

## An Analysis on Impact of Social Media for Learning in Eastern Cape Universities, South Africa

Oluwatosin O. Bamigboye<sup>1</sup> and A. Adelabu Olusesan<sup>2</sup>

<sup>1</sup>*Department of Computer Science, University of Fort Hare, South Africa*

<sup>2</sup>*Faculty of Science and Agriculture, University of Fort Hare, South Africa*

*E-mail: <sup>1</sup><201614053@ufh.ac.za>, <sup>2</sup><aolusesan@ufh.ac.za>*

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**ABSTRACT** There are a lot of changes in the society through information communication technologies which influence all aspects of life. Social media has exploded as a category of online platform where people create content, share it, bookmark it and network at an amazement rate. This research aims at surveying the impact of social media for learning in Eastern Cape Province Universities, South Africa. Two universities from the province were randomly selected for the study. A descriptive style of design using survey method was adopted for the study and the research instrument was a questionnaire titled Survey of impact of Social Media for Learning in Eastern Cape Province, South Africa. The questionnaires were administered directly to 300 students by stratified random sampling. The results were statistically analyzed using ANNOVA and t-test tools. The results also prove no significant difference between the male and female students on acceptance and impact of social media for learning in Eastern Cape Universities, South Africa. It was recommended that university authority should encourage and provide easy knowledge acquisition skills, dispositions, and social learning practices needed in higher education of learning.

### INTRODUCTION

Information communication technology has brought revolution in the development of Web 2.0 which is employed by users in Social media technology, with other tools and applications. Social media technologies have become a very important part of human life at bringing about content, interaction and sharing pictures. Social media are Internet-based applications which are built on the technological foundations of Web 2.0 allows for collaborations, exchanging of user-owned contents and ideas. It is also a medium for social interaction beyond super set social media communication. It provides ubiquitous access and measurable communication techniques. The ubiquitous of the social media is no more in vogue at the university where information technology has changed the way students learn and collaborate (Adelabu and Adu 2015; Yu et al. 2016). The vision of ubiquitous social media technology is to provide a platform of learning for users at anytime, anyplace without time constraint (Yang 2006; Atif et al. 2015). Social media has significantly changed the way institutions of higher learning, communities, individuals, and

organization communicate. Moreover, six different types of social media are identified as follows; collaborative project (Xiang and Gretzel 2010; Choe et al. 2016), blogs and microblogs (for example, Twitter), content communities (for example, YouTube), social networking sites (for example, Facebook), virtual game worlds (for example, World of Warcraft), and virtual social worlds (for example, Second Life). Social Media activities include; bloggings, picture-sharing, vlogs, wall-postings, e-mailing, instant messaging, music-sharing, crowd sourcing and voice over IP, to name a few. These services can be integrated via social media aggregation platforms (Caruso 2008; Andreas and Michael 2012; Johnson 2014). Social media are web based services, which allow everybody to produce a public or semi-public profile, articulate users and view others within the system. It is a platform used for communication through mobile phones, smart phones, palm tops and handheld devices computers, tablet PCs, laptops, desktops, iPad, iPod, Blackberry and Android on social network sites as Facebook, Twitter, 2go, google+ likely flicker (Kietzmann 2011; Mark 2010).

Social media technologies are prominent among the students of higher institutions of learning, as well as communication and entertainment. Social media are interactivity oriented and have digital tools that allow users to utilize, generate, and manipulate ideas for research. They are conducive for timely interactive communication and to foster dialogue (Seltzer and Mitrook 2007). They create opportunities for two-way dialogue and interaction in the institution among the students and instructors. It is a technology that allows deliberation, on social discussion and possibly collaboration among stakeholders. The technologies are those that are web-mediated, thus falling within the realm of read or writes collaborative Web 2.0 tools (Bortree and Seltzer 2009; Bryer and Zavatarro 2011). Social media create opportunity for interactions by the users for learning purposes. Most of the higher institutions of learning use social media for learning and researches; course registration, submitting assignments and checking. Social media are for instructional and content delivery. The benefits of social media include; making group learning easier, gaining insights from the wider group with the pairs and sharing valuable skills and knowledge among learners. (Sanni et al. 2009, 2012). Social media provide means for students to develop the knowledge acquisition skills, dispositions, and social practices required for full participation in learning society. The Social network sites encompasses the social media otherwise called a website that allows user to have group discussion in virtual community. The term social networking site will be used interchangeably with social media in this study. A factor which is very relevant to the benefit that can be derived from the integration of social media for teaching and learning is perception towards it (Lori 2011).

