

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/330151880>

Use of Social Media for Improving Student Engagement at Université des Mascareignes (UDM): Proceedings of Fifth International Conference INDIA 2018 Volume 2

Chapter · January 2019

DOI: 10.1007/978-981-13-3338-5_2

CITATIONS

0

READS

242

3 authors, including:



Randhir Roopchand

Aberystwyth University (Mauritius Branch Campus)

23 PUBLICATIONS 16 CITATIONS

[SEE PROFILE](#)



Vishal Chandr Jaunky

J&R Institution of Research Ltd.

44 PUBLICATIONS 332 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Research Project on SMEs [View project](#)



Sustainable Renewable Energy use in Mauritius [View project](#)

Use of Social Media for Improving Student Engagement at Université des Mascareignes (UDM)



Randhir Roopchund, Vani Ramesh and Vishal Jaunky

Abstract The research responds to the global trend of using technology in higher education for improving student engagement and student satisfaction. The research ontology adopted is that students may benefit from a more interactive approach of learning in classes. The methodology used is the use of a pre-designed questionnaire to test the readiness of students and faculty members for the use of social media. Three components were extracted based on EFA which are namely social media as a facilitator, improving learning proficiency and trust in data security. The research outlines the benefits, risks and challenges for adopting SNSs for improving customer satisfaction and loyalty. It is important to note that social media tools are part of the Web 2.0 interactive and intelligent system of communication being used in different fields.

Keywords Social media · Social networking sites (SNSs)
Informal scholarly communication · Higher education and social learning

1 Introduction

The present research seeks to explain the importance, challenges, and problems in using social media in Mauritian Higher education. Mauritius has a high internet penetration rate of almost 70% with more than 700,000 Facebook users. This proves that people of different ages use social media in their day to day lives. Mauritius ambitions to be an education hub in future and consequently, the use of technology

R. Roopchund (✉) · V. Jaunky
Université des Mascareignes, Beau Bassin-Rose Hill, Mauritius
e-mail: rar11@aber.ac.uk

V. Jaunky
e-mail: vishal.jaunky@itu.se

V. Ramesh
Reva University, Bengaluru, India
e-mail: sarada889@yahoo.in

© Springer Nature Singapore Pte Ltd. 2019
S. C. Satapathy et al. (eds.), *Information Systems Design and Intelligent Applications*, Advances in Intelligent Systems and Computing 863,
https://doi.org/10.1007/978-981-13-3338-5_2

for enhancing learning is of paramount importance. Recently, the launch of a social media guide by the Minister of Education heralds the importance of social media for the Mauritian youth. The research relies primarily on the opinions provided based on a survey carried out with students at Université des Mascareignes (UDM).

2 Research Problem and Research Objectives

The present research addresses the research gap of using technology in higher education in the Mauritian context. There is little research on the prospects and challenges of using social media in higher education. However, Mauritius ranks first on Internet penetration in Africa and also has the highest number of social media users if compared to the population. The research is also a logical pursuit after exploring the use of customer relationship framework in higher education in prior research. However, the research will be context specific as the questionnaire will be administered to students of Université des Mascareignes which is a Public University.

The objectives of the research are to:

1. Understand the use of social media in Higher Education
2. Analyse how social media may be used to increase student engagement at UDM
3. Develop some recommendations to improve student engagement.

2.1 Hypothesis and Research Framework

It is hypothesized that students have positive a negative attitude towards the use of social networking sites. The hypothesis can be formally stated as:

H0: Students have a negative perception about the use of Social Networking Technologies in Higher education

H1: Students have a positive attitude towards the use of social networking technologies in Higher education

3 Literature Review

3.1 Understanding Social Media

Social media refers to media used to empower social collaboration. For the present study, the term social media technology (SMT) alludes to electronic and portable applications that enable people to make, connect with, and share new user-generated or existing content, in computerized situations through multiway communication.

Social networking sites are the term utilized as a non-exclusive term for every single social medium and PC interceded correspondence, including yet not restricted to Facebook, Twitter, LinkedIn and Myspace, including social networking sites of Cyworld, Bebo and Friendster. Ellison and Boyd [1] characterize interpersonal organization locales as electronic administrations that enable people to develop profiles, show client associations, and inquiry traverse inside that rundown of associations.

