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**Social media, diffusion of innovations,
morale and digital inequality**

**A case study at the University of
Limpopo Libraries, South Africa**

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Abstract

Purpose – The purpose of this paper is to explore social media usage in an academic library in South Africa and the factors influencing its use. The primary goal of the study was to examine perceptions surrounding the impact of non-adoption of social media on morale, and to explore the consequences of digital inequality.

Design/methodology/approach – Using a qualitative method, in-depth interviews were conducted with a small sample comprising six key informants at the University of Limpopo Libraries.

Findings – The findings suggest that non-adoption of social media has a negative influence on morale, and that it is a very necessary

tool required for interaction with students as well as promotion and marketing of the library's resources.

Research limitations/implications – This paper is limited to one academic library in South Africa situated in a rural area. The research suggests that more academic libraries in rural areas be studied to ascertain if geographical location and finance are barriers to social media adoption.

Originality/value – This study addresses non-adoption of social media and suggests ways to improve employee morale and retention. The research contributes to current research.

Keywords Academic libraries, Social media, Digital divide, Environmental factors, Employee morale, Non-adoption

Paper type Case study

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Introduction

There have been numerous requests from both library employees and students to implement social media in the library's communication to its students. The first author, a senior librarian, had the opportunity to work with employees at University of Limpopo Libraries (ULL), and being part of a non-adoptive social media environment, the first and third authors, employed at the University, were led to research how librarians feel about being excluded from these platforms. The main purpose of this study was thus to examine the impact and perceptions on employee morale in respect of the banning and blocking of social media during core business hours. Based on six narrators' stories, we discuss the barriers preventing them from exercising the growing need to implement new and innovative technologies. Rural areas are characterised by underdeveloped information and communications technology (ICT) infrastructures, the high cost of telecommunications, unstable and unreliable power, densely populated areas, low-income

levels, few roads and limited means of transport (Kapondera and Hart, 2016, p. 13). Similarly, Nkondo *et al.* (2014, p. xxiv) define the digital divide as “the gap between people with effective access to digital and information technology and those with very limited or no access at all. It includes the imbalances in physical access to technology as well as the imbalances in resources and skills needed to effectively participate as a digital citizen”.

Of the nine provinces in South Africa, Limpopo is the fifth largest province, with the highest population of young people in the country. Tertiary institutions in rural provinces can be classified as historically disadvantaged institutions (HDIs). It should be noted that the University of Limpopo (UL) belongs to the category of universities in South Africa that are referred to as HDIs. HDIs are typically marked by limited resources, certain kinds of curricula and approaches to teaching and learning, and tend to be educationally and socially benevolent and accessible to the average student (Kaburise, 2014, p. 8). A study conducted by Osunkunle (2010, p. 381) noted the disparities between HDIs and historically advantaged institutions (HAIs) in South Africa and focussed on the digital inequality at the UL. Although South Africa has been a democratic country since 1994, there are still several inequalities dating from the apartheid era (Mnkeni-Saurombe and Zimu, 2015, p. 45). The uneven distribution of libraries is a consequence of the historical imbalances of the past, based on the racial and urban–rural divide of the apartheid regime (Nkondo *et al.*, 2014, p. 1). Living in a non-urban setting has both socio-economic and educational repercussions, referring to limited opportunities and access to libraries to groom learners for tertiary education (Kaburise, 2014, p. 15). This is a determinant of unsuccessful tertiary performance.

The paper addresses how the diffusion of technology, such as social media, affects an individual’s morale. Based on Rogers’ theory on diffusion of innovations (DOI), classifying adopters and non-adopters,

this paper suggests that incorporating social media into the academic library's operations and services will be based on the need as prescribed by the library. Being part of an academic university who is an adopter of social media, the library, as a non-adopter, can be classified as a late adopter. The study addresses the following research questions (RQs):

RQ1. What are the factors that hinder the social media adoption process?

RQ2. What effect does non-adoption of social media have on employee morale?

This study concentrates on low employee morale as well as internal environmental factors likely to discourage innovation. Nelson (2014, p. 78) notes that time and money invested in the professional development of each employee are reliable ways to improve work performance, employee morale and the status of the library on campus.

