IMPACT OF PERCEIVED RISKS AND BENEFITS OF SOCIAL NETWORKING SITES ON BEHAVIORAL INTENTION OF USERS: MEDIATING ROLE OF USERS' SATISFACTION

MUBBSHER MUNAWAR KHAN, KASHIF IMRAN,
BILAL MAHMOOD AND HIBA SAEED*

Abstract. This study is conducted to investigate the role of perceived risks and benefits on the behavioral intention of users with the mediating role of satisfaction associated with the use of social networking sites (SNS). Data were collected by distributing 350 questionnaires among the employees of various public sector organizations using simple random sampling technique. 300 duly filled questionnaires were used for data analysis. Results revealed that there is a significant impact of perceived risks and benefits of SNS on the behavioral intention of users. The study also confirmed mediating role of satisfaction in this relationship. Furthermore, the results of paired sample t-test show a significant difference in the scores of perceived risks and benefits. Results of paired sample t-test showed that perceived benefits associated with SNS are greater than perceived risks. Therefore, it may be recommended that usage of SNS is beneficial for enhancing the productivity and efficiency of public sector employees. In the future, practitioners may apply the findings of this study in making strategic decisions in the borderless intertwined world of SNS. The study may provide important

*The authors are respectively Professor/Principal at Hailey College of Banking & Finance / Dean, Faculty of Faculty of Commerce, University of the Punjab, Lahore and Scholars at Institute of Business Administration, University of the Punjab, Lahore - Pakistan.
Corresponding author's e-mail: mubbsher.khan@ibapu.edu.pk

implications regarding the impact of perceived risk and benefits of SNS usage on the behavioral intention of public sector employees with mediating role of user satisfaction, in their official assignments.

Keywords: Behavioural intention, Perceived benefits, Perceived risks, Social media application

I. INTRODUCTION

Social media is playing a crucial role in today's dynamic and competitive environment. It has changed the lifestyles of people. In today's highly competitive and dynamic business environment social media has become an important medium of communication and interaction between employees and their organizations (Santoso, 2012). Social media highly boost openness, social participation and information sharing among all segments of the society. In this study we would investigate how different perceived risks and benefits associated with social media impacts- the behavioral intention of employees working in different organizations, particularly in government organizations (Khan, Swar, & Lee, 2014), to use social networking site (SNS) and how satisfaction mediates this relationship. The increasing use of SNS has resulted in a reduced face to face interaction among employees in their normal business practices. In fact, today, the need for the physical presence of employees for business communications and routine assignments has also reduced in some societies – such as in work from home jobs. Social media applications have proven as innovative and technological advancement in social interaction which highly facilitates formal communication among the employees of both public and private sector organizations (Chun & Luna-Reyes, 2012).

According to Curtis et al. (2010), social media applications provide countless opportunities to individuals and organizations for sharing formal and informal information regarding their day to day activities. Chun and Reyes (2012) argued that the use of social media tools also reveals the social behaviors of the individuals such as; their sentiments, thoughts, intentions, attitudes, and responses towards their work activities. Therefore, it is obvious how SNS have made it possible for the employees, individuals, and students to interact, communicate and collaborate virtually with their organizations and institutions (Sandoval-

Almazan & Valle-Cruz, 2016). Moreover, social media applications highly influence the lifestyle of individuals, employees, and customers in their social interactions in terms of risks and benefits of social media (Bertot & Jaeger, 2011).

Coupled with the fact that there are several advantages of online social media applications for the employees and organizations, there are various disadvantages too. For instance, the users of social media applications may face various types of risks and challenges regarding their privacy, security, social interactions, approachability and time management (Bertot, Jaeger, & Hansen, 2012). Some scholars argued that social media applications are unproductive and ineffective tools for social interactions among individuals due to security concerns and wastage of time (Baumgartner & Morris, 2010). It is well known that incidents like Wiki Leaks and Panama Leaks proved disastrous for the governments of the many countries across the world.