### Literature

Olabemiwo (2013) reported that university students are versed in the use of social media but the usage varies based on gender. Moreover, the differences in male and female using social media and computer are within their experiences, which in turn affect their computer self-efficacy. It is assumed that how self-efficacious a person is will either positively or negatively affect his/her use of social media. Similarly on gender issue, Mix (2010) reported that women

are more influential to use social media than men. He further stressed the mission for using social media as being different for both sexes. Women are biologically tied to social media; especially ladies of ages between 19 and 25 led the team of users with expressive language via social media; whereas men by contrast, generally use social media to collect information. Female students are more active and outnumbered male students in social media usage, spending more time than male students in surfing the net (Weiser 2000; Mazman and Usluel 2011; Christine 2013).

Bandura (2012) previously reported that individual with moderate to high sense of self-efficacy have a tendency to involve regularly in task-related activities and persist longer in coping efforts. This paves way to additional mastery experiences, which in turn enhances self-efficacy. Those with low self-efficacy are willing to give fewer challenges and they give up easily. Schwarzer and Scholz (2000) submitted that self-efficacy can be measured at various levels of specific and at different degrees of correspondences of computer tasks. They further conceptualized self-efficacy as individualized self-precepts that can vary across activities and situational circumstances, rather than a global disposition that can be assessed by an omnibus test in the universities. Mildner et al. (2004) defined self-efficacy as an active construct that changes over time as new information and experiences are acquired. It is also "one's self judgments of personal capabilities to initiate and successfully perform specified tasks at designated levels, expend greater effort and persevere in the face of adversity" (Mogolosis 2004). In other words, self-efficacy is a belief of one's ability to succeed in particular situation. Bandura (1995) described these beliefs as determinates of how human being thinks, reacts to situation and feels.

The stated objectives of teaching and learning in the universities are yet to be achieved because of some challenges. Stodden and Jones (2002) identified the challenges facing post graduate students as follows; inadequate conducive environment for learning, outdated syllabus or curriculum materials that support pedagogy learning styles, unavailability of new educational technology system that help instructors and learners improve learning, problems of instructors and learners on aspects of languages and knowledge representation for learning to

improve students' performance and lack of informal knowledge of TAM's principles in studies.

The Technology Acceptance Model arise from usefulness and ease of use of technology and have revolved from the initial study on the technology acceptance model by Davis (1989). It demonstrates that the acceptance of technology and the usefulness have a measurable significant impact on the use and ultimately on performance. There are researches on these variables that have evolved out of the theory of reasoned action whereby users accept or reject the use of information technology based on its perceived ease of use and usefulness (Saade 2007). The practicality of this experience can be related to the technology adoption model as this model has been widely used to predict user acceptance and use based on perceived usefulness and ease of use (Davis 1989).

However, while the Technology Adoption Model has been acclaimed for predicting acceptance, Venkatesh (2000), noted that the Technology Adoption Model does not help to understand and explain acceptance in ways that promote development from meaningful predictive analysis. Nevertheless, Venkatesh (2000) posited that the TAM's "perceived usefulness will be influenced by perceived ease of use, because the easier a technology is to use, the more useful it can be."

### Statement of the Problem

The frequent use of social media among the students for interaction as well as for education is increasingly prevalent in university education (Coates et al. 2005). Several studies have been conducted on social media and education globally. For instance, Shirky (2012) worked on social media for students. His study revealed that social media allow groups of students to form activities which have higher potential value. Eli (2008) studied perceived ease of use and perceived impact of social media by University students in the United States. The study concluded that students' perceived ease of use led to higher perceived usefulness and ultimately greater intensity of use of the social media. Christopher et al. (2012) examined students' perception of using 'Facebook pages' within individual university. They stressed that Facebook is a common platform that facilitates activities learning in the university.

Badmus (2013) in his study titled development and evaluation of a Web Quest application on educational technology for undergraduate students in South Africa, recommended Web Quest for undergraduate courses. Olasedidun (2014) examined the relationship among lecturers' perceived usefulness, ease of use, attitude and intention towards social media in Eastern Cape, South Africa. The findings revealed that colleges of education lecturers had positive perception on the usefulness, ease of use, attitude and intention towards using social media in instruction.

