conduct of this study was the process of ethical approval. This part required the researcher to fully disclose the type of research undertaken and the methodology employed herein. The disclosure submitted satisfied the Galway Mayo Institute of Technology, Mayo campus ethics committee.

The dataset used is harvested from open sources; this has mitigated against any potential ethical concerns regarding data privacy, as all data was freely available on social media and the Internet. In addition, all online interactions were accessible via public forums. Therefore, no express permission was required from participants.

All findings were documented in an immersion journal, which is an integral part of the mixed methodology. This journal has documented deep engagement, which directed the researcher to read and listen to social media articles, discerning and absorbing a great deal of social media culture. In addition, the study allowed the researcher to hang out on particular social media platforms, sometimes meeting the same influencers repeatedly.

The research has rigorously followed the General Data Protection Regulation that governs data management within Ireland and the European Community. Furthermore, there are no vulnerable groups used or referred to in any aspect of the research.

Accordingly, throughout the study, the researcher has endeavoured to remain detached from the social media posts that were followed. The ethical statement submitted detailed all research to be observational.

The following diagram illustrates the approach to data collection, which is followed in Netnography. Though the researcher did, in fact, use the content analysis methodology to analyse the data, the researcher was guided by the Netnography approach to ethics and sampling. So, the diagram below illustrates the researcher's pathway to ensure the research approach was conducted robustly and ethically.



Figure 3-3-1Ethical roadmap (Kozinets, 2019)

Philosophical orientations:

Epistemology is the theory of knowledge, specifically concerning research methodologies, validity and scope, and the difference between justification and opinion (Biggam, 2015). Qualitative research's philosophical roots are constructivism and interpretivism and can provide unique contributions to human-centred research (Biggam, 2015). These are the philosophies that guide the study. The researcher did use a novel mixed-methods approach. Data analytics and social media statistics guided the selection of samples to review, but a qualitative content analysis approach was employed thereafter. The figure above illustrates the ethical processes (Kozinets, 2019).

Qualitative research entails looking at the phenomenon or events from the subject's perspective. The researchers' philosophical aim is to understand, describe and discover meaning and generate theory about the subject. There is a rigorous and widely recognised design method of data sampling, data gathering, and analysis and validation with qualitative research. The data collection instrumentation will be the researcher immersing themselves in the dataset extracted from social media platforms.

Essential to the research objective's is the word explore, which implies an in-depth exploratory study on current practices within the educational sector. The overriding research strategy utilises two different data collection approaches consistently and logically, thus ensuring that the research question is successfully addressed - data collection instruments are peer-reviewed papers and observations made on social media.

Data metrics informed the sampling process and determined the sample of peer-reviewed papers and social media posts examined, with a detailed content analysis subsequently undertaken. Accordingly, the dataset narratives have been explored objectively in order to minimise any bias.

Social media platforms today:

In this section, today's popular social media platforms, as investigated by the researcher, are briefly described to provide context.

In 2005, one company led the first Internet content changes by introducing a video sharing platform. YouTube© is blogging or 'vlogging' audience-focused media that allows users to upload videos and share these videos with other users. YouTube© allows registered user's share, rate and subscribe to video channels. Interaction on this platform takes place through the comments section. In the U.S., 73% of adults are YouTube© users (Pew Research Center, 2019).

Twitter© (Twitter, 2021) started in 2006 as a microblog devoted to a global community answering one question: 'What are you doing?' On Twitter©, users post or tweet and 'retweet' an assortment of posts and images. Twitter© users can follow others on the network to receive their tweets. Two features of this network are 'following' and 'trending'. Trending topics are prefixed with a hashtag symbol #, 22% of adults in the U.S. are using Twitter© (Pew Research Center, 2019).

Facebook® (Facebook, 2021) started in 2004 when students at Harvard University launched it as a student website enabling students to connect, share content and meet new people. In addition to creating a personal profile, Facebook® allows users to easily create and manage pages for events, activities, and interests. Companies and individuals can post, discuss and organise content around topics and themes. Facebook® also offers messaging, chat and video chat for synchronous communication and integrates effortlessly into mobile phone messages. It is common for event organisers such as universities to create Facebook® pages to increase brand awareness and gather insights and analytics from Facebook campaigns. Facebook has defined the social media industry and advanced online sociality. Around seven in ten adults use Facebook® (Pew Research Center, 2019)

Instagram© (Instagram, 2021) is another essential social media platform targeted at a younger cohort. Instagram is a mobile phone pictorial site constructed on communicating and interacting through photographs. Users upload photographs and videos to the platform; the posts are classified with hashtags, comments, and location information. The posts can be shared publicly or only with followers. With a market share of 37% of adults in the U.S., generation z are using the platform. (Pew Research Center, 2019).

Instagram© posts allow users two ways to share content, either via their feed or story. Feed content stays forever and is an excellent way to appeal to new users such as prospective students. Story content is fleeting and a great way to share unofficial content with followers.

LinkedIn©, launched in 2002, is a professional business and employment platform. LinkedIn© is centred on the user's work experience and professional qualifications. This platform offers users the opportunity to like, comment, share and message other users.

Snapchat© (Snapchat, 2021), launched in 2011, used by generation z, is another visual messaging social media used on mobile phones. Snapchat offers ephemeral content called 'snaps' that are only available for viewing for a short time before becoming inaccessible. Second, it has stories in chronological order presented using augmented reality using entertaining avatars in different situations. These snaps replace text messaging, allowing users to send inconsequential images with a message.

Current issues regarding usage of social media:

The critical argument is whether HEIs and students will benefit from reaching out to students and engaging them on social media, using technology students are familiar with and use daily. The widespread usage of social media provides substantial opportunities to enable connections. Students are found to adapt to various social media platforms despite social media's fungible nature.

One issue is the lack of institute-wide strategies for social media usage in communicating with students (Gross, 2020).

According to the literature, some HEIs are using individual or departmental information silos. These information silos need to be aligned with the strategic plan for the social media of the institute. They should be using carefully curated data crafted by social media professionals (Gross and Meriwether, 2016).

Social media strategies need to be appropriately resourced in finance and human resources (Gross, 2020). Without a strategy, most social media posts today are just shouting out on the Internet.

An additional and present-day issue is fake news on social media; if higher education engages students using social media, students need to know if the information is coming from a reliable source. Numerous television news stations report on fake news every day. According to new research, Facebook© spreads fake news faster than any other social website (Travers, 2020).

Data analytics is another current and genuine concern in social media usage. There are numerous news articles on the usage and misuse of data analytics that each platform produces. In recent years, in the 2016 U.S. Presidential election, Cambridge Analytica exploited social media data and users' goodwill, bringing social media research and ethics into the spotlight. These are concerns and are subject to GDPR legislation. However, this goes beyond the scope of this study but could form an interesting topic for future research. (What is social media analytics? / IBM).

Nonetheless, critical thinking through social media platforms can help overcome fake news stories within HE and improve their effectiveness in promoting well-being and safety (Travers, 2020). According to the new research, student safety and well-being could be essential issues when all students return to campus post covid (Grajek, 2020).

Study to meet the objectives:

Social media has dramatically progressed over the last number of years to the phenomenon that it is today. The origins of social media are in higher education. The first use of social media allowed students to come together using technology (Cats-Baril, 1992).

By exploring current social media practices within higher education, the research will seek knowledge gaps to construct a theory. This theory will describe how HEIs can foster a stronger relationship with students using social media and strengthen engagement with students outside the lecture halls. The premise of the theory is to produce a conceptual model to enhance the student experience.

Method for identifying the sources:

Research within social media is increasing, albeit fragmented and across multi-disciplinary fields, making it challenging to be at the forefront and evaluate this field's vast amount of evidence.

A mixed methodology approach using qualitative content analysis provides flexibility yet permits theory to evolve whilst being disciplined in design. The research goal is to explore and identify themes and patterns and gain insights to answer the research question.

The mixed methodology qualitative analysis process:

In implementing the mixed methodology, a qualitative analysis process four steps were involved.