The present study aims to fill the gap in the existing body of literature in three different ways. First, in Pakistani context, there have been few, if any, studies conducted to investigate the impact of perceived risks and benefits of social media on the behavioral intention of employees (Arslan & Zaman, 2014; Ashraf & Javed, 2014) belonging to public sector organizations in Pakistan (Irfan, Hassan, & Hassan, 2018). Secondly, we have tested the impact of perceived risks and benefits of social media on user intention through the mediating role of users' satisfaction. Finally, we have also compared the perceived risks and benefits associated with social media application using paired sample t-test.

The study may provide important implications regarding the impact of perceived risk and benefits of SNS usage on the behavioral intention of public sector employees with mediating role of user satisfaction, in their official assignments.

II. LITERATURE REVIEW

OVERVIEW OF SOCIAL MEDIA APPLICATIONS

Social media includes a set of online applications and websites that are designed to facilitate the users by providing them with the

opportunity to share their opinions, information and interests (Khan et al., 2014). Social media comprise of a large number of platforms and technologies that includes social networking sites and applications like Facebook, Twitter, Instagram, LinkedIn, Pinterest, Tumblr, etc.; blogs, microblogs, collaborative projects like WhatsApp, and all other internet based platforms that facilitates the users in their social interactions (Khan et al., 2013). A study conducted by Zheng (2013) demonstrated that the number of social media users are rapidly increasing in Chinese public sector organizations and government agencies are using this medium for public social interactions. Former studies show that the use of social media applications has increased at a very fast pace in the last few years (Sandoval-Almazan & Valle-Cruz, 2016; Sandoval-Almazan & Gil-Garcia, 2012).

Thinking about the significance of web based applications, these may very well be categorized into two types: web-based SNS and smartphone-based social media applications (Khan et al., 2014; Bertot & Jaeger, 2011). The users of web-based SNS may access them with the help of their e-mail addresses. Facebook, Twitter and LinkedIn are the best examples of web-based SNS. Whereas, smartphone-based social media applications may be accessed by the cellphone numbers of their users. WhatsApp is the best example of a smartphone-based application in this regard. In this study, we aim to investigate the benefits and risks of both types of social media platforms for the employees of public sector organizations of Pakistan.

The use of social media applications is also very crucial in terms of task fulfillment for the employees particularly when the deadlines of the projects are coming closer. Therefore, it is obvious that the social media applications are very important for employees in terms of risk and benefits, particularly in public sector organizations. In this study, our main objective is to investigate the impact of social media applications on various types of risk associated with employees such as time risk, psychological risk, social risk, and privacy risk. On the other hand, the present study is also concerned to investigate the impact of social media applications on various types of benefits related to employees such as social connectivity, social involvement, information attainment, and entertainment.

OVERVIEW OF SOCIAL MEDIA APPLICATIONS IN THE PUBLIC SECTOR

The revolution of social media and communication technologies has greatly influenced the social interaction patterns of individuals in our societies (Bertot, 2011). Social media is becoming an integral part of the day to day activities of people, customers, employees and organizations (Picazo-Vela & Gutiérrez-Martínez, 2012). It is a fact that the social networking sites (SNS) are very crucial for implementing the marketing strategies of organizations. According to Irfan et al. (2018) SNS have a significant and positive impact on economic sustainability, social sustainability and corporate reputation in public sector organizations of Pakistan. Social media provide the opportunity to the employees and their organizations to collaborate with each other on the matters of mutual interests. Social media is also playing a crucial role in social transformation by providing open access to global markets, financial services and by providing employment opportunities in private and public sector organizations (Rehman, Irem, & Ilyas, 2014).