Diffusion of innovations (DOI) theory

Although adopters of social media, Facebook and Twitter, UL prohibits the use thereof during core business hours. These platforms are managed by the Marketing and Communication Department but due to the ban on social media, the department invested in WiFi connectivity to disseminate information. Moodley *et al.* (2015, p. 80) look at best practice for blended learning, incorporating social media, at a rural university. They identified barriers such as poor internet connectivity and lack of computers which are exclusive challenges to a rural environment. Furthermore, in this study, the ban on social media is a result of low bandwidth and misuse of social media for non-academic purpose. The views of academic librarians are to promote self-efficacy, technical skills and to attract students. Academic libraries are beginning to incorporate social media to promote information sharing and bringing services closer to their users (Quadri and Idowu, 2016, p. 38). It is against this background that this study investigates the non-adoption of social media, Facebook and Twitter, for information dissemination at an academic library and the impact thereof. To study the challenges, the

research draws on the DOI theory designed by Rogers (1995, p. 4). Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. He categorises adopters as:

- (1) Innovators: venturesome – are obsessed with innovations, eager to try new ideas.
- (2) Early adopters: respectable – are an integrated part of the local social system that are innovators.
- (3) Early majority: deliberate – adopt new ideas just before the average member of a social system.
- (4) Late majority: sceptical – adopt new ideas just after the average member of a social system.
- (5) Laggards: traditional – are the last in a social system to adopt an innovation.

South Africa's historically disadvantaged university libraries are challenged to meet the demands of staff through the provision of relevant infrastructure, services and information-related skills to enable staff to function in the digital information age. The study conducted by Nyahodza and Higgs (2017, p. 39) at the University of the Western Cape Library indicated two levels of the digital divide: the global digital divide within a developing nation, and competing with a relative scarcity of skills and resources within the "local divide" as a legacy of apartheid. While the institution does make an effort to bridge the digital divide, emerging as a competent agent of democracy in meeting the demands of staff, other challenges of slow internet connectivity were acknowledged as a major issue. Although the library is engaging in various projects to improve access and skills, political and economic issues in South Africa could contribute to an increased digital divide if student protests persist and the economy does not stabilise. Through the provision of relevant infrastructure, services and information-related skills to enable staff and students to function in the digital information age, the library can be viewed as a role player in human freedom through the provision of

technologies to sustain the marginalised members of its academic community (p. 46).

Focussing on South Africa in a broader perspective, Bornman (2016) embarked on a longitudinal study and observed the slow progress in internet usage between 2008 and 2011 with only slight improvements. Underlying the complexities of the digital divide in South Africa, a continent that is already disadvantaged in respect of infrastructure and skills, Bornman indicated that South Africa had a long way to go towards becoming an information society, citing a downward trend in computer usage. This tendency could indicate that user-friendly devices such as tablets and smartphones are increasingly replacing computers (pp. 275-276). It can further be assumed that mobile internet usage has become widely available and has had a considerable impact on internet access and use, despite cultural and social barriers related to information-related needs and skills (p. 276). Being technologically savvy was mostly prevalent among males and white females, whereas most black females did not own smartphones. This is as a result of the perceived traditional role of African females and their placing less emphasis on information-related needs and skills.

Accommodating the information-seeking behaviour of Generation Y students

A new generation, called Millennials or Generation Y, is embracing technology with such fervour that a new culture of technology has emerged. This culture defines how people communicate, collaborate and incorporate technology into daily activities. Williams (2018, p. 11) concurred that the Generation Y students are technologically savvy and prefer social media to cater to their educational needs. They are demanding more flexibility in using technology to bridge social and academic activities. Librarians face new challenges as they adapt to this generation while continuing to serve the interests of less technology-connected students (Allison, 2013, pp. 23-26).

Arif and Kanwal (2016, p. 27) conducted a study of the adoption and use of social media technologies and their impact on the performance of distance-education students in Pakistan. They found that students at higher education institutions used social media for freedom of expression, communication, awareness and political engagement. Using social media to their advantage was instrumental, as students were more expressive when communicating on these sites, as opposed to traditional media such as electronic mail. Students considered social media as instruments to promote democracy. They found social media easy to use and had the necessary resources and knowledge to use social media. Subjective norms seem to indicate a perceived social pressure to use the technologies, indicating a significant change in their behaviour (p. 32).

The role of academic libraries and library professionals is changing (Harrison *et al.*, 2017, p. 248). Appropriate skills and hands-on training on the latest trends in technological applications should be organised accordingly for librarians or staff in charge of social media to upgrade their skills, experience and knowledge to ensure they are up to date in digital competence. As there are many social media tools and applications available with different features and benefits, academic libraries should keep abreast of these technologies in order to reach out to students through using multiple delivery systems proactively. To clarify this, in a qualitative study, Raju (2014, p. 167) analysed job advertisements appearing in a South African newspaper to establish the knowledge and skills required for library and information science (LIS) professionals to effectively and efficiently practice in a digital era academic library in South Africa. She reported that a variety of skills are required of the modern LIS professional including social media competencies. As such, library professionals in the twenty-first century should be equipped with hard and soft skills to face the challenge of students' needs and expectations now and in the future (Shafawi and Hassan, 2018, pp. 25-26). Shafawi and Hassan tested user engagement with social media and monitored library usage. The results indicated