3.2 Increasing Use of Social Media

There is an increasing use of social media in Mauritius (more than 700,000 Facebook users). From the diagram below, the most commonly used social media are Facebook followed by Pinterest and Twitter (Fig. 1).

Social media in Mauritius has witnessed tremendous growth with the rise in the number of users and their participation spent their time on Social Networking Sites. Broadband too has seen a noteworthy development in 2012 with 400 thousand clients (57%) are educated youngsters. Mauritians who have relocated to Australia, Canada, and European nations for training and career are in constant touch with family and companions which prompted the ascent in utilization of informal communities such as Facebook. This trend has expanded much more with the process of globalization triggering Mauritian to use more technology such as mobiles, PCs, other registering gadgets like PCs, tablets. Most prevalent social networking media platform in

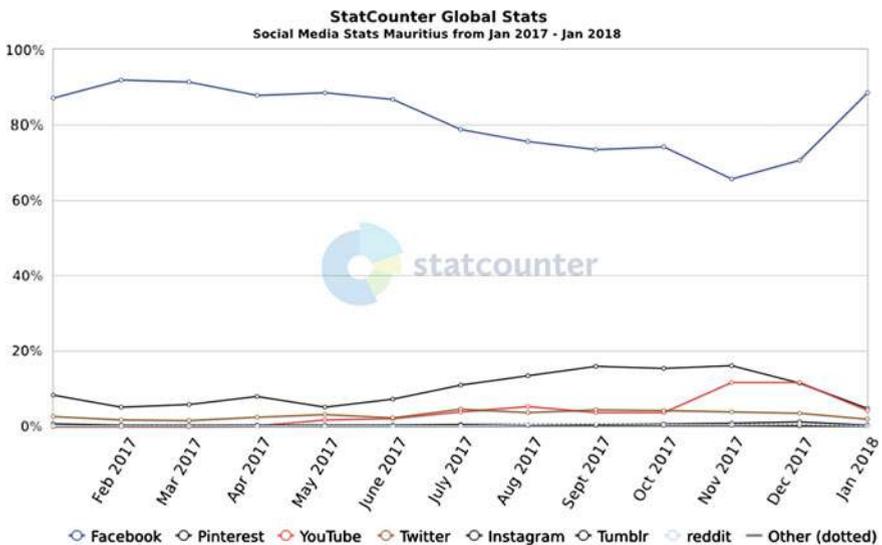


Fig. 1 Use of social networking sites in Mauritius

Mauritius is Facebook as around 58% dominated by male and for the most part, the students and professionals in the age group of 14–24 are using the social media.

3.3 Social Media in Higher Education

The Hon Minister of Education for Mauritius Mrs. Leela Devi Dookun-Luchoomun [13] stressed the growing importance of technology for Mauritians while highlighting its developmental role in the higher education sector. The Minister also highlighted that technology will entail the transformation of educational institutions into ICT-driven ones. The increasing use of tablets and other hi-tech materials may eventually contribute to making this dream a reality.

At an international level, some universities are already using podcasts, video blogs, and webcasts to share the work of students, faculty and alumni with the public at large. There is increasing use of Tweeting—the function of a status update (tweets)—is increasingly being used for discussion by students and faculty members [9]. Besides, numerous NCAA members have encouraged athletes, mentors and other staff to use Twitter and Facebook as platforms to connect with fans [20]. Faculty members have also used blogs as a pedagogical strategy. Some recent studies have investigated the use of blogs in academic disciplines including the sciences [4], language learning [8]), teacher education [7, 16] and business [21]. Faculty has also created Facebook profiles to connect with their students in a more personable and informal space [19].

3.4 Web 2.0 and Student Engagement in Learning

The advent of Web 2.0 applications, collectively known as social media, presents schools and universities with the opportunity to go beyond traditional delivery formats and develop learner-centred personalized learning environments [18]. It has significant impact for teaching and learning because they are strictly web-based and typically free, support collaboration and interaction, enhance students' learning experiences through customization and personalization and provide rich opportunities for networking. They are also highly responsive to the user and is highly student-centred approach [5].