All the above mentioned studies are relevant to the present investigation because they give an insight to social media utilization in education in South Africa and abroad. Unfortunately, the existing literature is silent on the perception, awareness, free from efforts and perceived usefulness, self-efficacy and intention to integrate social media into learning among postgraduate students. None of the reviewed studies has carried out investigation on the students' perception and impact of social media for learning in Eastern Cape, Universities South Africa and the influence of Gender.

### Purpose of the Study

The aim of the study is to analysis the impact of social media for learning in Eastern Cape Province, Universities in South Africa. For students to develop the knowledge acquisition skills, dispositions, and social learning practices are needed in higher education of learning.

### Research Questions

The following research question were generated to guide the conduct of this study;

- What is the influence of students' acceptance and impact of social media for learning in Universities of Rhodes and Fort Hare, South Africa?

### Research Hypotheses

1. There is no significant difference between the students' acceptance and impact of social media for learning in Rhodes and Fort Hare, South Africa.
2. There is no significant difference between the male and female students gender' acceptance and impact of social media for learning in Eastern Cape province University, South Africa.

## METHODOLOGY

### Research Design

This study was carried out in Eastern Cape. A descriptive type of design using survey method was adopted for the study and two universities (University of Fort Hare and Rhodes) were selected in Eastern Cape Province, South Africa.

### Research Instruments

The research instrument was a self-administered questionnaire and the items of the questionnaire were selected based on their relevance to perception and usefulness of social media in learning.

### Population and Sample/Sampling Techniques

Samples constituted of three hundred students of one fifty female and one fifty male students from University of Rhodes and University of Fort Hare. The questionnaire consisted of three sections - sections A, B and C. Section A elicited the type of social media the student subscribe to, section B elicits information on biographical data of the respondents such as name of school, school type, gender, course of study. Section C seeks to find out the students perception and usefulness of social media, this contains 10 items numbered 1-10 and were patterned after the five point-likert type rating scale format of Strongly Agree (SA) - 5 points, Agree (A) - 4 points, Disagree (D) - 3 points, Strongly Disagree (SD) - 2 points and Undecided (UD) - 1 point.

### Validity and Reliability

The instrument was validated, tested and found to satisfy face, content and construction validity by two senior lecturers in the Department of Educational Technology, University of

Fort Hare and one senior lecturer in the Department of Information technology, University of Rhodes. Due to their suggestions and comments, the final draft was made. The instrument was further subjected to pilot testing and reliability before using the research instrument.

### Data Administration and Analysis

The questionnaires were administered to the respondents. Due to the type of the instrument, it was possible for the students to attempt the questionnaire within a period of five to ten (5-10) minutes. Therefore, the researchers waited to collect the completed questionnaire from the respondents immediately. All the questionnaires (300) were retrieved and statistically analyzed using Cronbach's alpha, the value obtained for the reliability was 0.80 which was quite satisfactory for this study. The level of the significance adopted for the analysis was  $P \leq 0.05$ .

## RESULTS

### Hypothesis 1

*There is no significant difference between the students' acceptance and impact of social media for learning in Eastern Cape province University, South Africa.*

To test this hypothesis, ANNOVA statistics was used to compare the two universities students' means scores of students acceptance of social media for learning in Eastern Cape Province Universities, South Africa and the hypothesis was tested at 0.05 level of significance as shown in Table 1.

Table 1, indicates that the calculated F value of 11.144 is not significant because the significant value of .000 is lesser than 0.05 alpha levels. The result implies that there is no significant difference between Rhodes University and University of Fort Hare in Eastern Cape Province. Therefore, the null hypothesis is rejected.

**Table 1: The students' acceptance and impact of social media for learning in Eastern Cape Province universities, South Africa**

Source	Type III sum of squares	Df	Mean square	F	Sig.
Corrected model	4647.980 <sup>a</sup>	2	2323.990	11.144	.000
Intercept	330672.000	1	330672.000	1585.611	.000
Universities	4647.980	2	2323.990	11.144	.000
Error	61938.020	297	208.546		
Total	397258.000	300			
Corrected total	66586.000	299			

## Hypothesis 2

*There is no significant difference between the male and female students' acceptance and impact of social media for learning in Eastern Cape province University, South Africa.*

The hypothesis is tested using t-Test statistics to compare male and female students of Rhodes University and University of Fort Hare on the students' acceptance and impact of social media for learning in Eastern Cape Province, South Africa. The hypothesis was tested at 0.05 level of significance as shown in Table 2.