- 1. Data collection uses Netnography selection criteria assisted with data analytics.
- 2. Netnography principles were employed to observe and describe the dataset.
- 3. Grouping keywords and emerging themes assisted with social media listening tools and business metrics to quantity.
- 4. Content analysis of the dataset.

The graph below is an illustration of the mixed methodology employed in the study. In "Detecting customers knowledge from social media big data: toward an integrated methodological framework based on

netnography and business analytics" in the research study by (Del Vecchio et al., 2020), a mixed methodology was employed similar to the one in this study. Del Vecchio et al.(2020) combined data analytics with a qualitative approach to study how big data analytics and Netnography are relevant for studying customer relationship management development. The mixed methodology provides a deeper understanding of emergent dynamics, which helps capture and examine online relationships and behaviours within social media communities (Del Vecchio et al., 2020).

The Mixed Methodology / Qualitative Analysis Process

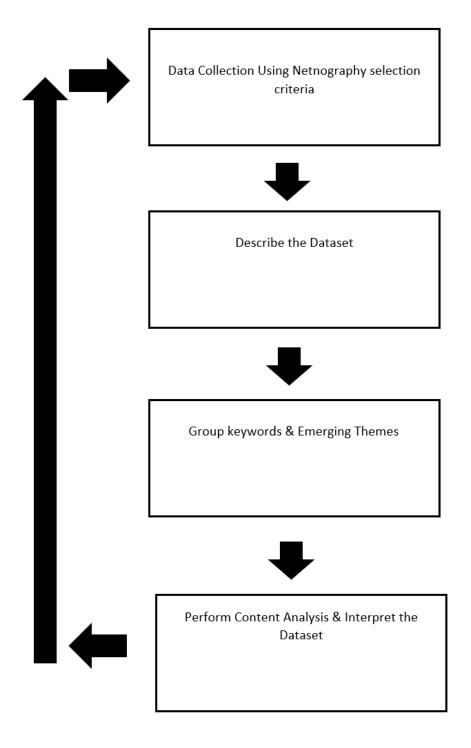


Figure 3-3-2 Mixed methodologies a qualitative Analysis Process (Biggam, 2015)

The first step in the qualitative analysis process is data collection which uses a pre-defined selection criterion. The method employed is aligned with the approach used in Netnographic studies.

The next step is describing the dataset – this stage discovers themes using keywords. Subsequent, the process continued the usage of business metrics to quantify the emerging themes and keywords. The final stage is a content analysis that interprets the immersion journal the research dataset. The researcher will continually revisit to update the immersion journal.

Content analysis will assist in looking at how past research within a selected field has progressed over time, and so it seeks to identify and understand all relevant peer-reviewed papers and understand their value concerning the research question and its objectives (Snyder, 2019).

The content analysis contributes to the research because it can help detect themes and common issues shared within a specific discipline and make sense of the knowledge available within the dataset. In addition, adopting this approach helps to identify knowledge gaps within the literature and the social media post. (Snyder, 2019).

These steps demonstrate how integrating analytics with Netnography can support the research objectives and provide insights that assist in answering a research question from openly available data (Del Vecchio et al., 2020).

The methodology in practice:

The first stage of the methodology was the desktop research of peer-reviewed papers. The next stage was to identify papers that aligned with the research objectives. This stage used Google Scholar© with business metrics/PlumX© to find articles using keywords to assist the research objectives. Business metrics, PlumX, are embedded into the Mendeley© library, the research management tool. Business metrics assisted with uncovering themes in the literature review and were the determinant drivers for the searching and selecting data for the next stage.

When the sources were discovered, Netnography techniques were used to observe the various social media platforms. In Netnography, investigative data operations offer an organised method to conduct search processes, including websites and podcasts, that replace field notes in ethnography (Kozinets, 2019).

However, the difficulty which prevented the employment of the complete netnography research methodology for this research study was that the selection criteria for netnography research did not entirely fit the research objectives. In particular, the interaction between the participants was infrequent. Therefore, as the selection criteria did not meet the requirements for an in-depth Netnographic study, it was decided to use a content analysis approach to review the data collected. Nevertheless, the Netnographic approach informed sample selection, and the mixed method assisted in the research design of this study, business metrics also informed sample selection. The usage of business metrics with content analysis satisfied the research objectives.

Peer-reviewed papers:

Google Scholar© was used in identifying the initial data to determine the available peer-reviewed articles that align with the research question. It yielded a wealth of valuable information on openly sourced databases about social media in higher education.

There are four phases involved in this peer-reviewed research; each phase is carefully designed to generate the dataset to arrive at the findings. The first step was designing the research keywords; step two is conducting the search and selection; step three is data analysis, and the final step, step four, writing up the findings. These steps are defined and developed from experience and influenced by various standards and guidelines suggested for desktop literature reviews (Biggam, 2011) (Snyder, 2019)

The selection of peer-reviewed papers was ascertained using the same selection process as Google Scholar. The papers were saved into Mendeley. An analysis of the papers helped identify the social media themes within HEIs across the U.S. and the U.K. The search gave context to how different sectors within higher education used social media. Refer to the immersion journal for a screen capture of Mendeley, page 35. Because the research used a mixed approach of peer-reviewed papers and social media listening, the principles of Netnography informed the approach to data collection was employed (Kozinets, 2019).

The search tactic initially used broad search terms to capture the list of available peer-reviewed papers. These included four keywords: social media, engagement, higher education, and foster. Then, as it used a semi-systemic approach, this list of keywords was further expanded.

The papers consideration criteria:

The following search principles were used as criteria part for the Google Scholar© dataset:

- Does it align with the research question?
- How current is the paper?
- What are the themes in the paper?
- The research methodology.
- The country origin.

The Google Scholar© tool allowed the researcher to create alerts by entering the keywords into an alert query. Alerts were generated when new articles were published on social media usage in higher education.

The usage of business metrics:

Combining both the Netnography selection principles with data metrics and content analysis permitted the researcher to drill down into the dataset and create a rich conversation for the immersion journal.

This involved capturing and collecting social media posts guided by business metrics. The next part involved downloading papers and importing them into Mendeley©. This research management tool collated the dataset and facilitated analysis of social media comments on each article. One guiding metric used by Mendeley© is the reader's seniority and discipline.

The business metric PlumX© analysis tracks research in real-time. These metrics allow the researcher to recognise how peer-reviewed papers are discussed online using citation counts and associated tweets. They also provide interaction details with additional research articles. These include conference proceedings, book chapters, YouTube© videos, blogs, and podcasts, allowing the researcher to explore and become immersed in social media pertaining to authors that pivot around the research objectives.

The content analysis technique categorises and critiques each article in detail; these include their citation, usage, captures, mentions, and social media mentions. The techniques assisted the researcher to measure awareness and interest and provided ways to uncover new phenomena. In addition, it allowed the researcher to associate the peer-reviewed papers in social media posts (About PlumX Metrics - Plum Analytics).

Author's supplied keywords: this criterion allowed additional consideration to articles.

Reader's seniority metric: relates to who has the article in the library.

Reader's discipline metric: relates to their discipline, is the reader in social science, business, or computer science. The reader's discipline aligns with the *diversity* criteria of the Netnography selection technique.

Article metrics: measures the number of times the article has been shared/mentioned on social media. For social media interaction, there are five data analysis categories: usage, captures, mentions, citations and social media.

• Citations Metrics: How many times other researchers cite the research, combined with the *activity* filter in Netnography. These are valuable when evaluating the paper and following the social media trace. Mentions are blog posts, comments, and reviews of the research article. The richness metric of Netnography can be applied here.

- Usage Metrics: measures the demand of the article on the research tool and is the critical metric. The *relevance* criteria from Netnography is used in the instance.
- Capture Metrics tracks users' bookmark and if they added the article to their favourites, indicating if someone wants to return to the article. Capture metrics are created when a researcher inserts an article into reference management software like Mendeley©.
- Mentions Metrics: Pertain to discussions on the research topic, the stories of how people are interacting with the research. The *interactivity* criteria in Netnography aligned with this metric.
- Social media metrics are likes, shares and tweets about the research and allowed the research to follow academic Twitter© handles and hashtags on the research subject. Again, the *richness* of Netnography has the same theme.