3.5 Facebook and Blogs for Enhancing Student Engagement

The use of Facebook and blogs are increasingly being used in the higher education landscape [6]. Facebook is not only a network of contacts but may also be used for communication, sharing of videos and also chat. Gee [10] compares Facebook to affinity spaces where people may acquire social and communication skills. Facebook

has additionally been utilized for formal learning with academics setting up open or private gatherings for classroom practices [14]. Through the use of blogs, lecturers have the chance to make the material open for subsequent reflection and investigation thus improving the overall learning experience. Despite the growing evidence of the use of Facebook and blogs in educating and learning, there is lack of published research linking the use of these tools for improving student engagement. Studies that exist stem to a great extent from fields outside education, for example, sociology, human sciences and communication studies [3, 11]. However, existing research in the field of education demonstrates that students use social media such as Facebook and blogs on a daily basis and trust that more utilization of such advances in scholarly settings would prompt greater planning and commitment [6].

4 Research Methodology

This research design used a survey research methodology wherein a questionnaire was used as the main research tool. Questions included demographics, challenges and perceptions. The respondents were asked to rank and comment on different questions. This was used to determine the weight or the importance of each challenge and perception. The questionnaires included a combination of both structured and semi-structured questions. The questionnaire was validated by pretesting it with a few undergraduate students and making some changes to a few questions.

5 Analysis and Results

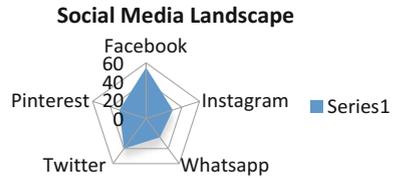
5.1 Profile of Participants

Table 1 provides the profile of participants (58 in total) in terms of year of study and also the different age groups. We find that students from Year 1 to Year 3 students participated in the survey. The highest percentage is for the final year students (more than 40%). In terms of gender participation, there were 32 as compared to 26. Most of the students are in the age bracket of 18–25 years.

5.2 Social Media Presence

Almost all students (98.3%) are on social media based on the survey results. This is not surprising due to high internet connectivity and this corresponds to the statistics of high internet users (more than 63% overall). We also have a 50% penetration rate for Facebook users. The high rate of social media presence is also explained by the

Chart. 1 Social media landscape at UDM



fact that the survey has been conducted with young students who are technologically savvy. The findings corroborate with the increasing number of users as identified by the increasing internet users by global statistics. The number of Internet users in the Republic of Mauritius in the past decade has boomed. In fact, the number of internet users in the island nation has undergone a ten folded growth. Going from 30,000 users in 1998 to 290,000 12 years later with a penetration rate of over 22% [2] (Chart 1).

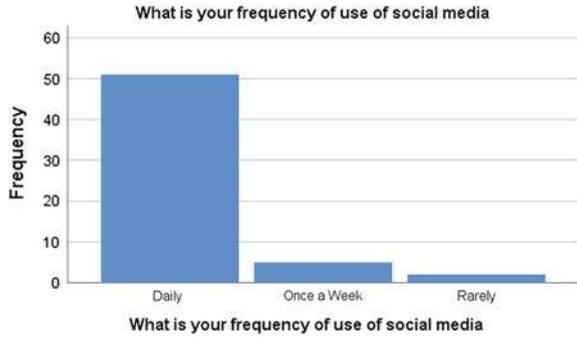
From the above, we find that most of the users are from Facebook, followed by Twitter and Pinterest. This is in line with the emerging trends in teaching pedagogy such as connectivism [17]. Another learning theory which suits the teaching and learning needs of digital learners is the Communities of Practice (COPs). Piktialis and Greenes [15] define Gen-Y as a person who ‘values group and team learning, constructing understanding from many sources as opposed to a single authority’. A Community of Practice (COPs) is hence a natural fit to motivate and enhance the learning of Gen-Y. The statistics confirm the popularity of Facebook, Instagram and Pinterest as the most used social media. However, there may be a change in future with the problems and the data privacy issues being raised at the international level (Chart 2).