**Table 2: The male and female students' acceptance and impact of social media for learning in Eastern Cape Province universities**

Variables	No	Mean	SD	df	t	Sig.
Male	150	27.9	15.00	298	6.562	.000
Female	150	38.49	12.86			

Table 2 indicates that the calculated t (300) = 6.562, p=.000. The result implies that there is no significant difference between the male and female students on acceptance and impact of social media for learning in Eastern Cape Universities, South Africa. That is, male and female are differ significantly from each other. Therefore, the null hypothesis is rejected

## DISCUSSION

The results of ANNOVA analysis on students' acceptance and impact of social media in learning are not positive. In order for any higher education institute to grow and to catch up with the ever expanding technological world of social media applications, it has to improve and focus on its public relation practices using social media. Social media platforms/ technologies is the key for any educational institute to reach the audience through effective display of strength or showcase of strength (Virani and Pathak 2017). The findings is in congruence with the study of Selwyn and Stirling (2016), Michelle (2013), Nsofor and Momoh (2013) and Alabi et al. (2015) who reported the usefulness of social media as stimulants for students to pay more attention to instructions.

The result of the second hypothesis implies that there is significant difference in mean scores of both male and female students of Rhodes University and University of Fort Hare on the

students' acceptance and impact of social media for learning in Eastern Cape Province.

These findings of this research indicated that most of male and female students were using social media site. Participants in this study indicated that the social media they visited the most were WhatsApp, Facebook, google+, twitter, yahoo messenger, 2go, BBM, skype and Instagram. Most of students visited their social networking sites when they feel like (Changchit 2014; Alharbi 2012).

These students realize the capability of social media sites to improve their performance if they use social media for academic purposes. Interestingly students find it easy to use social media as they agreed that many of the social media sites does not need an expert or need to be skillful before using it as reported by Ala-Mutka (2010).

The findings supported the findings of Achuonye and Olele (2009) who indicated male superiority over female in computer usage and Ofili (2015) who emphasized usefulness of PowerPoint among the undergraduate male and female students. Hence the findings of this study negates the finding by Mitra et al. (2000) and Huynh et al. (2005) who stated that men perform higher than women in computer usage. Anulobi (2009) and Yusuf and Afolabi (2010) indicated male dominance in computer usage on gender and Computer Assisted instructional package.

## CONCLUSION

Social media has become an interesting popular method approach in higher learning educational institutions due to rapid growth of information communication technologies. This study has made some findings on impact of social media as a means of communication in learning. The impact of social media on students of higher institution of learning often results in positive psychological effects. All tertiary institutions can benefit from the enormous value of blending the traditional learning and teaching experience coupled with the emerging technologies.

## RECOMMENDATIONS

Based on the result of this study the following recommendations were made to alleviate the identified impact of social media for learning in higher institution.

1. There should be seminars for students regarding the proper utilization of all the social media technologies (example, Facebook, WhatsApp, badoo, 2go, google and so on) so that the learners will not misuse those sites and blogs.
2. Efforts should be intensified to improve the access and use of ICT social media to learners in terms of the price to acquire the desired or needed ICT technology.
3. Government should provide institutions at all levels with adequate information-technology facilities which will enhance the quality of the learners.
4. Teachers to embrace and adopt the latest technology and explore ways to harness student engagement for activities that work in conjunction with the new technology way of teaching.