that the relationship between user engagement with social media and actual library usage was positive. They further determined that frequent user engagement with social media encouraged actual use of the library resources and services (pp. 21-22). As academic libraries are serving a “web generation” of students with advanced computer skills (Ngcobo, 2016, p. 60), “it is imperative for academic libraries to embrace technology and tools such as social media”. Harrison *et al.* (2017, p. 250) note that Generation Y (Millennials) requires constant validation of their desires and accomplishments in life. In addition, social media can empower the Generation Y students, giving them control over their interactions and expressing more confidence than would be possible in personal situations.

Employee morale

Positive organisational behaviour (POB) can be used in the workplace to promote the strengths and skills of employees in the belief that it increases work productivity and improves employee morale while reducing stress and burnout of employees (Baker, 2015). Baker stated that leaders should lead by example when demonstrating and modelling POB (p. 9). “Authentic leadership” displays genuine, trustworthy and honest high moral standards and leaders should work transparently. In particular, Baker challenges library leaders to model optimism and self-confidence when dealing with times of uncertainty and unpredictability (p. 24), as libraries face challenges in a changing society. The confidence of the leader can saturate and strengthen the employees. In addition, training and development in university libraries can promote employee morale and employees may function as role models for their subordinates (p. 12). Additionally, social capital linked to relationship building is important in developing the university community to form networks, thereby establishing norms and creating trust (p. 19). Likewise, Bornman (2016, p. 265) favours integration into the information society as it holds positive social and economic consequences, such as an improvement in productivity and work

performance. However, low levels of ICT usage among many South Africans emphasise the need to transform South Africa into an information society.

Digital divide and social media engagement to increase library usage

Over the past two decades, many academic libraries across the globe have transformed into e-libraries; this includes the use of online scholarly publications coupled with social media engagement. Information is easily retrievable using mobile technologies and social media collaboration (Jain and Akakandelwa, 2016, p. 145). To fit into this new information landscape, academic librarians have assumed new roles and skills. Major challenges such as financial constraints and insufficient ICT infrastructure, poor library and information resources, slow acceptance of open-access resources and resistance to change could hamper transformation. Academic libraries have to continuously evolve and change as technology drives futuristic thinking (p. 146). However, Mojapelo and Dube (2017, p. 215) found that most higher education libraries in South Africa are still distinctly divided with regard to their user-groups and ecosystems, and that these divisions deny multiple users, both employees and students, the opportunity to access information resources equitably to meet their daily information needs. In bridging the digital divide, Osunkunle (2010, p. 380) noted the establishment of digital villages (ICT resource centres) contributed to development in South Africa.

Similarly, Quadri and Idowu (2016, pp. 30-31) emphasised that university libraries of South-West Nigeria were making efforts to integrate Facebook and Twitter into the library's services to disseminate information. Furthermore, they (p. 31) observed that social media are rapidly becoming the preferred means of building social/professional networks among librarians, while also being used to communicate with library users. Social media allow librarians to adopt a new role by placing themselves within a social realm with users. By being active participants

on social media, librarians are able to anticipate patrons' requirements and provide advice. However, the adoption of social media is channelled through ICT.

The study conducted in South-South Nigeria by Amina and Nwanne (2015, p. 210) noted hindrances experienced due to network connectivity problems, low bandwidth, few online desktop computers at academic libraries as well as cost implications and financial constraints to keep abreast with updated technology and infrastructure. Rambe and Nel (2015, p. 629) draw on technological uncertainty to unravel the complex, multiple possibilities in the reasonable use of technology, including the double-bound relationship between human agency and educational technology. The paper demonstrates the complex connection among educators' perceptions of social media, their media choices and effective use of such technologies for teaching. In spite of the hype around universal access to institutionally sanctioned networked technologies, inequalities in accessing social media persist in South Africa. One of the concerns is that students from lower income and rural areas may not have access to the web when they are not on campus, owing to their lack of web-enabled phones and networked computers. This contradicts earlier hopes about the educational potential of mobile phones (p. 640). The uneven adoption of emerging technologies like social media in South African universities is less about technologically literate students and more about the limited off-campus opportunities for productive educational deployment of social media. The tragic experience of students in technologically disadvantaged communities is not based on a geographical location, but rather supposedly functional technologies disabled by adverse structural conditions such as uneven connectivity.