From the above diagram, we find that the students are very actively engaged on social media. They use social media on a daily basis and consequently, there is high scope for using it in the field of education. Almost 50 students claimed that they use social media on a daily basis.

Table 1 Profile of participants-year of study

Gender × year of study cross-tabulation					
Count					
		Year of study			Total
		Year 1	Year 2	Year 3	
Gender	Male	6	9	11	26
	Female	12	7	13	32
Total		18	16	24	58

Chart. 2 Frequency of use of social media

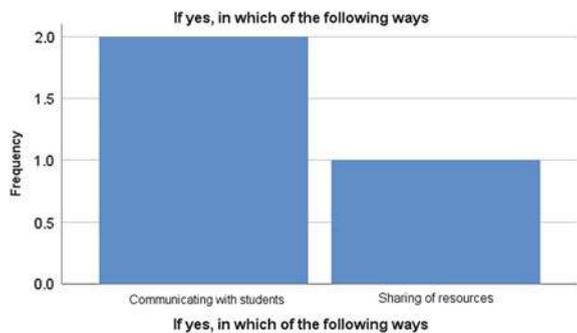


5.3 Use of Social Media for Teaching at Université des Mascareignes

The most interesting findings from the survey are that 85% of students are of the opinion that social media may be used as a teaching tool. Social media has traditionally been used as a means of making friends, networking and not as a medium of education strategies. Minocha [14] makes reference to the use of Social media in higher education for different purposes. Out of the 85% who are in favour, they believed that Facebook may be used for communicating with students and sharing resources. However, the use of Facebook as a discussion forum and Facebook page has not been selected (Chart 3).

The findings may be compared to the study carried out by [12] where students provided the following responses to the applications of social media technologies (survey carried out with 80 students). It should be explained that the sample is higher than the present study.

Chart. 3 Ways of communication



How do you use SMTS to support education	No of responses	% of responses
Assignments/project collaboration	81	97.59
Sharing of documents	76	91.57
Knowledge/information sharing	69	83.13
Activities/events updates	67	80.72
Sourcing of information	60	72.29
Communicating with professors and peers	73	87.95

5.4 Social Media and Student Engagement

The following variables have been used to assess student engagement through social media in higher education. We find that the mean is more than 3 implying that students are quite engaged and active (on a scale of 5). The grand mean for all the variables is 3.35. A factor analysis has been carried out to extract three main factors that may explain student engagement through social media. The three components will be explained later.

Total variance explained									
Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	5.447	41.900	41.900	5.447	41.900	41.900	3.978	30.601	30.601
2	1.730	13.306	55.206	1.730	13.306	55.206	2.406	18.511	49.112
3	1.167	8.977	64.183	1.167	8.977	64.183	1.959	15.071	64.183
4	0.900	6.922	71.105						
5	0.847	6.518	77.623						

Based on the above factor loadings and eigen values, we find that three factors have been extracted with eigen values more than 1. The three components that were extracted have been named as follows:

Component 1	Social media as facilitator	Implies that social media is a facilitating or support tool. It can enhance engagement of students based on the principle of connectivism [17]
Component 2	Security and safety	Students are concerned about privacy and security issues. Students are reluctant to communicate with lecturers
Component 3	Learning proficiency	It increases interest in learning as it is more fun [12]

5.5 Components of Social Media Engagement in Education

6 Recommendations

This study provides a positive view about the perception of students for the use of social media for improving student engagement at UDM. Most of the students are using Facebook as social media platform on a daily basis. Based on the EFA, three components have been extracted which may help to improve engagement which are namely social media as facilitator and learning and proficiency. However, students are concerned about the safety and security issues with the use of social media.