### REFERENCES

- Adelabu OA, Emmanuel O 2015. An Investigation into Teacher's Competence on Information Communication and Technologies (ICT) and Availability of E-learning Resources in the Teaching of Mathematics in Secondary Schools. *Proceedings of Ed-Media: World Conference on Educational Media and Technology*, 22-25 June, Montreal, Quebec, pp. 1002-1009.
- Achuonye KA, Olele CN 2009. Internet using patterns of Nigerian teacher-trainees: Implications for teacher education in Nigeria. *Journal of Sci Teach Assoc Nig*, 44(1,2): 103-108.
- Alabi TO, Emmanuel O, Falode CO 2015. Effects of videodisc mediated and computer assisted instructional packages on achievement of junior secondary school mathematics students in geometry in Minna, Nigeria. *Journal of Science, Technology, Mathematics and Education (JOSTMED)*, 11(3): 240-251.
- Ala-Mutka K 2010. *Learning in Informal Online Networks and Communities*. Seville: European Commission-Joint Research Centre-Institute for Prospective Technological Studies.
- Alharbi ST 2012. Users' acceptance of cloud computing in Saudi Arabia: An extension of technology acceptance model. *International Journal of Cloud Applications and Computing*, 2(2): 1-11.
- Anulobi JC 2009. Effect of the use of video compact disc instructional package (VCDIP) on academic performance of junior secondary school fine arts students in Owerri. *J Educ Technol Instr (JETI)*, 1(1): 31-36.
- Badmus AM 2013. *Development and Evaluation of a Web Quest Application on Educational Technology for Undergraduate Students in Nigeria*. PhD Thesis, Unpublished. Ilorin, Nigeria: Department of Science Education, University of Ilorin.
- Bandura A 1995. *Self-efficacy: The Exercise of Control*. New York, US: WH Freeman/Times Books/ Henry Holt & Co.
- Bandura A 2012. On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1): 9-44.
- Bortree DS, Selter T 2009. Dialogic strategies and outcomes: An analysis of environmental advocacy groups' Facebook profiles. *Public Relations Review*, 35(3): 317-319.
- Bryer TA, Zavattaro S 2011. Social media and public administration: Theoretical dimensions and introduction to symposium. *Administrative Theory & Praxis*, 33(3): 213-276.
- Caruso JB 2008. *The ECAR Study of Undergraduate Students and Information Technology*. Boulder and Washington: Educause Centre for Applied Research.
- Changchit C 2014. Students' perceptions of cloud computing. *Issues in Information Systems*, 15(1): 312-322.
- Choe Y, Kim J, Fesenmaier DR 2016. Use of social media across the trip experience: An application of latent transition analysis. *Journal of Travel & Tourism Marketing*, 1-13.
- Christine G 2013. Social Media and Gender. Is It One Big? From <www.talentzpo.com>
- Christopher I, Ball L, Desbrow B, Leveritt M 2012. Students' perceptions of using Facebook as an interactive learning resource at university. *Australasian Journal of Educational Technology*, 28(7): 1221-1232.
- Coates H, James R, Baldwin G 2005. A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary Education and Management*, 11: 19-36.
- Davis FD 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3): 319-340.
- Egbule J 2008. *Comparative Effectiveness of Power Point and Chalk Presentations*. PhD Dissertation, Unpublished. Owerri: Imo state University.
- Eli Cohen 2008. *Setting Knowledge Free: Issue in Informing Science and Information Technology*. Volume 5. California: Informing Science Press.
- Falade AA 2013. *Stakeholders' Perception of Integration of Information Technology and Communication Technology (ICT) in Open and Distance Learning in Nigeria*. PhD Thesis, Unpublished. Nigeria: Department of Educational Technology, Faculty of Education, University of Ilorin.
- Huynh MQ, Lee J, Schuldt BA 2005. The insiders' perspectives: A focus group study on gender issues, in a computer supported collaborative learning environment. *Journal of Information Technology Educ*, 4(4): 237-255.
- Johnson RJ 2014. *Based on Teacher Perceptions, Would the Use of Social Media Via Mobile Devices in Grades 9-12 Classrooms Increase Student Engagement in Learning Activities?* Doctoral Dissertation. Louisiana: Louisiana State University.
- Jones JB 2009. November. Challenging the Presentation Paradigm (in 6 minutes, 40 seconds): Pecha Kucha. *The Chronicle of Higher Education*.
- Kaplan AM, Haenlein M 2012. Social media: Back to the roots and back to the future. *Journal of Systems and Information Technology*, 14(2): 101-104.
- Kietzmann JH 2011. Unpacking the social media, phenomenon: Towards a research. *Journal of Public Affairs*, 12(2): 33-55.