This approach adopted for data collection, monitoring and analysing social media data using tools and software is defined as business analytics (Del Vecchio *et al.*, 2020).

The illustration below is a Treemap chart of the various keywords and themes discovered through the mixed research methodology. The size of the square indicates the number of occurrences of each theme.

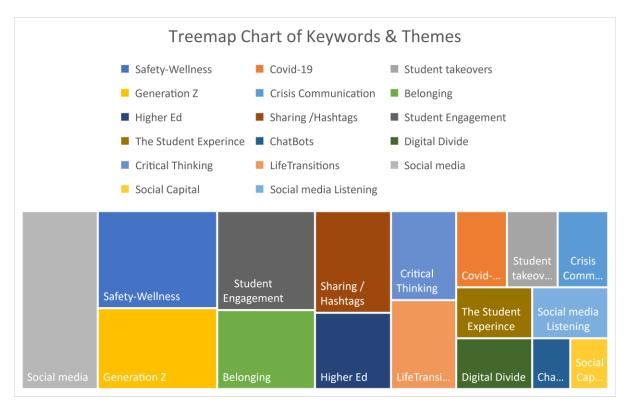


Figure 3-3-3 Quantification of emerging themes

The citation, mentions, and social media metrics were the three primary metrics used to examine the theory reviewed in the academic papers. The tools focused the research on following threads in microblogging discussions. These tweets were tracked and followed using TweetDeck©, a social media listening tool that continually tracks threads about themes and related research papers. Social media listening tools helped curate social media posts based on recurring hashtags and keywords. The tool aggregated various hashtags and tracked the likes and comments, directing real-time analysis to follow each paper's social media threads and interactive insights. The tool also informed the research on the volume and types of social media posts, enabling the research to follow authors on social media.

Below is the novel approach of the technique enacted for the mixed research methodology.

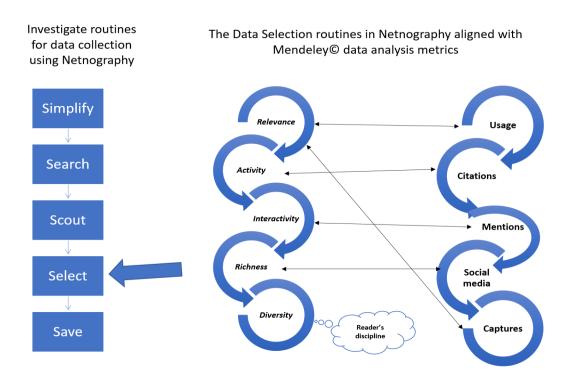


Figure 3-3-4 The data selection routine

Investigative routines for data collection using a Netnography approach:

The mixed approach to research in this project applied content analysis, Netnography and business analytics (PlumX). First, the five pillars of investigative research operations for observing social media are based on Netnography, then data metrics groups the emerging themes and contents analysis describes and interprets the dataset.

Simplify

The research question is construed into keywords and hashtags themes, "higher. ed", "foster", "relationships"," transitioning", "social media", and #highered, #soicalmedia. These search strings form the context and provided scaffolding for the literature review themes. A complete set of search themes can be found in the immersion journal (Kozinets, 2019).

Search

The next phase in Netnography is searching for data, entering the identified themes and their variations into Google Scholar. The search used Mendeley authors' supplied keywords metrics to track research in realtime. These metrics allowed the researcher to understand how peer-reviewed papers were discussed online using citation counts and associated tweets. They also provide interaction details with additional research pieces. These include conference proceedings, book chapters, YouTube videos, blogs, and podcasts.

By searching the selected social media platforms, which were Twitter©, YouTube©, Instagram© and LinkedIn©, this stage returned the dataset used for the next phase (Kozinets, 2019).

Scout

Scouting involves following, reading, watching, and listening and reconnoitre of the dataset. The research question's focus can organically drive scouting along with the data returned from keyword searches. It also permits the search to filter and narrow the choices to selected data sites, informing the researcher of new keywords that focus on more effective keywords and are included in the immersion journal. A social media listening tool called TweetDeck© was employed for the immersion of social media conversations, particular microblogging (Kozinets 2019).

Select

The selection phase evaluated the data and applied criteria to filter the results and limited the dataset. The book that guides this methodology, 'The Essential Guide to Qualitative Social Media Research' by Robert Kozinets, provided guidelines for the selection criteria used in this study. The five selection filtering criteria for social media data are relevance, activity, interactivity, diversity and richness (Kozinets 2019).

- Relevance: This is the most important focus of the research. The source should be informing with nuanced data that provide a sense of understanding relating to the research question.
- Activity: The regularity and recency of the data, how many posts per week, and are the posts recent?
- Interactivity: Because the research is studying social media, interactions between people should be part of the dataset.
- Richness: relates to the presence of detail, description, and emotions. Because it is descriptive, anecdotal, and well-crafted, conversations contain lots of contexts. It catches interconnection within the dataset.
- Diversity: The dataset needs to reflect a multi-perspectival opinion.

All these filtering techniques have been interwoven with Mendeley© data analysis and assisted with searches on social media. This tool is part of the Elsevier group, a global leader in academic management of paper and their analytics (Plum Analytics, 2020).

As the dataset was deficient in 'interactivity', this sample did not meet the criteria for a Netnographic study. Thus, the researcher had to employ an alternative methodology to proceed with data analysis. The choice was made to employ a 'content analysis' methodology to analyse the dataset.

Save

The video and podcasts were curated by subscribing to the social media channels in which they are published. Saving the social media posts involved importing the media into Mendeley©, where it is referenced and cited in the research (Kozinets, 2019).

This research examines social media's usage in fostering a stronger relationship with students. The findings could improve student retention and brand loyalty by creating a digital interactive communication journey between the HEI student services function and the students. The duration of the journey is from the first year to postgraduate and alumni.

Taking this mixed perspective allowed for complete immersion in social media and reflective comprehension of online communities. Using these research methodologies enables the capture of information about behaviours and explains the rich diversity that produces a detailed representation of experiences in internet-based communities (Del Vecchio et al., 2020).

Qualitative Content Analysis:

Qualitative content analysis is a systemic technique that provides a methodology for analysing data collected for research. As the study focused on social media, podcasts, and YouTube© interviews form a large part of the corpus of information. Consequently, the unit of analysis is podcasts.

Aligning content analysis with business analytics assisted the researcher to discover value from the podcasts and offered understandings of how student services staff usage of social media can foster a stronger relationship with students. This usage of business metrics helped focus on the sampling of podcasts and assisted in defining an appropriate qualitative dataset.

After that, content analysis assisted with discovering themes that created a hypothesis and enabled the development of theories from the dataset. These podcasts and YouTube© interviews were listened to and manually transcribed into the immersion journal. The reason they were manually transcribed was to capture the context of the podcast. When reoccurring patterns began to appear continuously, the point of data saturation was reached, and data collection could cease. After this point, the qualitative content analysis was started on these themes. The next chapter presents these themes and findings (Ward, 2019).

Chapter 4

The Research Findings.

The findings are analyzed from the data collected using a mixed methodology. The journal contains various excerpts from online interviews on various social media channels. The technique has been outlined in the methodology chapter of this study.

The themes captured from the findings are from influencers and student services professionals on social media usage in higher education. Keeping an immersion journal allowed the researcher to gain insights into the culture and conversations around their usage. The journal contains numerous themes along with keywords. Some of the notes are personal and attempt to bring resonance to the experience. Furthermore, again the notes were transcribed manually to retain the richness of the data. Thus, keeping the context and the insights into the social media. These insights have provided a large part of the research findings, along with peer-reviewed papers.

The recurring themes of safety and belonging are present in numerous social media excerpts. Today students need for safety is very important within many different contexts and is regularly discussed by different people.