Another study, conducted to examine the impact of social media on employee performance in the public sector organizations of Pakistan, reported that SNS have a strong impact on the performance and satisfaction of employees (Ashraf & Javed, 2014). In recent years, social media have greatly influenced the intention of its users to use new media technologies for their social interactions (Zaheer, 2018). Moreover, individuals and employees of the organization are also using SNS for their social interactions and for daily assignments. However, these applications significantly influence the employees in terms of their risks and benefits related to their official duties and work performances. Therefore, this study is conducted to investigate the impact of social media risks and benefits associated with SNS on user intention with the mediating effect of user satisfaction on public sector organizations employees in Pakistan.

BENEFITS OF SOCIAL MEDIA IN PUBLIC SECTOR

Social media applications are widely used by the different segments of the society around the world. According to Global Digital 2019 collection of reports from Hootsuite and WeAreSocial the number of

active social media users has grown to 3.48 billion representing 45% of world population while 3.26 billion (42% of world population) people are using social media on smartphones (Kemp, 2019, Jan 30).Social media applications provide a platform for social interactions, where individuals discuss and share their opinions, issues, mutual interests and can create new relationships (Siddiqui & Singh, 2016). Social media also provide enormous benefits and opportunities to people in their formal and informal activities. Social media provide facilities two-way communication between the employees and their organizations which help them to achieve their organizational goals and objectives.

According to Siddiqui and Singh (2016), social media applications enable the public sector organizations to enhance their brand image, increase market insight and promote responsiveness among the employees. Past studies also supported that social media applications have a positive and significant impact on different segments of the society, such as general public, academia, public and private sector organizations, business communities and political circles in the different countries across the world (Siddiqui & Singh, 2016; Sandoval-Almazan & Valle-Cruz, 2016; Khan et al., 2014; Bertot, Jaeger, & Hansen, 2012; Chun & Luna-Reyes, 2012; Bertot, 2011). The benefits associated with SNS may include; social connectivity, social involvement, information attainment, and entertainment.

RISKS OF SOCIAL MEDIA IN THE PUBLIC SECTOR

Despite the fact that social media applications have many benefits, there are several forms of issues, challenges, and risks as well. These include social, time, privacy and psychological risks as faced by the users of social networking sites. In 2009, the US government took initiatives to enhance transparency, openness and public participation through social media applications (Snead, 2013). After these initiatives, many US agencies have adopted social media to enhance public sharing and to spread information among the people and state organizations. In Pakistani context, social media applications have also proven detrimental impacts on different segments of the society. In a study conducted by Khalid (2017), it was found that excessive use of social media applications has a significant negative impact on the physical and psychological health of the students.

One of the major drawbacks of social media is the privacy issues faced by students when they interact with their institutional groups (Ali, Iqbal, & Iqbal, 2016). Past studies also supported that social media tools have adverse effects on the progress and productivity of organizational employees particularly in public sector organizations (Irfan et al., 2018). According to Irfan et al. (2018) the use of social media is creating social and ethical issues among the employees of public sector organizations in Pakistan which raises psychological, social and privacy risks among them. In another study, Arsalan and Zaman (2014) reported that organizational culture is highly affected by the use and application of social media. In the light of aforementioned review of literature, our aim is to find out the impact of perceived risks and benefits associated with SNS on the users' intention with the mediating role of users satisfaction in the public sector organizations of Pakistan.

RESEARCH HYPOTHESES

The following research hypotheses are proposed to investigate the variables of our study:

H1: There is a significant impact of perceived risks associated with SNS on the behavioral intention of users

H2: There is a significant impact of perceived benefits associated with SNS on the behavioral intention of users

H3: Users' satisfaction has a significant impact in the relationship between perceived risks and benefits and behavioral intention of SNS users

H4: There is a significant difference in perceived risks and benefits associated with SNS