- Levasseur DG, Sawyer JK 2006. Pedagogy meets power point: A research review of the effects of computer-generated slides in the classroom. *The Review of Communication*, (6): 101-123.
- Lori T 2011. Kids closer up: Playing, learning, and growing with digital media. *International Journal of Learning and Media*, 3(2): 37-59.
- Mazer JP, Murphy RE, Simonds CJ 2009. The effects of teacher self-disclosure via Facebook on teacher credibility. *Learning, Media & Technology*, 34(2): 175-183.
- Michelle J MP 2013. *Effects of Visual Media on Achievement and Attitude in a Secondary Biology Classroom*. A Research Project in Partial Fulfillment of the Requirements for the Degree Master of Education. Ohio: The Faculty of the Patton College of Education and Human Services Ohio University.
- Mazman SG, Usuel YK 2011. Gender differences in using social networks. *TOJET: The Turkish Online Journal of Educational Technology*, 10(2): 133.
- Mildner C, Montgomery GP, Shin RQ, Speight SL, Vera EM 2004. Conflict resolution styles, self-efficacy, self-control, and future orientation of urban adolescents. *Professional School Counseling*, 74-82.
- Mitra A, Lenzmeier S, Avon R, Qu N, Hazen M 2000. Gender and computer use in an academic institution: Report from a Longitudinal Study. *Journal Educ Comput Res*, 23(1): 67-84.
- Mix KK 2010. *Online Social Networking: Exploring the Relationship between Use of Web-based Social Technologies and Community College Students' Engagement*. Doctor of Philosophy Thesis. Austin: The University of Texas.
- Morgolois HA 2004. Self-efficacy: A key to improving motivation of struggling learners. *Clearing House*, 77: 241.
- Nsofor CC, Momoh GD 2013. Effects of developed electronic instructional medium on students' achievement in biology. *Journal of Education and Learning*, 2(2): 1.
- Ofili GO 2015. Effects of power point instructional medium on biology students' academic achievement and retention in Uyo Akwa-ibom state. *Journal of Science Technologist Mathematics and Education, (JOSTMED)*, 11(3): 294-300.
- Olabemiwo O 2013. Advantages and disadvantages of social media. Maryland Catholic Grammar School Ogbomoso, Oyo State. *The Trumpet Magazine and 2013 Yearbook*.
- Olasedidun OK 2014. *Relationship among Lecturers Perceived Usefulness, Ease of Use, Attitude and Intention Towards Social Media in South West Nigeria*. PhD Thesis, Unpublished. Nigeria: Department of Educational Technology, University of Ilorin.
- Perception and the Perceptual Process 2013. What is Perception? From <<http://psycyhtpp /chologyabout.com>> (Retrieved on 8 November 2016).
- Saade RG 2007. Dimensions of perceived usefulness: Toward enhanced assessment. *Decision Sciences Journal of Innovative Education*, 5(2): 289-310.
- Sanni M, Awoloye OM, Egbetokun AA, Siyanbola WO 2009. Models of change. *Journal for Studies in International Education*, 6(6): 87-89.
- Selwyn N, Stirling 2016. Social media and education... now the dust has settled. *Learning, Media and Technology*, 41(1): 1-5.
- Schacter D 2011. *Psychology of Education*. Atlanta Georgia, USA: Worth Publishers.
- Schwarzer R, Scholz U 2000. Cross-cultural Assessment of Coping Resources: The General Perceived Self-Efficacy Scale. *Paper Presented at the First Asian Congress of Health Psychology: Health Psychology and Culture*, 28-29 August, Tokyo, Japan.
- Seltzer T, Mitrook M 2007. The dialogic potential of weblogs in relationship building. *Public Relations Review*, 33(2): 227-229.
- Shirky C 2012. How Enterprises can Benefit from Social Media Technology. From <<http://www.search-contentmanagement.tect>> (Retrieved on 10 December 2016).
- Stodden RA, Jones MA 2002. Supporting youth with disabilities to access and succeed in postsecondary education: Essentials for educators in secondary schools. Minneapolis: University of Minnesota. *National Center on Secondary Education and Transition Issue Brief*, 1(5): 67-78.
- Venkatesh V 2000. Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the Technology Acceptance Model. *Information Systems Research*, (11): 342-365.
- Virani S, Pathak S 2017. Impact of social media technologies on public relation practices in higher education institutes across India - A live study. *Indian Journal of Applied Research*, 6(12): 686-689.
- Yang SJH 2006. Contexts aware ubiquitous learning environments for peer-to-peer collaborative learning. *Edu Technol Soc*, 9: 188-201.
- Xiang Z, Gretzel U 2010. Role of social media in online travel information search. *Tourism Management*, 31(2): 179-188.
- Yu N, Xu Q 2016. *Public Discourse on Genetically Modified Foods in the Mobile Sphere: Framing Risks, Opportunities, and Responsibilities in Mobile Social Media in China*, in *Mobile Media, Political Participation, and Civic Activism in Asia*. Netherlands: Springer, pp. 81-102.

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