Research methodology

The rationale for this study is to identify the social media gap in an academic library in South Africa and the factors contributing to this. Interviews using a qualitative design approach were employed. The

population of this study comprised five academic librarians and one network manager at the UL. This population was deemed appropriate for drawing conclusions from their experience of and perceptions on non-adoption of social media. A total of six professionals participated in the study.

Purposive sampling was used for this study. The cases were selected from a pool of library professionals. Purposive sampling involves identifying groups that are known to possess specific characteristics the researcher is interested in studying (Allen, 2017, p. 1525). Personal invitations were submitted via e-mail to prospective candidates at ULL. Face-to-face, semi-structured, in-depth, one-on-one interviews were conducted with four respondents. One respondent was on leave and a Skype interview was arranged. Social presence is one of the most important theoretical concepts in understanding people's social interaction in technology-mediated communication environments, for example, social media, e-mails, phones and video-conferencing technologies such as FaceTime and Skype. Social presence is understood as a feeling of being aware of and/or connected to the other social factor in a mediated environment (Allen, 2017, p. 1643). Interviews were held by the first author between September and October 2015. The names of the respondents were changed for confidentiality and pseudonyms were used to record the data.

Analytic procedure

The study needed to classify users according to the DOI theory, and used Hurt, Joseph and Cook's "individual innovativeness (II)" measurement tool established in 1977 to analyse respondents' innovativeness as people respond to their environment in different ways. Respondents were requested to state the degree to which each statement applied by indicating whether they strongly disagree=1; disagree=2; are neutral=3; agree=4; strongly agree=5. A 20-item instrument was answered by respondents:

- scores above 80 are classified as innovators;

- scores between 69 and 80 are classified as early adopters;
- scores between 57 and 68 are classified as early majority;
- scores between 46 and 56 are classified as late majority; and
- scores below 46 are classified as laggards/traditionalists.

In general, people who score above 68 are considered highly innovative, and people who score below 64 are considered low in innovation (Hurt et al., 1977, 2013).

The study further needed to assess the impact of social media on employee morale. Morale was qualitatively assessed based on the responses from research informants and discussed thematically in Theme 3.

A written account of the interviews is presented in the findings, using a narrative approach. A narrative approach is a method of qualitative data collection whereby a story is generated through the interview. The purpose of the narrative approach is to provide an opportunity to narrate respondents' experience. The narrative approach emphasises the lived experiences (Allen, 2017, p. 1072). This section describes the results of the narrative analysis of six respondents at ULL.

Results: understanding the needs of library professionals

The narrators put the phenomenon of non-adoption into perspective. These stories are told through the voices of respondents, bringing their own uniqueness as well as similarities to the fore. Everyone interviewed was familiar with social media, but one participant was not in favour of implementation.

Aisha

Aisha is 47 years old and has 27 years of library experience; she provided insight into the difficulties the library faces. As a Senior Librarian and Member of the Management Team, she was sceptical and answered the question, “do you have any

technological issues that could hinder your work output?” as follows:

We are barred from using social media during core business hours, and this is what caused the delay. Library employees were enthusiastic to move with the changing technology but because of the challenges, we have remained backward.

The technological difficulties faced by the library go further than social media and affect the library employees’ daily tasks. “There are programs that I cannot access because of network issues and being blocked by the firewall”.

Aisha furthermore highlighted the “censorship” enforced by the university on the general e-mail distribution to university recipients using the university’s mailing LISTSERV. This is intercepted and authorised at a central point before it is distributed to the recipients. “We are delayed and late with the adoption, because it is long since [*sic*] most librarians have been communicating with their users through social media”, she said. From the conversation, the researchers gathered that this is the golden age of free speech where smartphone technology, WiFi and the internet can be used to tap into the latest news reports and library developments.

Additionally, the question, “do you feel pressurised by the media and the buzz around social media to keep abreast with technology?” She noted:

Students created their own group profiles on social media. I am not sure how widely spread is the membership of these groups but they have indicated that there’s a forum where they discuss student issues on Facebook. We also highlighted that as university employees we too do not have access to social media platforms such as Facebook and Twitter. However, it was

pointed out that the Marketing and Communication Department has adopted social media and advised that the library use the institutional social media platforms to communicate with students.