FIGURE 1

Schematic Diagram
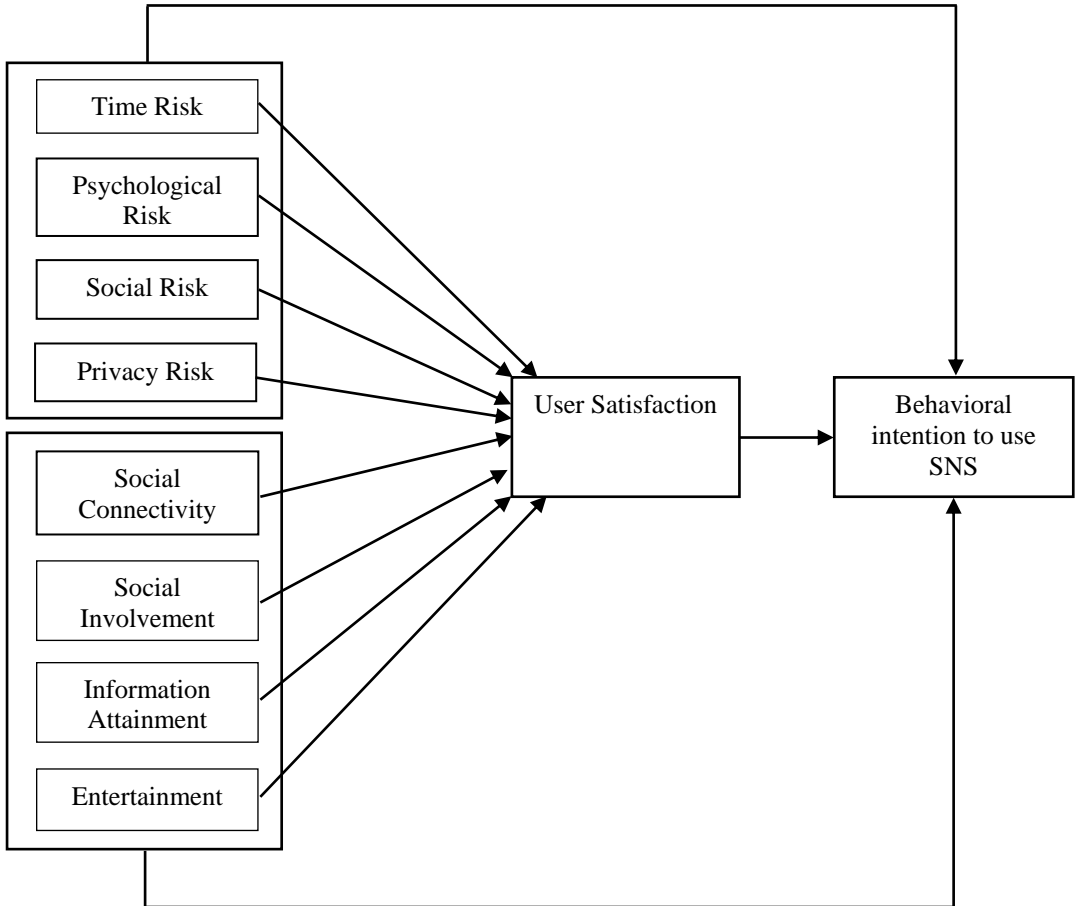
III. RESEARCH DESIGN AND METHODOLOGY

This study has used quantitative and deductive approach. The study is explanatory in nature. Data for the study have been collected from primary data sources using the survey technique. We have adapted a well-developed and close-ended questionnaire of Khan et al. (2014). The questionnaire comprised of 43 five-point Likert scaled items divided among 10 constructs. It measured four important aspects of risks related

to SNS through: time, psychological and social risks (Featherman & Pavlou, 2003); and privacy risks (Tsoi & Chen, 2011). Benefits of SNS were measured through four variables: social connectivity (Ellison, Steinfield, & Lampe, 2007); social involvement, information attainment and entertainment (Ellison, et al., 2007; Featherman & Pavlou, 2003; Shu & Chuang, 2011). User satisfaction was measured using scales items adapted from Wixom and Todd (2005) and behavioral intention to use SNS from Gefen and Straub (2000) and Carter and Bélanger (2005). We distributed 350 questionnaires through personal contacts among the employees working in various government departments at a single point in time. Out of total distributed questionnaires, we received back 325 and found 300 as being able to be used for statistical analyses.