"gen Z born post 9/11, crisis management active shooter drills, mental health issues, students want more safety information." Journal Entry 8 (Dobies and Nelson, 2016)

Another theme is that the students' sense of belonging can increase satisfaction and better outcomes for all stakeholders. The usage of social media handles and the repurposing of media for different events is discussed.

"if you are trying to get alumni to engage, you could appeal to their sense of belonging to the college by high-lighting the experiences of students."

Journal Entry 7 (Episode 5: Campus Sonar—Liz Gross, Founder and CEO, 2020)

Crisis management is mentioned; the interviewees agree that communicating with students is critical, especially for safety announcements. Furthermore, critical thinking, social media messaging, along with email are part of the conversations.

"Without critical thinking, you cannot have a discussion around digital"

Journal Entry 5 (Stoller, 2019)

The need to listen to the student's voice is the topic of one interview, allowing the college to discover new keywords used within the community.

"students voice is front and centre."

Journal Entry 2 (Episode 53: Why Your Current Students Are Your Best Recruiters: How to Leverage the Power of Peer-to-Peer Influence in Admissions, no date)

The immersion journal has allowed the phenomenon to speak for itself. It has documented deep engagement, which leads the researcher to read and listen to the social media articles, discerning and absorbing a great deal of social media culture. In addition, the study allowed the researcher to hang out on particular social media platforms, sometimes meeting the same influencers repeatedly (Kozinets, 2019).

"digital engagement is part of the student experience; how is an institution embedding utilising social media for student success? Holistically across the entire institute from recruitment to current student and alumni, when it all joined up, it makes it transformative and uses the power of social media for the student experience."

Journal Entry 5 (Stoller, 2019)

The literature review advocates that social media can provide valuable social capital to students transitioning to high education Institutions (Vincent, 2016).

This chapter presents the findings using themes. Themes are necessary to describe and analyse the dataset acquired from a qualitative approach; the study has used an inductive method without any pre-assumptions on the content. The content analysis is themed around both the PESTLE and SWOT analysis models, the latter SWOT allowing comments and discussion on the findings. These techniques give a multi-dimensional interpretation of the research findings by delving into the content and permits the issues to be grouped systemically.

"social media is a great space to reach out to students."

Journal Entry 4 (Episode 40: The Past, the Present, and the Future of Social Media in Higher Education — A Conversation with the Founder of #HigherEdSocial , no date)

PESTLE (Political, Economic, Social, Technology, Environmental and Legal) analysis scaffolds some of the research findings, whereas SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis provides comment and discussion on the findings. These acronyms are used to assist in data analysis and to make sense of the findings.

Despite HEIs widespread usage of social media, there is little evidence that HEIs carefully set tactics to engage students. Instead, some of the social media initiatives is just shouting out on social media.

"know your audience, or else you're just shouting on the internet."

Journal Entry 4 (Episode 40: The Past, the Present, and the Future of Social Media in Higher Education — A Conversation with the Founder of #HigherEdSocial , no date)

The primary research confirms that social media can foster a stronger relationship between the education institute and students. The following section presents the findings scaffolded on the PESTLE and SWOT models, showing that social media can become the good, the bad, and the ugly of communication.

These findings strongly indicate that HEIs need to create a toolkit to enable the strategic usage of social media that engage students using widely available information rather than focusing on using social media based on departmental information silos.

Findings and discussions using PESTEL analysis techniques.

The analysis of the findings from the Netnography research are described using two data analysis techniques called PESTLE and SWOT. Both are used to enable the unfolding of the stories from the immersion journal, which are excerpts from social media research.

The first methodology used is the PESTLE (Political, Economic, Social, Technology, Legal and Environment) analysis model. It is a theory to analyse the key factors that influence an organisation from the outside. The model is flexible and is used in different scenarios to guide the strategic direction of organisations (Chartered Institute of Personnel and Development, 2020).

A strategic approach to social media requires senior management's affirmation. Goals and objectives need to align with and reflect the organisation's strategic plan. Consequently, all the stakeholders need to agree with the social media direction.

Political:

Senior management and student services staff have an essential role in implementing plans and are dependent on senior management leadership, responsibility, and coordination. In addition, the personal development of student services staff will form part of the plan (Gross, 2020).

Staff need to be digitally literate to incorporate these skills into work to communicate to students on issues. Social norms or influences in the higher education institute are essential drivers for using social media.

Accepting that, it is vital from the very start to agree on a code of practice for social media usage, which should be available on the websites' landing page, so expectations for all stakeholders are met. This policy statement code of practice has to reflect core values held up by the institute. According to social media influencers, the objectives and metrics should be agreed upon and reviewed at an agreed time, particularly when re-purposing social media platforms for specific objectives (Gross, 2020).

Regardless, it is vital to agree on the most effective platform throughout the student journey, depending on communication and the student cohort. For example, most generation z make the transitions to college using Snapchat (Smith and Anderson, 2018).

Having the correct political atmosphere, the institute can strategically plan to graduate students to appropriate platforms annually. In addition, having students communicate on the correct social media platform will be crucial to success with *perceived usefulness* for accepting new technology.

Economic:

One constraining aspect of employing social media to engage students is resource allocation, including human resources and finance. Regrettably, these are significant issues (Grajek, 2020).

Emerging from the pandemic will be challenging. Strategically using social media for digital transformation may mitigate a return to lockdown. Some of the issues post-pandemic will pertain to the student experience and managing health risks communication will be critical. Having effective communication and a stronger relationship with the students will be paramount. The Educause report delves into the risks of returning to campus (Grajek, 2020).

The resources for effective management of social media will need to be significant. An adequately resourced initiative allows for content creation that can be curated from information silos across the institute (Gross and Meriwether, 2016).

Moreover, creating a social characteristic on the various channels will be about employing the right tactics. Employing the correct tactics are the best way of engaging with students.

"virtual tours are online, and students use Snapchat for students' takeovers encouraging prospective students to the college."

Journal Entry 4 (Episode 35: How to Successfully Move Higher Ed Admissions & Marketing Events Online, no date)

The Law Department at Oxford University uses their Instagram for 'take-over days, allowing student influencers to control designated social media and post content on college life aspects. Evidence points that it is widely practised across colleges in the UK and US (A day in the life of an Oxford Student - Law (Snapchat Takeover) - YouTube, 2019).

This initiative allows students to make connections that otherwise would not be available, increase student retention, and further increase their relationship with their higher education institute. This tactic of social interaction can be re-purposed to reach prospective students when posted on the reach channel.

These tactics could be employed within higher education anywhere, given the right conditions. For example, admission staff have to organise open days with empty lecture halls due to the present pandemic's health concerns. Social media's strategic use will help mitigate these real issues facing student recruitment and retention (2021 Top IT Issues / EDUCAUSE, no date).

Specifically, these same objectives could be instrumental across distributed campuses, creating social inclusion. Similarly, posting curated content at specific times can also strengthen the relationship.

The usage of social media that allows educational compatibility is an additional advantage. Successful social media campaigns such as the above advocate the practical usage of particular platforms and create demand for the academic staff to engage in social media inside the lecture hall. However, this study focuses on their usage outside the lecture hall to foster a stronger relationship with students. Furthermore, adopting technology within the educational context that can be used both within and outside the lecture hall gives technology acceptance an edge over other platforms.

Indeed, using these tactics could help the academic rollout of social media. The literature review noted one author's frustration (Hurst, 2018) when creating a peer-peer account for chemistry teaching and contextualisation in the real world. Interestingly, the choice of social media created issues when the students went looking for the content. One feature of Snapchat© over other social media platforms is that the posts are ephemeral, making it popular with generation z. Conversations in life are not permanently recorded. Students can reach out to student services staff and ask questions on the flip side of ephemeral social media platforms. These will not be recorded. A feature such as this allows students greater freedom in seeking advice from all members of staff.

Social:

While the social media plan's objective could be community engagement as part of the overall goal for a stronger relationship, to this end, some colleges practice the encouragement of sharing hashtags both inside and outside the lecture hall. These hashtags can be on current communal topics in college and the community. A hashtag allows people to contribute to the topic, which enriches the conversation and increases engagement and learning. The use of hashtags gives valuable insights into the academic community. When institutes offer students advice on social media's correct use, it increases their social capital and can engage more effectively with each other and their college. In adopting these tactics, the objective of community involvement is met, and the graduated use of different social media in the student experience is progressing toward the goal.