Having considerable technical ICT experience as a systems librarian, Aisha scored 81 points and is classified as an “innovator”. Owing to technological deterrents and non-compliance by library employees, her efforts to implement a new technology were not realised. To clarify the above, she created a Wiki where employees could upload training materials useful for student assistants working after hours when the library has a skeleton employee complement. Employees reported that time was against them and that they could not participate in the project. Her interest in presenting change was undermined to the point where she could not execute the innovation. This reluctance from employees is based on internal environmental factors that hindered employees from embracing innovative technology and therefore led to low employee morale. She feels strongly about the critical success of implementing social media to ensure equality among the student population across the country. Aisha’s adoption personality is very different from that of the other respondents. She sees the adoption of social media as a high-risk effort as a result of the institutional policies. She suggested that the process should be centralised. She might be right, and as an innovator she brings good new ideas that will be brainstormed before implementation. Irrespective of institutional agency, she still values the success of social media and emphasised the involvement of the library’s senior management to support the adoption of such platforms, particularly Facebook and Twitter. Implementing innovations at ULL depends on the university’s executive management and the ICT department’s vision to lift restrictions to ensure free use of social media for academic purposes.

June

June is an acting Senior Librarian who manages a division in the library. She is 41 years of age and explained the prospects for the university library and hopes for change in bringing this phenomenon of social media on board. June expressed her perception of social media technologies when asked about the limitations or challenges she faced regarding non-adoption of social media.

Based on her ten years of library experience, she said:

For the sake of the students, I wish we can have more and give more in terms of electronic access and technology. The students at UL come from previously disadvantaged communities. Most of them are introduced to a computer for the first time when coming to the university. [At other universities] iPads are lent to students, cost free. However, there are rules that apply if the iPad is lost or damaged; the cost is added to the student's fees account. This is the type of technology and the way forward that UL should establish. We hope that maybe the restriction with access to social media will be lifted.

Furthermore, she answered the question, “do you have any technological issues that could hinder your work output”, and explained that:

[...] academic libraries are modern and it is no longer the old (historical version) of a library of students merely coming into the library to take out a physical book. We need to bridge the digital divide.

Based on question regarding the acceptance of technology, she said:

We need to be open-minded and willing to accept change, as is the case at other academic libraries in the Gauteng and KwaZulu-Natal provinces. They use hi-tech technology and equipment

where students are entrusted with these as well as taking responsibility for the care and safekeeping thereof.

June scored 74 points and is classified as an “early adopter” as she explores technologies before they are adopted by others. As an early adopter and avid user of social media, June is eager to adopt and use social media to promote the library’s services. Her adoption process is imaginative and she evinces the energy and creativity to develop innovative ideas. Her social nature allows her to freely speak about her future plans. She is eager to adopt and launch new ideas in the social system (Rogers, 1995, p. 249), inviting others in the library to come on board to create a social media committee to discuss the way forward and design a suitable strategy to best serve the students.

Skylar

Skylar is a 40-year-old subject librarian who has 13 years of library experience. She voiced the good aspects as well as her need to execute her job to its full potential; coupled with the negativity, she advanced positive suggestions.

To the question: “Would you find social media useful for your job?”, she answered:

Yes, it will help a great deal, especially for distance learning and off-campus communication’. This she says will help her performance and her communication as the clientele she serves are matured adults and training takes up to two hours on various databases which requires step-by-step training as some students are not computer literate and requires a longer period to grasp.

She said that if a step-by-step training guide or video is available online on social media, students would have the freedom to go through the tutorial independently.

She was enthusiastic and said:

“Maybe if we write a motivation and we get support from students. I think support from students is important to strengthen our case and to point out the benefits and educational use of social media.” On the question of limitations and challenges faced regarding social media on the work front, she referred to other academic libraries in South Africa and their provision of electronic social media to their students and the library personnel. She referred to the limitations at UL as “red tape”.

Skylar scored 72 points is classified as an “early adopter”. She interacts frequently with students using various other means of technology, as she requires this to correspond remotely with students who are situated on another campus. She has been innovative in communicating with students using alternative means of communication, such as Google Drive, owing to the unreliable and low-bandwidth e-mailing system. She has broadminded ideas and uses technology as soon as it becomes available. She is therefore eager to start using social media for communication and collaborative means with remote students should social media be adopted. She looks for ease and simplicity in a communication system, and because of the widespread use of social media, she feels that social media are best suited to meet the needs of remote students. She feels that the bureaucracy at the university contributes to negative consequences and escalates the frustrations experienced by employees and students. Strong support from the library’s executive management is required to ensure the implementation process and its continuous maintenance. Her perception and vision for an innovative academic library with additional communication features such as Facebook and Twitter confirmed that students are expecting library professionals in the digital age to organise and present information in a way that best suits them.

Tina

Tina is 37 years of age and is employed as a Faculty Librarian, serving two faculties. She provided us with an overview of her main duties, sketching her supervisory role. “Being a librarian is a passion”. Her passionate relationship with her profession is short-lived as she briefs us on the hindrances she faces which prevent her from exercising her job to its full potential and implementing innovations. She responded negatively to the question, “Do you have the necessary resources to use the system that is in place?” “No, I do not”.