RESEARCH MODEL

To test the relationship among the variables of the study, we have performed mediated multiple regression analysis based on the following equation:

$$BI_i = \beta_. + \beta_1 TR_i + \beta_2 PR_i + \beta_3 SR_i + \beta_4 PRR_i + \beta_5 SC_i + \beta_6 SI_i + \beta_7 IA_i + \beta_8 E_i + \beta_9 US_i + \mu_I$$

Where; BI refers to behavioral intentions of users, TR refers to time risk, PR refers to psychological risk, SR refers to social risk, PRR refers to privacy risk, SC refers to social connectivity, SI refers to social involvement, IA refers to information attainment, E refers to entertainment, US refers to users' satisfaction, μ refers to error term and i refers to employees.

FINDINGS AND ANALYSES

In this section, after reliability analysis, we have performed advanced statistical tests such as correlation and multiple regression analyses in order to interpret results:

RELIABILITY ANALYSIS

This analysis is carried out to check the consistency of the instrument. The findings given in Table 1 shows that the instrument is

81.7% reliable and it's measuring what it ought to measure. While calculating the Cronbach's alpha values, a number of outlier items were detected which were deleted to make the results more reliable. For all the constructs the Cronbach's alpha values came around to be approximately .80, which is fairly acceptable for social sciences studies (Nunally, 1978).

TABLE 1

Reliability of the Instrument

Items	Cronbach's Alpha if Item Deleted
Social Connectivity	0.799
Social Involvement	0.797
Information Attainment	0.800
Entertainment	0.800
Psychological Risk	0.807
Social Risk	0.785
Time Risk	0.786
Privacy Risk	0.801
Satisfaction	0.802
Behavioral Intention	0.827
Average	0.817

CORRELATION

According to Table 2, perceived benefits generally seem to have a significant and positive correlation with the behavioral intention to use SNS, except social connectivity, because increase in social connectivity of government employees reduces their behavioral intention to use SNS, while its other three benefits have grown more in importance. Perceived risks generally seem to have no significant correlation with the behavioral intention to use SNS. Surprisingly time risk showed a significant but very weak correlation with the behavioral intention to use SNS because, again, loss of time while using SNS does not seem to worry a lot of people or people do not consider using of SNS a loss of

time nowadays. Privacy risk does show a negative, but insignificant correlation because currently not much people in Pakistan are aware of the privacy risks associated with the use of SNS. Satisfaction also shows a positive and significant correlation with the behavioral intention to use SNS.

TABLE 2

Correlation Matrix

Variables	1	2	3	4	5	6	7	8	9	10
Social Connectivity	1									
Social Involvement	0.470**	1								
Information Attainment	0.380**	0.564**	1							
Entertainment	0.321**	0.298**	0.429**	1						
Psychological Risk	0.292**	0.129**	0.171**	0.554**	1					
Social Risk	0.401**	0.349**	0.260**	0.269**	0.562**	1				
Time Risk	0.329**	0.355**	0.442**	0.261**	0.340**	0.604**	1			
Privacy Risk	0.416**	0.303**	0.128**	0.159**	0.290**	0.509**	0.575**	1		
Satisfaction	0.276**	0.344**	0.352**	0.170**	0.136*	0.378**	0.414**	0.509**	1	
Behavioral Intention	0.080	0.389**	0.228**	0.304**	0.078	0.065	0.173**	-0.057	0.255**	1

** Indicate significance at 1% level; * Indicate significance at 5% level

MULTIPLE MEDIATED REGRESSION ANALYSIS

We have investigated the impact of perceived risks and benefits of social media on the behavioral intention of users of SNS, with mediating role of users' satisfaction. As the table shows, we have applied mediated regression analysis in four steps:

- Checked the impact of perceived risks and benefits of SNS (IVs) on users' behavioral intention (DV).