Technology:

Technology affordance is essential for higher education to engage students using social media to create a digital journey. Accepting this, the widespread use of mobile devices and most internet users using their smartphone to visit social media, many owning multiple devices (
Smartphone users in Ireland 2018-2024 | Statista, 2021).

The change in ownership breaks down the barriers to technology availability. Furthermore, plans to extend Wi-Fi initiatives for third level students were announced early this year; Eduroam is the Wi-Fi broadcast across the EU and the US and is widely available in all HEIs (Government to Extend WiFi Initiative for Students to 90 New Locations – The University Times, 2021).

The strategy should also offer tutorials to students and staff on the various nuances of social media platforms. These should include advice on privacy, safety, sharing content on different media, and creating and sharing hashtags. Some aspects of critical thinking on social media usage should be taught; one of the downsides of social media is fake news. Students must know where the information is coming from. Is it a reliable source? (Travers, 2020).

Evidence confirms that employing these tactics improves students' grades and retention (Junco, Heiberger and Loken, 2011). It likewise has a positive impact on the student experience.

Consequently, because of community engagement and students sharing hashtags, it will be vital that the strategy uses social listening tools. These tools monitor social media channels for any brand mentions; there are many interest keywords in education. The process allows response to mentions and is critical for relationship management and research. These tools allow listening to student's conversations regarding their experience and then hear their voices.

Environment

The strategy needs to create an environment where social media usage can flourish, allowing social media to complement students' current communication. One policy that the institute could use as a tactic is the pushback from sending vast amounts of email. As mentioned earlier, literature published reports email is dead (It's 2018 and Email is Already Dead. Here's Who Zapped It Into Extinction | Inc.com, no date). Email has been regularly used before generation z was born. The strategy could use social media advising that an email be sent on a specific date with a call to action. A more structured communication plan in conjunction with social media will allow cohesion with the email subject line and a social media post. The post could include a short video on the appropriate response to the email. Using this new engagement policy in continuing the strategy provides effective communication, strengthening the relationship with students and the higher education institute.

Throughout this policy, all these tactics accompany critical thinking or personal development modules giving students digital literacy. This digital literacy gives students the skillset for the fungible nature of social media. In addition, students should be made aware of how their online behaviour can impact their future career opportunities. The final stage of advancing social media usage is to encourage final year use of professional social media. This lifecycle of social media usage can increase engagement and lead to better academic outcomes for all stakeholders. The literature review research indicates that the more students are engaged with their HEIs, the more successful they will be (Stoller, 2017).

The next objective will be creating new ways to foster alumni and reach potential post-graduate students. Similarly, the plan will encourage final year students to create profiles on professional social media platforms.

"How to market the college, design a campaign about LinkedIn that promote students that are on the front line of the pandemic."

Journal entry 4 (Episode 40: The Past, the Present, and the Future of Social Media in Higher Education — A Conversation with the Founder of #HigherEdSocial , no date)

Student services staff and academic staff can help students create testimonials of the final year and work experience. For example, students working in health science could post their experience in hospitals dealing with disease outbreaks. Such social media posts can potentially reach under-graduate students, their parents, and the wider community.

These posts can strengthen the relationship with the community and students with their higher education institutes. This creates a new audience of graduates, parents, and professional bodies. The career staff have a new communication channel to contact students and graduates on career opportunities to specific cohorts. Moreover, the HEI has a digital map of its alumni and can reach them through a single social media post.

Legal:

A code of practice of social media usage should be evident on the landing page aligned with the student code of conduct. All stakeholders' privacy and legal rights have to be upheld (Gross, 2020). The big data issue is outside the boundaries of this study as the issue could form part of another research study.

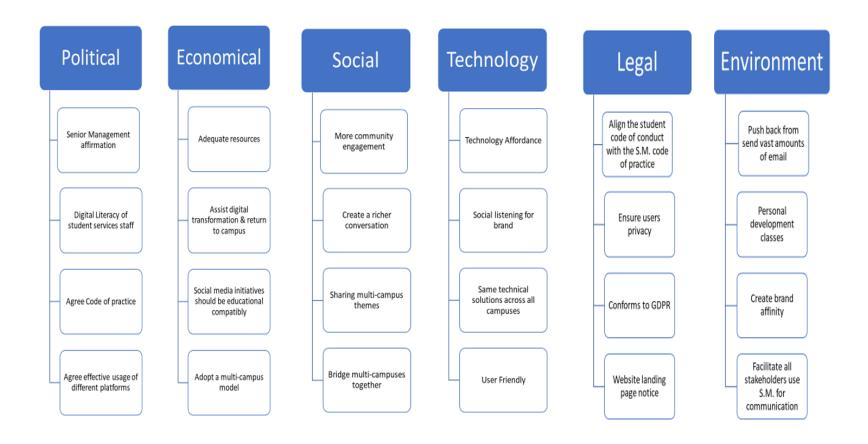


Figure 4-4-1 Pestle Analysis Model Overview

Findings and discussions using SWOT analysis techniques.

The following section contains comments and discussions on the findings using SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of reoccurring issues that impact students' perspective when engaging with their higher education institute using social media.

Albert Humphrey developed the SWOT analysis at Stanford University. The theory evaluates the four drivers involved in a business project. The input is the project's objectives, and the process identifies the internal and external factors that may have a positive or negative impact on achieving the project. It is widely used as part of the strategic planning process (Chartered Institute of Personnel and Development, 2020).

The following section will explore the findings using the SWOT technique to advocate for the students' interests in adopting social media to enable a digital journey for their student experience. It will build upon and be informed from the previous section to articulate a continuous graduated journey for students to engage with student services staff that strengthen the relationship.

Social media's strengths are the number of users (Social Media Use in 2021 | Pew Research Center, 2021). In addition, social media can generate a sense of belonging. Generation z are the digital natives who have more ways to communicate with each other than ever before and spend more time on screen daily than any other generation. Using college-themed social media groups, students can link with a common interest. A large part of this success is the excellent user experience of using social media.

Strengths:

Moreover, employing social media platforms for students to transition to college life allows for platform features familiarity, allowing students to communicate and reach out for assistance. For example, students can use social media to converse with student services staff on registration issues if they arise. One of the critical aspects of college life is student's safety, and the appropriate code of practice ensures safety for all. The value of safety and belonging are some of the benefits for students using social media. One strong advantage of social media is the quick and effective distribution of information in an emergency; these could be health or weather alerts. Some students may not check email before arriving on campus—social media. One or more social media platforms are geotagged; these can alert students within a particular location of campus events and closures.

Weaknesses:

Institutes not facilitating a strategic approach to social media will result in stakeholders articulating their views publicly. There are many different social media platforms, and some are ephemeral. Therefore, the correct use of these platforms is essential. Drawing from research, selecting an inappropriate platform could lead to a negative user experience which poses a threat (Hurst, 2018).

The enactment of a policy such as this could create a digital divide with students. All students will need access to high-speed data connections in college and at home to use social media. Additionally, mobile devices' costs can be substantial, and not every student will be in the position to purchase such mobile devices. Nevertheless, research shows that the vast majority of people own one or more mobile devices, and there is a national plan for the rollout of high-speed broadband (Anderson and Jiang, 2018) (Welcome to National Broadband Ireland | NBI, no date)

Threats:

Regrettably, social media has its threats in daily communication to students, particularly regarding privacy concerns and "big data" issues. Consequently, because of the enormous issues both topics raise, it is beyond this study's scope to analyse these themes in detail. Likewise, technology companies' continuously changing their terms and conditions can threaten social media usage for strategic purposes. However, as stated earlier, all institutional core values and ethics must be baked into the social media policies and their accompanying code of practice. Specifically, the affirmation of senior management must be established.