Furthermore, she commented on social media being the “in-thing”:

Students rely on this medium of communication, because they are no longer interested to check their electronic mail (email); they prefer Facebook and Twitter. Right now, we are still facing a challenge. There is a great need for social media as we are pressurised to move with the changing technology to reach students in the medium of communication that they are currently using.

As a solution to the problem, Tina states, “If we, as librarians, stand together, we can persuade the university’s executive management to adopt social media. This will be so interesting to students who are technologically savvy”.

Tina is the type of person that will follow “innovators” before embracing a technology, after ensuring that it works well and is suitable and stable to use. She scored 67 points and is classified as part of the “early majority”, sceptical of implementation and change. Although she follows the mainstream social media sites, such as Facebook and Twitter, she is conservative in her approach to adopting social media and would prefer stability of the network before acceptance. She noted the need as expressed by students during information literacy (IL) training sessions that training material should be posted on social media. IL is a life-long

learning competency of finding and using information to solve problems, make decisions and create new knowledge. So too social media form part of life-long learning and electronic competency skills required in the digital age.

Cassie

Cassie is 36 years old and acts as a liaison between two schools. She provides training and does literature searches for her constituency of students. Having 11 years of experience as a Librarian, she narrated her experience. Cassie is enthusiastic to include social media as part of the librarians' job descriptions. On the question regarding the adoption of social media, Cassie was hopeful that the library will engage in social media soon, she noted, "to some extent we are compelled to be on par with other academic libraries, so that we are able to help those whom we serve". She provides a different angle regarding the technologically savvy nature of students. Libraries are at the forefront of technological change when students rely on the library to keep up with technology. "We need to reach out to the students who are so advanced in technology when we, the library, are not out there [...] we are not even visible in the social media realm" because the ICT department cited "low bandwidth connectivity". She feels that the library's management should provide the necessary structures to enable employees to operate. Furthermore, she noted:

Most libraries have a Facebook account and I think being visible on social media increases the library's image as well as sharing information that is relevant to the library profession and to promote collaboration [...] Having social media opened only after hours is not practical because social media is hands-on and provides real-time communication. Employees and students cannot wait until 16:00 because messages lose the effectiveness of online communication.

She strongly feels that social media should be accessible to all and that ICT should increase the bandwidth to cater to the growing need for technology.

Cassie scored 63 points and is classified as an “early majority”. She is eager to express her opinion to ensure that her voice is heard, and eventually, if given the opportunity, she will accept the technology. The message perpetuated by Harrison *et al.* (2017, p. 249) is the same. “The normative mechanism is pressuring academic libraries to have a presence on social media”. Cassie is quick to make the necessary connections between the needs of the students. She is enthusiastic and will challenge the adoption of social media. Now that she has determined its success, ease of use and the widespread need to effect change in an academic library, her natural desire to be a trendsetter is to ensure the speedy adoption of social media. She can be persuaded of the utility of new ideas, but the pressure of peers is necessary to motivate adoption. The early majority’s unique position between the very early and the relatively late to adopt makes them an important link in the diffusion process. The early majority follow with deliberate willingness in adopting innovations, but seldom lead (Rogers, 1995, p. 250).

Network manager

An interview with one of the network managers at ICT provided insight regarding the decisions reached to block social media. For clarity purpose it was stressed that Facebook and Twitter were the preferred media of choice. The question posed: “Why is social media not accessible during core business hours?”

The network manager gave an overview regarding the decision reached to block social media during core business hours. He said:

It was unanimously agreed by executive management to block social media, Facebook and Twitter, during core business hours. The decision was reached based on misuse of social media during working hours as

employees surfed social media sites for non-work related matters, causing unproductivity, which led to internet privileges being revoked and certain sites being blocked to prevent an influx of network traffic and slowing down the network.

Furthermore, he informed us about the aging infrastructure as it was not designed to cater for social media or videos. Due to the low bandwidth and for security purposes, as the university did not invest in monitoring tools to monitor social media usage, it is only accessible after hours, from 16:00 to 08:00.

Discussion of themes

The primary goal and objective of the study was to examine perceptions surrounding the impact of non-adoption of social media on morale, and to explore the consequences of non-adoption. At this specific institution, non-adoption, due to financial restraints, is a result of digital inequality related to disparities between income groups in South Africa. Employees' perception regarding non-adoption of social media technologies was not favourable. Using emerging themes, the following RQs were addressed:

RQ1. What are the factors that hinder the social media adoption process?