- Check the impact of benefits and risks associated with SNS (IVs) on users' satisfaction (MV).

- Investigated the role of users' satisfaction (MV) on their behavioral intention to use SNS.

- Examined the role of perceived benefits and risks (IVs) on behavioral intention to use SNS (DV) controlling the role of users' satisfaction (MV).

TABLE 3

Multiple Regression Analysis

Steps	1	2	3	4	
Dependent Variable	Behavioral Intention	Satisfaction	Behavioral Intention	Behavioral Intention	Hypotheses
Independent variables	Coefficients	Coefficients	Coefficients	Coefficients	
Constant	2.266***	.782***	2.479***	1.975***	
Social Connectivity	-0.100	-0.062		-0.077	Not Confirmed
Social Involvement	0.585***	0.048		0.568***	Confirmed
Information Attainment	-0.215***	0.270***		-0.315***	Confirmed
Entertainment	0.290***	0.015		0.285***	Confirmed
Psychological Risk	-0.040	-0.083*		-0.009	Not Confirmed
Social Risk	-0.077	0.127**		-0.124*	Confirmed
Time Risk	0.266***	-0.020		0.273***	Confirmed
Privacy Risk	-0.339***	0.458***		-0.509***	Confirmed
Satisfaction			0.298***	0.372***	Confirmed
R Square	0.279	0.362	0.065	0.344	
F Statistics	14.090***	20.627***	20.709***	16.878***	

***, ** and * indicate p-value is significant at the levels of 1%, 5%, and 10% respectively

The findings of mediated regression analysis have revealed a significant impact of various dimensions of risks and benefits associated with the usage of SNS. The findings related to the perceived benefits of social media show that there is significant as well as the positive impact of social involvement and entertainment on behavioral intention to use SNS. These findings are consistent with the existing body of literature (see for example; Khan et al., 2014; Sandoval-Almaza & Valle-Curz, 2016; Sandoval-Almaza & Gil-Garcia, 2011). The impact of information attainment in behavioral intention to use SNS is found significant but negative. This implies that the availability of abundant information plays a negative role in social media usage which is in agreement with a study conducted by Lee and Kwak (2012). Another plausible reason for this

negative coefficient is the absence of monitoring authority to filter authentic sources of information from unauthentic sources; which reduce the utility of SNS. Social connectivity is found to be having no impact on behavioral intention to use SNS at any given conventional levels of significance. The finding implies that an increase in social connectivity of government employees reduces their behavioral intention to use SNS.

The findings of perceived risks of SNS revealed that there is a significant and negative impact of social and privacy risks on behavioral intention to use SNS; which is consistent with the findings of Khan et al. (2014) and Ali et al. (2016). The findings reveal that an increase in social as well as privacy perceived risks would negatively affect the behavioral intention to use SNS. Furthermore, there is a significant and positive impact of time risk on the behavioral intention to use social media sites; which is in agreement with the findings of Khan et al. (2014). However, the findings uncovered that there is no impact of psychological risk on behavioral intention to use SNS; which is in line with a study conducted by Khalid (2017).

In model 4, we have considered satisfaction as a mediating variable. The findings show that there is a significant and positive role of users' satisfaction in their behavioral intention to use SNS; which is in line with the findings of Khan et al. (2014). Thus, findings imply that the relationship between perceived risks and benefits of SNS on their behavioral intention is because of users' satisfaction which indicates partial mediation. The value of R-square shows that behavioral intention to use SNS is 34.4% explained by perceived risks and benefits of SNS; with the mediating role of users' satisfaction. Furthermore, the score of F-statistics shows that the model is a good fit at 1% level of significance.

COMPARATIVE ANALYSIS OF PERCEIVED RISKS AND BENEFITS

To compare the role of perceived risks and benefits of SNS, we have performed comparative analysis using paired sample t-test.