The social media policy determinates will underpin what needs to be protected, ethical considerations, stakeholders' rights, and institutional priorities all need to expand beyond compliance with the General Data Protection Regulation and include social policies. These social policies will shape the code of practice aligned with the code of conduct and help establish users' expectations. The code should appear on the institute's website. Addressing these issues will assist student services staff when users are expressing anger on social media. Some social media posts can be filled with hyperbole with comments when issues arise. The policy can allow staff to delete such comments and arbitrate the matter using the student code of conduct.

In contrast to finding that social media can increase students' academic outcomes, social media can distract academic performance and is worth noting. The study found that Generation z is spending large amounts of time looking at smartphones. One way to overcome this trend is to engage with students in the lecture hall using social media. Nonetheless, the focus of the study is their usage outside the lecture halls.

In addition to the above concerns, the features are also subject to change with many updates. There can be pushbacks from some platforms, while generation z may not be on the leading platform because their parents use it. Social media is fungible and will be replaced by another platform offering similar features.

Opportunities:

Peer-assisted learning programs could be used in many colleges where fellow students coach other students in the necessary skills for engaging with different social media platforms. Indeed many colleges promote the effectiveness of peer-assisted learning, also called peer-assisted study sessions (Peer Assisted Study Sessions at GMIT (PASS) - YouTube).

The research's recurring theme is that facilitating social media stratification confers numerous opportunities for the students and the student experience. Social media can reach out to remote learners who are

connected yet feel isolated; this support could be a social media group like Facebook® groups set up by student services staff. These initiatives can offer remote learners the methods of engaging with fellow students that facilitates teamwork. The Facebook® groups can be systemically set up, allowing students to reach out and meet up with their class group.

Drawing on the findings, accepting the sharing of hashtags, as mentioned before, can create opportunities for students to engage with other students and similar academic programs across distributed campuses. Whatever the hashtag, these allow engagement and collaboration with class groups and generate subject curiosity. Facilitating social media hashtags can build bridges between students and their institutes and community with complimented academic interest. Interestingly, these social media bridges could allow a sabbatical or sojourn within these HEIs. The students will have the social capital to enjoy the benefits of all social media initiatives.

The issue of connected and isolated students feeling lonely and unmotivated can be addressed with counselling services reaching out to students using ephemeral platforms. Students may engage more openly about personal issues with counselling services if they know that the conversation is completely confidential and never recorded.

In the literature review noted earlier, counselling services provided students with the opportunity to build social media profiles; this afforded them social capital and self-esteem. Just as safety and belonging are pillars of the student experience, self-esteem is another essential pillar fulfilled on this conceptual digital journey. When students have completed their digital journey through the adopted approach, the skills acquired through college experience will enable students to construct their digital identity. Below is a visualisation of the SWOT model.



Figure 4-4-2 SWOT Analysis Model Overview

Chapter 5

Conclusion, Discussion and Recommendations.

To conclude the study, it is necessary to address the research question and satisfy the research objectives. 'Can higher education institutes strategic usage of social media foster a stronger relationship with students?'

The study has identified key aspects of strategically using social media to engage students in higher education. Through research, the study showed that HEIs can benefit from strategically using social media to foster a stronger relationship with students.

The research objective was to examine social media usage in higher education institutions and explore how the effective usage of social media platforms can increase student engagement. The study has led to the development of a conceptual model formalizing the digital journey as part of a new student experience that can assist HEIs to foster a stronger relationship with students.

It is crucial to evaluate and interpret the data from the students' view-points which adds a greater dimension to the findings. The pyramid of needs developed by Maslow summarized the key aspects of student needs uncovered in this research and provides a robust framework to assist in underpinning the students' engagement with social media. Further detail regarding this pyramid of needs is covered in the next section.

The Conceptual Model:

Aligning themes to Maslow's Hierarchy of Needs.

In analyzing social media platforms that assist students in transitioning to college, Maslow's theory of motivation was found to align closely in terms of outlining the categories which match student benefits in the findings of social media usages in HEIs. The next section will explain how the conceptual model was created from this.

"In any given moment we have two options: to step forward into growth or to step back into safety."

Abraham Maslow 1908-1970

Maslow's hierarchy of needs is a motivational theory in psychology represented as a pyramid that comprises five layers. The theory starts with the most fundamental at the base layer and develops upwards. The base layer is excluded from this study. Maslow's hierarchy states that individuals are motivated to accomplish a particular need, and once that need is fulfilled or achieved, the next level is what motivates people. The needs are physiology (food and clothing), safety (security), belongingness (friendship), self-esteem (accomplishment), and the need for self-actualisation at the top (achieving one full potential) (Maslow, 1970).

Maslow's theory has had a significant influence on teaching and educational management. It adopts a holistic approach to education and learning (Maslow, 1970). The focus is on Maslow's theme of safety, belongingness, self-esteem, and self-actualisation. Maslow's hierarchy of needs is represented as pillars aligned with various social media platforms that support the student experience, including the challenges and benefits of employing this technology within the educational system, which underpins the student's relationship needs with their higher education institutions as they transition through college life.

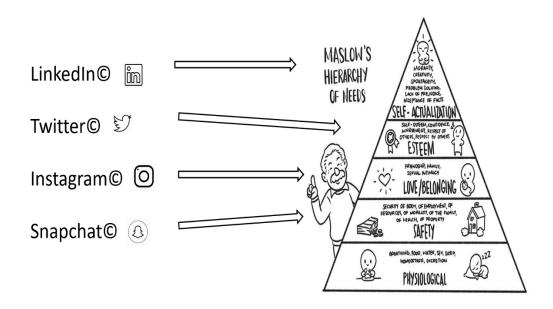


Figure 5-5-1Maslow Hierarchy of needs
(Maslow's Hierarchy of Needs - Decision Skills, 2020)

The study discovered that social media usage in HEIs is varied. Furthermore, there are no detailed strategic approaches used to engage students using social media platforms.

The findings were developed using Maslow's model of needs to create this innovative new paradigm for HEI student engagement. The pillars of this model are safety, belonging, self-esteem and self-Actualisation. These social media values are the pillars of the new student experience that advance student engagement and retention. The continuous model enables HEIs to reach their alumni for post-graduate opportunities and assist post-graduate students to transition back to college life. The employment of the model allows HEIs to foster a stronger relationship with students.

The start of this journey involves the institute reaching out to prospective and first-year students on social media platforms they are already using. Adopting this tactic assists in fulfilling the objective and allows *safety* (Dabbagh and Kitsantas, 2012).

Safety will be one of the vital pillars of the new student experience. As part of the digital journey, students will progress to different social media platforms. Second-year students will be offered personal development skills on the appropriate use of social media platforms to increase a sense of **belonging** (Vincent, 2016).

The usage of appropriate social media will have third-year students using micro-blogging platforms. Using such platforms allows students to communicate and interact with each other. Platforms, such as Twitter©, affords students a sense of belonging and leads to *self-esteem*, another pillar.

Sharing hashtags can help generate richer conversations around subject interest and help with a positive outcome for students. These conversations on common interest create a greater sense of **belonging** and help with greater **self-esteem** (Junco, Heiberger and Loken, 2011).

The use of professional social media platforms helps student services staff reach alumni. The tactic can assist with recruitment for post-graduate courses and help build a digital map of alumni. Final year students will start using professional social media platforms; the tactics to be encouraged can be work placement testimonials. Increasing social media usage can assist students' self-efficacy; it helps them create a digital identity and measure self-actualisation (Stoller, 2019).

Increasing community engagement through social media and listening for the brand's reputation in the community help students belong to their college. Encouraging the sharing of hashtags on current themes that arise within college life will benefit the higher education institute and permit community engagement (Episode 38: How to Communicate Appropriately with Admitted Students During COVID-19, 2020).

Increasing community engagement will also help to create a stronger sense of *belonging*. An engaged student is a content student; there is evidence to support the claim that social media can increase better outcomes for students; this increases the retention rate of students in higher education is an important objective satisfied (Stoller, 2017). Listening tools are a perfect tactic to achieve this objective.