RQ2. What effect does non-adoption of social media have on employee morale?

Theme 1: impact of non-adoption in an academic library

RQ1. What are the factors that hinder the social media adoption process?

The barriers highlighted in this study such as intermittent internet connectivity, low-bandwidth and aging infrastructure are exclusive to this university, which is situated in the rural area of Limpopo. Similar restrictions were cited by Moodley *et al.* (2015, p. 80). Other factors that hinder the adoption process were the restrictions on access to social

media. Respondents perceived that the University was not taking a stance to ensure to their staff developmental growth and innovative technology progress. Even though the restrictive access was explained by the network manager, respondents felt that social media were crucial for their developmental growth. Furthermore, respondents felt that the bureaucratic system should be changed to a democratic system and the limitations imposed by executive management to bring forth change.

To drive transformation, the research suggests a change in the current practices, as the University Libraries act as a support structure to the greater university community, by making short- and long-term technological trends, like social media platforms, Facebook, and Twitter, available to students. Library professionals will have an opportunity to express themselves in the social media realm while satisfying students' needs as well as developing skills to analyse and create social media content. These platforms are particularly relevant as Generation Y students use social media for communication. If library professionals are given adequate opportunities to adopt technology, they will feel included and will be more likely to promote innovation. The main purpose of networking is to get information across to a wider audience of the student population.

As librarians at ULL are striving to implement social media, other academic libraries have embarked on new changes and opportunities. For example, the notion of the "embedded librarian" is introduced by Rambe and Nel (2015, p. 630). Their paper highlights the different ways in which effective uses of social media are embedded in innovative technologies. Furthermore, the UL should lead the way in bridging the digital divide by lifting the ban on social media to allow employees to explore innovative methods of communication and so too provide library professionals with the opportunity to develop their skills according to the key performance areas (KPA) required within the profession. Social media consist of a set of tools that enables library professionals to interact with students in real-

time media as it is interactive and has a quick response timeframe for urgent notifications.

Theme 2: impact of digital inequality

Irrespective of the reasons provided by the network manager, several inequalities between library management, executive management and the ICT Department were observed insofar as the amount of power granted to certain employees to withhold access to pertinent technologies. Respondents felt that there is therefore a need to introduce additional methods of communication to boost the library's communication tools by using innovative technologies such as social media to bridge the digital divide based on the university's poor access to the internet, poor WiFi connectivity and poor remote access. Concurred by Moodley *et al.* (2015, p. 79), most students own mobile devices with internet connectivity and requested employees to communicate using social media as they are able to access it using their mobile devices even though social media is blocked during core business hours. The advent of ICTs has led to a technological revolution across the globe and it continues to change the global social and economic environments of countries making use of these technologies (Osunkunle, 2010, p. 377). Academic libraries are mandated to serve academics, students and administrative staff but the higher education sector did not escape the historical baggage of apartheid. The apartheid system engineered a division in the higher education sector where social inequalities of race, gender and geographic location resulted in the broad characterisation of HDIs and HAIs (Mojapelo and Dube, 2017, p. 224). Providing an example of the disparities between HDIs and HAIs, Osunkunle (2010, p. 384) found that HAIs, such as Stellenbosch University, had a ratio of access to computers of 3:1 and 24-h access to the internet, as opposed to HDIs such as the UL, where a ratio of 17:1 was recorded. The latter is still mirrored in current practices. Library professionals at ULL have partial use of technology, although support from the library's management is needed to implement social media, employees feel they have the necessary skills and are willing to learn to

use innovative technology. Digital inequality continues to persist along socio-economic lines. Respondents reflected on access provision at HAIs compared with ULL, where access was marginal. WiFi was not accessible within the entire library and internet access was intermittent. Based on these advantages and disadvantages, respondents felt their developmental skills were much poorer than those at HAIs. This links to employee morale discussed in Theme 3.

Theme 3: impact on employee morale

RQ2. What effect does non-adoption of social media have on employee morale?

Although significant progress has been made by making Facebook and Twitter available after hours' respondents are in favour of adopting social media, ensuring a stable and accessible WiFi network and internet connectivity. Respondents feel marginalised and incompetent to perform daily tasks. Respondents replied negatively to non-adoption of social media citing, they feel demotivated as their professional growth is hampered by limited resources, poor infrastructure and lack of trust which led to poor work performance. To increase job satisfaction, an open-door policy and transparency are key indicators of involving employees in strategic planning and sharing information as the importance of their roles in the library is emphasised to strengthen relationships between the employer, employees and students. Likewise, social capital is acquired through social media interactions with students and colleagues at other academic libraries to enhance staff morale and so to feel that they are becoming digital citizens. Limiting access to social media is discouraging and contributes to employees lacking skills and knowledge to set up social media pages, seen as a KPA for academic librarians. So too, the lack of ICTs seems to have a negative impact on employee morale where the use of these media to create content and collaborate with students to bridge the socio-economic divide has led to low employee morale.