The results of this analysis show that the perceived benefits of SNS overweighed perceived risks associated with it which confirmed H4. Therefore, the study recommends that the usage of SNS is overall

beneficial in improving the productivity and efficiency of the government employees.

TABLE 4

Paired Sample T-Test

Method	Value
Z score	-5.877***
Mean Score	
Perceived benefits	3.6511
Perceived risks	3.4297

IV. DISCUSSIONS AND CONCLUSIONS

Today, social media plays a significant role in our lives. Use of SNS has not only facilitated in our academic life but also in our professional lives. However, the usage of SNS such as Facebook, WhatsApp, Twitter and Instagram, is subject to certain risks and benefits associated with them. The benefits of SNS include; social connectivity, social involvement, information attainment, and entertainment. These benefits imply that usage of SNS has increased the productivity of students, employees, and businessmen. However, excess usage of SNS has also subject to certain risks such as privacy, psychological, social and time risks. It's crucial to evaluate the role of perceived risks and benefits in the behavioral intention of users. Therefore, the study is conducted to evaluate the impact of such risks and benefits on users' behavioral intention with the mediating role of user satisfaction. We have collected data from government employees from various departments. The choice of government employees is made because we want to gauge the impact of perceived risk and benefits of SNS usage on the behavioral intention of public sector employees with mediating role of user satisfaction, in their official assignments.

The findings of the study reveal that there is a significant impact of certain risks and benefits associated with social media on the behavioral intention of users. Furthermore, the results also demonstrate that users'

satisfaction plays an intervening role between the relationship of perceived risks as well as benefits and behavioral intention of using SNS. The findings of the study are in line with the existing body of literature (see for instance; Ali et al., 2016; Khalid, 2017; Khan et al., 2014). The findings of paired sample t-test indicate that there is a significant difference in mean scores of perceived risks and benefits of SNS; which implies that usage of SNS is more beneficial for the government employees in terms of their behavioral intention as compared to perceived risks associated with it.

LIMITATIONS AND FUTURE DIRECTIONS

Though we have put our best efforts in the present study; but still some limitations seem to prevail. The first limitation is that the study has collected data from government employees; therefore, the results may not be generalizable to the private sector of Pakistan. The study has collected data at a single point in time which ignored that behavioral change in usage on SNS with the passage of time.

To overcome the limitations, it is recommended for future researchers to conduct a longitudinal study on this area in order to measure the change in usage of SNS over recent years. A comparative study can be done to check the usage of SNS in public as well as private sector employees. Potential researchers can also investigate some other variables, such as; ethical issues and age. Moreover, a cross-cultural study can also be conducted to check the usage of SNS in developed and developing countries of the world.

REFERENCES

Ali, A., Iqbal, A., & Iqbal, K. (2016). Effects of social media on youth: A case study in University of Sargodha. International Journal of Advanced Research (IJAR), 4(11), 369-372.

Arslan, M., & Zaman, R. (2014). Impact of social media on organizational culture: Evidence from Pakistan. Developing Country Studies, 4(21), 1-10.

Ashraf, N., & Javed, T. (2014). Impact of social networking on employee performance. Journal of Business Management and Strategy, 5(2), 139-150.

Baumgartner, J. C., & Morris, J. S. (2010). MyFaceTube politics: Social networking web sites and political engagement of young adults. Social Science Computer Review, 28(1), 24-44.

Bertot, J. C., Jaeger, P. T., & Hansen, D. (2012). The impact of polices on government social media usage: Issues, challenges, and recommendations. Government Information Quarterly, 29(1), 30-40.

Carter, L., & Bélanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. Information Systems Journal, 15(1), 5-25.

Chun, S. A., & Luna-Reyes, F. L. (2012). Social media in government. In S. A. Chun, & F. L. Luna-Reyes (Eds.), Social Media in Government - Selections from the 12th Annual International Conference on Digital Government Research (dg.o2011), Government Information Quarterly, 29(4), 441-445.