The literature review highlighted the current usage of social media both inside and outside the lecture hall. They described the weaknesses of using these tools. Taking a more strategic approach using the different platforms requires the institutes to understand their features and nuances. In order to satisfy the objectives, the affirmation of senior management is required. Only then will it be possible to engage students successfully in social media.

The research question revisited

The research question: 'How can higher education institutes' strategic usage of social media foster a stronger relationship with students?'

Research objectives:

To analyse the usage of social media in higher educational institutions.

To explore how the effective usage of social media platforms can increase student engagement.

With the research objectives satisfied, it positions the study to answer the research question, affirming that the strategic usage of social media can help foster a stronger relationship with students.

The research recommends that higher education adopt a holistic approach to social media usage for student engagement, fostering a stronger relationship with students and alumni. The tactic of advancing students on different social media platforms from first to final year is central to this goal.

Recommendations:

The researcher proposes a new conceptual model based on Maslow's theory, consisting of six steps based on the research findings and designed to support the student experience in positively employing social media platforms as part of their digital journey.

The conceptual model for HEI- Student social media engagement.

This conceptual model allows for a holistic sense of the student experience, creating ways to connect with their institute throughout their entire journey. The pillars of the model are safety, belonging, self-esteem and self-actualisation. These needs will provide the structure to the student experience throughout their digital journey in college life. The underpinnings will be peer-assisted learning that provides for the effective use of various social media platforms.

The following illustrations describe the student experience enabled through strategic usage of social media outlined above. Both Facebook© and YouTube© are the bedrock of the student experience with Moodle©, their virtual learning environment included.

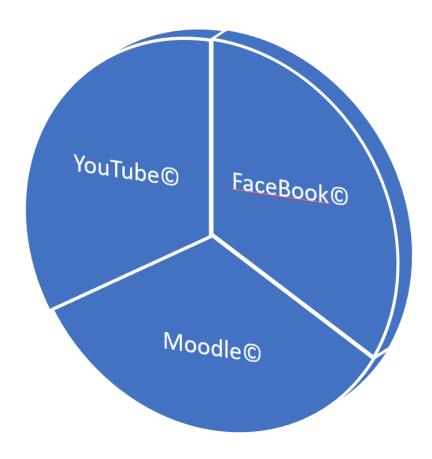


Figure 5-5-2 The foundation Social Media Platforms

This phase starts the digital journey. Different social media platforms form part of the student experience. These can be achieved year to year using peer-assisted learning modules. The social media platforms are the constructs of Maslow's motivational theory of needs.

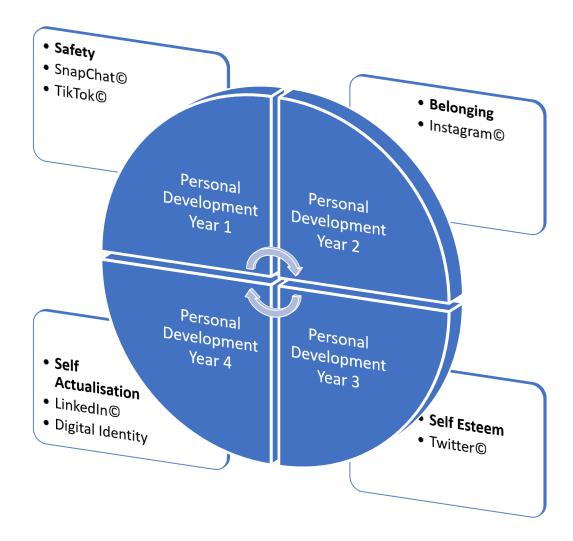


Figure 5-5-3 Student Experience with Social Media

In this phase, both models are laid upon each other cementing the new strategy to the bedrock of institutional social media norms.

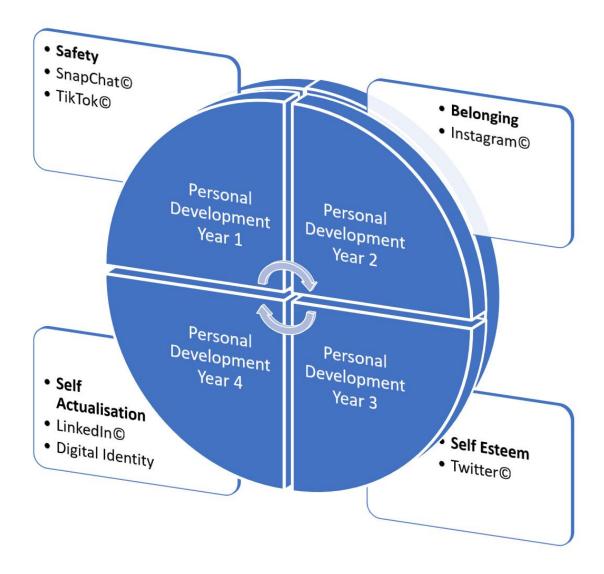


Figure 5-5-4 Student SM usage aligned Needs & HEIs SM

The next phase of the student experience is the second year of college and their digital journey. The emphasis focuses on student experience and college life. A different social media platform can be employed. The strategy's objective is for second-year students to share their student experiences and interact with other students using social media. Instagram© is very popular among college students, according to research (Smith and Anderson, 2018).

The Illustration describes year two of the social media strategy; students have completed the first two years, including safety, and belonging aspects of social media engagement.

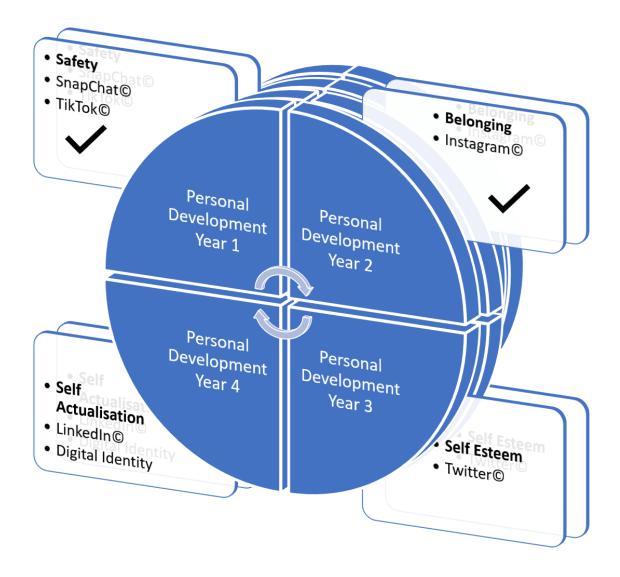


Figure 5-5-5 Students Experience yr. 2, Using SnapChat© & Instagram©

Facilitating the strategy into the third year is the systemic use of microblogging social media for communication with students, services staff, and fellow students. Micro-blogging in education can break down the hierarchy students can communicate with persons they may never meet face-to-face, tweet with a head of department and student services staff. In addition, in encouraging content sharing using hashtags, this form of communication may well allow for students' self-esteem.

In the final year of the digital journey, the student will have experienced all the various social media platforms used for the digital journey. Thus, completing the lifecycle. The students have to skills to create their digital identity and reach self-actualisation within this context.

Step 6

The final figure describes how strategic usage of social media can support the student experience and act as columns representing Maslow's theory of needs. Social media usage underpins the need for safety, belonging, self-esteem and self-actualisation. Accordingly, they act as columns to the student experience and give structure and strength for the trials in life on their digital journey.

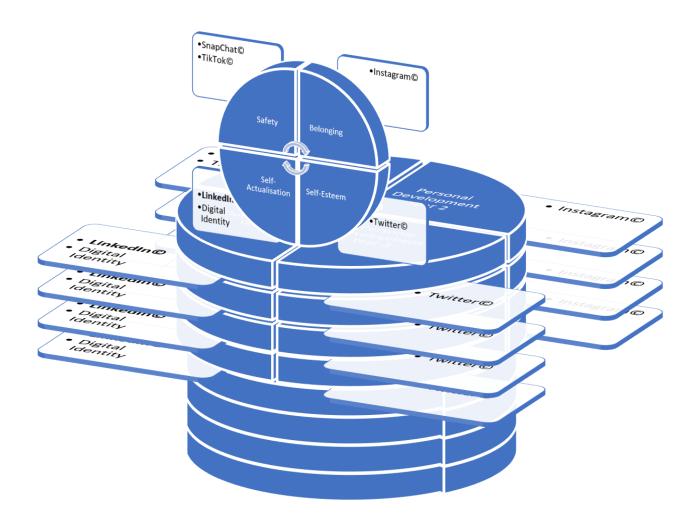


Figure 5-5-6 The lateral view of the student experience

With these changing times, HEIs need to leverage the potential and benefits of social media by adopting these technological advances and utilising these communication platforms. Therefore, higher education institutes need to adopt a more holistic approach to teaching and learning and consider the student experience and their journey and how students can link with one another (Gross and Meriwether, 2016).