References

1. Boyd, D., Ellison, N.B.: Social network sites: definition, history, and scholarship. *J. Comput.-Mediated Comm.* **13**, 211–230 (2007)
2. Bertrand, A.: Using Social Networks and Media to Fight for Market Supremacy in Mauritius. <http://socialmedia-mauritius.com/2011/07/social-networks-media-market-supremacy-mauritius/>. Accessed 5th April 2018 (2011)
3. Bosch, T.E.: Using online social networking for teaching and learning: Facebook use at the university of Cape Town. *Communication* **35**(2), 185–2009 (2009)
4. Brownstein, E., Klein, R.: Blogs. *J. College Sci. Teach.* **35**(6), 18–22 (2006)
5. Bryant, T.: Social software in academia. *EDUCAUSE Quarterly* **29**(2), 61–64 (2006)
6. DeGennaro, D.: Learning Designs: an Analysis of Youth-Initiated Technology Use. <http://net.educause.edu/ir/library/pdf/ERM0837.pdf>. Accessed 4th March 2018 (2008)
7. Deng, L., Yuen, H.K.: Connecting Preservice Teachers with Weblogs: design Issues. Paper presented at the World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media 2007), Vancouver (2007)
8. Ducate, N.A., Lomicka, L., Lord, G.: Using computer-mediated communication to establish social and supportive environments in teacher education. *CALICO J.* **22**(3), 537–566 (2005)
9. Dunlap, J.C., Lowenthal, P.R.: Tweeting the night away: using Twitter to enhance social presence. *J. Inf. Syst. Educ.* **20**(2), 129–135 (2009)
10. Gee, J.P.: *Social linguistics and literacies: ideology and discourse*. London: Falmer. Opportunity to learn: a language-based perspective on assessment. *Assess. Educ.* **10**(1), 27–46 (2003)

11. Greenhow, C., Robelia, B., Hughes, J.E.: Learning, teaching, and technology in a digital age: web 2.0 and classroom research: what path should we take now? *Am. Educ. Res. Assoc.* <http://edr.sagepub.com/cgi/content/abstract/38/4/246>. Accessed on 24th May 2018 (2009)
12. Lim, J.S.: Investigating the Use and Perceived Effectiveness of Social Media for Informatics Programs in the Malaysian Higher Education Context. Doctor of Philosophy thesis, School of Electrical, Computer and Telecommunications Engineering, University of Wollongong (2015)
13. Luchoomun, L.: Education Minister Launches Book Promoting Proper Usage of Social Media. <http://www.govmu.org/English/News/Pages/Education-Minister-launches-book-promoting-proper-usage-of-social-networks.aspx>. Accessed on 24th April 2018 (2017)
14. Minocha, S.: A study of the effectiveness use of social software to support student learning and engagement. *JISC*. <http://www.jisc.ac.uk/whatwedo/projects/socialsoftware08.aspx>. Accessed on 15th Jan 2018 (2009)
15. Piktialis, D., Greenes, K.A.: Bridging the Gaps: how to Transfer Knowledge in Today's Multi-generational Workforce. The Conference Board. <http://tech.tac-atc.ca/private/education/pdfs/Multigenerational.pdf>. Accessed on 30th April 2018 (n.d.)
16. Ray, B., & Coulter, G.: Reflective practices among language arts teachers: the use of weblogs. *Contemp. Issues Technol. Teacher Educ.* **8**(1), 6–26 (2008)
17. Siemens, G.: Connectivism: a learning theory for a digital age. *Int. J. Instr. Technol. Distance eLearning*. http://www.itdl.org/journal/jan_05/article01.htm (2005)
18. Sigala, M.: Integrating web 2.0 in e-learning environments: a socio-technical approach. *Int. J. Knowl. Learn.* **3**(6), 628–648 (2007)
19. Sturgeon, C.M., Walker, C.: Faculty on Facebook: confirm or deny? Paper presented at the Annual Instructional Technology Conference, Lee University, Cleveland, TN (2009)
20. Watson, G.: Coaches, Colleges Explore New Frontier (Commentary). <http://sports.espn.go.com/ncaa/news/story?id=4308218>. Accessed on 18th March 2018 (2009, July 6)
21. Williams, J., Jacobs, J.: Exploring the use of blogs as learning spaces in higher education. *Australas. J. Educ. Technol.* **20**(2), 232–247 (2004)