Curtis, L., Edwards, C., Fraser, K. L., Gudelsky, S., Holmquist, J., Thornton, K., & Sweetser, K. D. (2010). Adoption of social media for public relations by nonprofit organizations. Public Relations Review, 36(1), 90-92.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of computer-mediated communication, 12(4), 1143-1168.

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. International Journal of Human-Computer Studies, 59(4), 451-474.

Gefen, D., & Straub, D. W. (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. Journal of the Association for Information Systems, 1(8), 1-28.

Irfan, M., Hassan, M., & Hassan, N. (2018). Unravelling the fuzzy effect of economic, social and environmental sustainability on the corporate reputation of public-sector organizations: A case study of Pakistan. Sustainability, 10(3), 769.

Kemp, S. (2019, Jan 30). Digital 2019: Global internet use accelerates. Retrieved Jan 30 2020 from https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates

Khalid, H. (2017). The effects of social networks on Pakistani students. Information Technology & Software Engineering. 7(3), 203.

Khan, A. Y., Razi, A., Mirza, R., Mazhar, S., Amjad, A., & Shafique, U. (2013). Impact of mass media in Pakistan on social, ethical, and economic grounds. International Journal of Economics and Research, 4(3), 1-20.

Khan, G. F., Swar, B., & Lee, S. K. (2014). Social media risks and benefits: A public sector perspective. Social Science Computer Review, 32(5), 606-627.

Nunally, J. C. (1978). Psychometric Theory, McGraw Hill, NewYork, NY.

Picazo-Vela, S., Gutiérrez-Martínez, I., & Luna-Reyes, L. F. (2012). Understanding risks, benefits, and strategic alternatives of social media applications in the public sector. In S. A. Chun, & F. L. Luna-Reyes (Eds.), Social Media in Government - Selections from the 12th Annual International Conference on Digital Government Research (dg.o2011), Government Information Quarterly, 29(4), 504-511.

Rehman, M., Irem, K., & Ilyas, M. (2014). Social media: A prospective or a dilemma – The case of Pakistan. International Journal of Management Research and Emerging Sciences, 4(1), 47-68.

Sandoval-Almazan, R., & Gil-Garcia, J. R. (2012). Are government internet portals evolving towards more interaction, participation, and collaboration? Revisiting the rhetoric of e-government among municipalities. Government Information Quarterly, 29, S72-S81.

Sandoval-Almazan, R., & Valle-Cruz, D. (2016). Online activities through social media by high education students: Business vs. informatics. Global Media Journal México, 13(25), 42-62.

Santoso, E. P. (2012). Intellectual capital in Indonesia: The influence on financial performance of banking industry (Doctoral Dissertasion). Retrieved from PQDT Open – ProQuest. (UMI Number: 3507059)

Shu, W., & Chuang, Y. H. (2011). The perceived benefits of six-degree-separation social networks. Internet Research.

Siddiqui, S., & Singh, T. (2016). Social media its impact with positive and negative aspects. International Journal of Computer Applications Technology and Research, 5(2), 71-75.

Snead, J. T. (2013). Social media use in the US Executive branch. Government Information Quarterly, 30(1), 56-63.

Tsoi, H. K., & Chen, L. (2011, October). From privacy concern to uses of social network sites: A cultural comparison via user survey. In 2011 IEEE Third International Conference on Privacy, Security, Risk and Trust and 2011 IEEE Third International Conference on Social Computing (pp. 457-464). IEEE.

Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. Information Systems Research, 16(1), 85-102.

Zaheer, L. (2018). New media technologies and Youth in Pakistan. Journal of the Research Society of Pakistan, 55(1), 107-114.

Zheng, L. (2013). Social media in Chinese government: Drivers, challenges and capabilities. Government Information Quarterly, 30(4), 369-376.