Nonetheless, there are challenges when HEIs replace traditional learning with new online approaches using social media. Higher education institutes should establish clear social media policies that address the student and the HEIs relationship. Social media policies will set the direction the HEIs is taking and how the staff can navigate social media's effective use within these policies (Gross and Meriwether, 2016).

One crucial tactic will be personal development modules that allow all stakeholders to use social media effectively and safely. These modules will underpin the student experience and bind the digital journey to social media.

Summary

To conclude, research confirms that the strategic use of social media in higher education can create significant advantages for both HEIs and students. Findings confirm, there are real advantages to adopting a social media policy that creates a stronger relationship with the student experience and augments the student journey. Student services staff need to reach students with content that engages and supports first-year students right through to postgraduate and alumni.

This study recommends using the different social media platforms and outlines which platform is optimum for each level in accordance with student cohort requirements. HEIs need to create carefully curated content crafted by social media professionals for various purposes (Gross and Meriwether, 2016).

Consistent with the research findings, determining factors for the successful implementation of social media policies are positive affirmation from senior management and are appropriately resourced and aligned with college norms and the code of practice.

Social media usage in education has been conceptualised differently and studied by various researchers across many different disciplines in numerous countries. The phenomenon of social media in higher education has been discussed by many scholars and academics globally. A mixed methodology was employed to garner information on the most cited and discussed relevant papers (Mendeley© and PlumX©). The approach selected articles based on defined keywords. A Netnography approach was employed for social media immersion. Data metrics and content analysis were employed to explore the dataset.

Supported by the findings, a conceptual model was developed to empower students with social capital to accentuate the student experience. Thus, the model may help increase student loyalty by increasing student satisfaction and increasing retention rates. The model repurposes specific social media platforms for prospective students and postgraduate recruitment.

The conceptual model can support a strategy to increase community engagement through social media. This includes social media listening for interests on campus and the broader community.

The model illustrates a gradual overview of engagement with students by social media. The study recommends the usage of four social media platforms, SnapChat©, Instagram©, Twitter© and LinkedIn©. The HEI student services engage with students systematically — initially using a predetermined social media platform.

The student experience begins with SnapChat© for supporting first-year students. The usage of this social media platform provides the *safety* column for the students. Due to SnapChat© ephemeral features, it is expected that students can comfortably reach out and seek assistance with transition issues.

Within the model, second-year students are encouraged to use Instagram[©]. This supports the need for *belonging*; students will share content on enjoying a college experience. Thus, it is expected that such engagement may have a positive impact on student retention.

Self-esteem within the model is accomplished through Twitter©. Third-year students learn to share knowledge at this stage, which may lead to greater campus and community engagement. The model introduces Self-actualisation to the student experience using professional social media such as LinkedIn©. This is the final pillar of support for the student journey.

All stages are facilitated with peer-assisted learning. Enabling students to assist one another in learning is an important driver that underpins safety, belonging, self-esteem and self-actualisation. Using peer-assisted learning allows for the sustained usage of the model.

This conceptual model is a systemic and progressive social media usage theory aimed at the entire student journey. These engagement initiatives can advance the student journey and lead to a stronger relationship between HEIs and students. The facilitation of such policies may increase academic success for all stakeholders, as outlined in the literature review (Junco, Heiberger and Loken, 2011).

The four social media platforms model offers a varied broadcast for communicating with students that no single platform can reach. In times of uncertainty, effective communication is vital. Hence, the model provides for strength and robustness for communicating safety messages.

HEIs need to evaluate supportive social media and implement their strategic usage on methods social media can foster a stronger relationship with students.

A proliferation of academic writings and reports (Vincent 2016, Hurst 2018, Manca 2020) have repeatedly referred to the benefits of the formalised use of social media by HEIs, and they quote the benefits as student engagement, belonging and student wellness and safety.

In addition to the literature endorsement of the positive impact of formalised social media usage by HEIs, this study, via its content analysis of academic podcasts and social media accounts, has found repeated confirmation of the impact of social media engagement on student safety, positive student experience, student retention, and student satisfaction (Stoller 2017, Gross 2020, Dobie 2016).

As a result of this examination of social media usage – a model was developed, which it is expected, when used accordingly, may effectively improve HEI-student engagement along the student journey.

It is clear from this detailed analysis that HEIs can use social media to foster a stronger relationship with students by adopting these approaches.

Further Study

The creation of digital identities is one of the emerging issues today in social media usage. Students need to be aware of posting content that could affect their identity in the long term.

Also, another new concept is the usage of Chatbots to engage audiences and answering routine questions in the first year of college (Stoller, 2019). The usage of Chatbots attached to social media platforms will be an issue for the near future and could form part of further research and students creating digital identities.

Implementation Advice:

There is a method where HEIs could implement this model. It is called the technology acceptance model. Fred Davis developed the model in 1989. It is now one of the most influential theories of technology acceptance in the workplace. Two key drivers influence an individual intention to use. Perceived use and perceived usefulness. If the user perceives the technology as too challenging to use, this affects the probability to adopt the technology. However, if perceived as user-friendly and suitable to their work practice, it will more likely be accepted (Charness, Boot and Eighth, 2016) (Davis, 1989).

Appendices

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Table of Figures

FIGURE 3-3-1ETHICAL ROADMAP (KOZINETS, 2019)	34
FIGURE 3-3-2 MIXED METHODOLOGIES A QUALITATIVE ANALYSIS	PROCESS
(BIGGAM, 2015)	41
FIGURE 3-3-3 QUANTIFICATION OF EMERGING THEMES	46
FIGURE 3-3-4 THE DATA SELECTION ROUTINE	47
FIGURE 4-4-1 PESTLE ANALYSIS MODEL OVERVIEW	61
FIGURE 4-4-2 SWOT ANALYSIS MODEL OVERVIEW	66
FIGURE 5-5-1 MASLOW HIERARCHY OF NEEDS	69
FIGURE 5-5-2 THE FOUNDATION SOCIAL MEDIA PLATFORMS	74
FIGURE 5-5-3 STUDENT EXPERIENCE WITH SOCIAL MEDIA	75
FIGURE 5-5-4 STUDENT SM USAGE ALIGNED NEEDS & HEIS SM	76
FIGURE 5-5-5 STUDENTS EXPERIENCE YR. 2, USING SNAPCHAT® &	ķ
Instagram©	77
FIGURE 5-5-6 THE LATERAL VIEW OF THE STUDENT EXPERIENCE	79

List of research #Hashtags

#chatbots

#highered

#higheredsocial

#highereducation

#insidehighed

#studentengagement

#StudentExperience

#StudentSuccess

#WVUAlerts

Research Keywords & Themes

The list of Author supplied keywords used to search and filter peer-reviewed articles with social media from within Mendeley® and PlumX®. Belonging Chatbots Collaborative learning Covid-19 Crisis Communication Digital Divide Forman-informal learning Generation Z Higher Ed Instagram© (Manca, 2020) Learning communities (Junco, Heiberger and Loken, 2011) Personal Learning Environments (PLE)

Self-regulated learning (Dabbagh and Kitsantas, 2012)

Safety-Wellness

Sharing

Snapchat©

Social connectedness (Vincent, 2016)

Social Media

Student Engagement

Student takeovers

The Student Experience

Web 2.0

Web-based learning (Hurst, 2018)