As indicated by respondents, although other academic libraries do have the autonomy to express their expectations, the measures that are put in place are not as stringent as those of the UL. Employees have the perception their views and input will not be considered, as there is too much “red tape” to circumvent before social media can be implemented. As certain websites are censored by the University, social media platforms cannot be accessed during core business hours; instead employees use their personal data on mobile devices or wireless broadband to gain access; alternatively, social media are accessible after-hours only as per the prescribed times stipulated by the University.

Conclusion

Social media contain significant platforms in the digital environment, creating additional means of communication for academic libraries where library professionals see themselves as educators in the rapid development of digital libraries. Social media have been identified as important networking tools as they are deemed important for staff development and social capital for academic librarians to keep abreast with trends and new developments in the profession. Not only should the University ICT department allow social media platforms on the network 24 h a day and upgrade the infrastructure to enable this, but high-speed WiFi connectivity should also be rolled out throughout the library to ensure and facilitate the effective access to and usage of social media. As noted by Rogers (1995, p. 31), in a university setting, a professor may not be able to make an optional decision to use a word processor until a prior authority decision to purchase the word-processing equipment has been made by the professor’s departmental chairperson. Therefore, the library’s management should become the agent to adopt and implement the DOI, in this instance, social media. Mojapelo and Dube (2017, p. 232) noted the historical divisions and barriers in academic libraries across South Africa prevent Generation Y students from accessing a plethora of information sources to satisfy their wide-ranging, dynamic and ever-evolving information needs.

This paper identified the challenges faced by library professionals in an academic library environment. These are low bandwidth, poor internet connectivity and dated ICT infrastructure. This concurs with the opinions of Nkondo *et al.* (2014, p. xxiv) that there are imbalances of physical access, technology and resources. As a result, the adoption of social media is not practicable. Low employee morale is experienced, as employees are unable to express themselves in a digital environment due to the University's ban on such media, which leads to non-adoption of social media. This creates a digital divide within academic libraries and staff developmental skills at ULL. To bridge the gap in digital divide, higher education institutions play a pivotal role and should make a concerted effort to prioritise internally the availability of infrastructure and limited resources to produce technologically savvy, skilled graduates to compete in corporate competitive environments. The LIS profession require new and emerging skilled professionals to use technologies geared for the digital era which is important to their growth in a constant changing LIS environment (Raju, 2014, p. 169). Similarly, library professionals should be equipped with innovative technologies where social media expertise are considered desirable skills for the twenty-first century librarian. Furthermore, South African universities play a pivotal role in offering diverse learning opportunities for those who face disproportionate socio-economic challenges (Williams, 2018, p. 10). Even though misuse of social media has been identified, respondents viewed the use of social media as a source of communication in the social environment, keeping students abreast with newsfeeds, posting urgent messages and to network with colleagues at other branches. Social media is viewed as a source of connecting with students, fellow colleagues and other academic libraries, locally and abroad. Accepting technology and moving with modern times require academic libraries to change in order to keep abreast with technological advancements to suit the needs of Generation Y students as it is a fast mode of communication.

This study's sample size is not representative of the university library community, therefore it cannot be generalised, but variables such as age, tenure and length of service seem not to have had any impact on respondents' approaches to innovation. The study concludes that library professionals are eager to accept innovative technology, even if the institution is known as a late adopter of or laggard in the adoption of the technology. Respondents emphasised the importance of training as an essential tool to ensure maximum use of the technology. There was a strong feeling among respondents that social media could be beneficial to the library and contribute to positive employee morale and employee retention. Despite the lack of enthusiasm, respondents are hopeful that one day, social media will be adopted and freely accessible. The key is to recognise best practice and to work towards building a collaborative tool that suits academic libraries and the student population.

It is recommended that all social media sites be opened and to prevent abuse of social media, students could be given a certain amount of data loaded on their student cards and when depleted the onus rests with the student to reload. The recommendations could be used to implement a turnaround strategy. Furthermore, this qualitative study of the challenges faced by academic libraries has highlighted the effects when a specific technology is not adopted, based on internal environmental factors. As a support structure to the university, academic libraries need to re-conceptualise processes and procedures in support of students to align with the needs of their twenty-first century clientele.

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Further reading

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