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# The impact of using online social media networks on employees' productivity in higher educational institutions

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CHRONICLE	A B S T R A C T
Article history: Received: May 20, 2020 Received in revised format: May 29, 2020 Accepted: August 2, 2020 Available online: August 5, 2020 Keywords: OSMNs Productivity PSAU Saudi Arabia	The purpose of this study was to examine the impact of the online social media networks (OS MNs) on productivity at workplace among 88 administrative staff at Prince Sattam bin Abdulaizi. University for the academic year 2020-2021. This study finds that using online social media net works by PSAU's employees at the workplace enhances their productivity. The majority of the employees (59%) perceive that using the OSMNs at workplace have a positive impact on their productivity. In addition, the majority of the employees (33%) regularly use WhatsApp as a usefu online social media network at the workplace. The results also indicate that the majority of the employees (66%) use the OSMNs at workplace more than once a day. Further, the majority of the PSAU's employees (39%) use the OSMNs at workplace less than half an hour per a day. Further more, 39% of the PSAU's employees use the OSMNs at workplace to keep in touch with their families and friends, and 34% of the employees use the OSMNs to search for work-related infor mation. The results of this study should be useful to policy makers in Saudi Arabia at the country ministry of education, PSAU, and elsewhere in gaining a deeper understanding on how using the OSMNs at workplace can enhances the employees' productivity.

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#### 1. Introduction

The idea of social networking is not revolutionary as human interaction naturally fosters network creation by social communication. Social networking, also known as social networks, is a means for other people to come together and develop a forum to help construct social networks or social connections. It offers users the ability to exchange thoughts, memories, and interests. Such groups can be intentional, unintentional, as well as formal or informal. Such websites are called social networking sites in the field of online exchange of above-mentioned ideas and activities. The social network platforms have not only fundamentally changed the way employees communicate with each other and with the company, but also have changed the entire contact mechanism chain through inclusion of digital media forums like e-mails and several chat applications. All social networking apps have the common characteristics of being self-organized, straightforward and potentially effective in providing consumers with a platform to communicate and share thoughts and emotions to each other. Social networking channels have a significant effect on the way communication is carried out in people's personal and professional lives (Beck, 2007; Tudu & Pathak, 2015; Martensen et al., 2011; Tapscott and Williams, 2007; Picot and Neuburger, 2000; Sarbu, 2017). Social network sites are the websites that function like online communities of people who use the internet. There are a lot of social network sites that allow the internet users to take their membership for free and socialize with other members regarding religion, hobbies, fashion, career, politics, ongoing social issues etc. The users read the profile pages of other members, share \* Corresponding author.

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views and ideas, give comments and contact them via their profiles. Social network sites are a great means of bringing people of same mindset together and helping them socialize with others. The rapid spread of social media has made it a necessary part of every person's life and living without it has become almost impossible now. Social media has become a source of recruitment and job search for employers and job seekers respectively. Employers make use of social media to search information about people that they may hire. Potential employers use social media not only to screen the potential hires but also in the very early stages of recruitment and identification of the people who can perform the job roles required by their company. Many users of social media websites enter their professional and educational details in their accounts that others can see easily. Job seekers also tend to use social media website to look for vacant job positions that are readily available for them in a large number on different social websites (Munene, 2016; Tilahun, 2016; Sultana, Abdullah & Tabassum, 2013; Asund, 2010; Adzovie, Nyleku & keku, 2017).

As social networking sites' usage has become more widespread, companies have started considering the impact that the use of social networking websites can have on the image and working of their organizations. In this regard, the unmonitored use of social media by the employees poses some risk for the organizations (Aguenza, Al-Kassem & Som, 2012). It is suggested that the use of social media, promoting the use of social media channels, and formation of processes and protection to regulate social media are some effective things organizations do in view of the rise of social media. It is a fact that lack of monitoring poses a risk for the organizations. On the other hand, proper regulation can improve the operational efficiency of the organizations, strengthen their cooperation, and eventually increase their levels of productivity. Supervision and implementation of transparent, equitable and implementable performance policies are central to effective management of social media (Hutley, 2009; Cornelius, 2009). The possibility of risk emerging from unmonitored use of social media makes employers concerned about the possible effect on their organizations' profitability. Those concerns have been explored by many empirical and theoretical studies that have provided significant contradictory claims about the effect on employee efficiency of social media use at the workplace.

Many theoretical and empirical researches have shown a positive correlation between organizational efficiency and social media usage by employees (e.g., Aknin, Elizabeth, Ashley, Adam & Michael, 2013; Richards, 2012; Salanova, Llorens & Ventura, 2014; Cardon & Okoro, 2010; Cross, Borgatti, and Parker, 2002; Coleman and Levine 2008; McAfee 2009; Swartz, 2008; Smith et al., 2011; Tudu & Pathak, 2015; Ferreira & du Plessis, 2009; Wilson, 2009; Asund, 2010). On the other hand, several theoretical and empirical studies indicated to a negative association between the usage of social media on the work-place on employee productivity (e.g., Wushe and Shenje, 2019; Razmerita, Philips-Wren and Jain, 2015; Tudu & Pathak, 2015; Hysa et al., 2015; Sarbu, 2017; Shami, Nichols & Chen, 2014; Sarbu, 2017; Wushe & Shenje, 2019; Munene, 2016; Shava, Chinyamurindi, & Somdyala, 2016). In addition, these studies were conducted in developed and developing countries. To the best of the researcher's knowledge, an empirical study examining the association of social media usage on the work-place with employee productivity in Arab countries (e.g., Saudi Arabia) does not exist. Therefore, this study is motivated to investigate the impact of using social networking by the employees on their productivity at Prince Sattam bin Abdulaziz University for the academic year 2020-2021.

# 2. Literature Review

Productivity is characterized as the extent and the degree to which we make use of resources. We tend to increase the graph of productivity by generating better products using limited resources (Bernolak, 1997; Ferreira & Du Plessis, 2009). Productivity generally refers to increase or decrease in economic efficiency. The economic success of a company is usually measured in relation to its employee performance by its production output. In particular, the extensive use of social networking sites does not allow any exception to workers who spend at least eight hours a day at work. Social networking sites draw masses and provide workers not only with the opportunity to connect, but also to find good friends (Kudyba & Diwan, 2002; Asund, 2010).

Richards (2012) and Aknin, Adam Ashley, Elizabeth, and Michael (2013) assert that workers who make use of social media platforms at the workplace show up to 15% more productivity as compared to those who do not. Sarbu (2017) suggested that there may be a possible risk of using social media, as companies can make quick decisions, which results in increased organizational and labor productivity. Salanova, Llorens and Ventura (2014) are of the viewpoint that Using social networking sites also improve employee productivity as they are linked by social media sites with other experts, as well as enhanced communication networks and expertise sharing. As much as nine percent more successful are workers who use social networking sites as compared to those who are not the users of social networking sites. Social networking allows companies and their employees to become more competitive in market. Social websites also encourage organizations to retain the important information and knowledge that businesses need to grow and sustain their positions in competitive markets (Tudu & Pathak, 2015).

Social networks promote knowledge exchange through the efficient distribution of information to employees or to customers. In order to disseminate business ideas, information, and best practices for workers, several businesses use forums like Twitter, Facebook, and Instagram as an alternative to e-mail communications in organizations (Cardon & Okoro, 2010). Social networking channels are a viable tool of assistance for networks, which are important to improve collaboration among employees with diverse skills and knowledge related to knowledge-based industries. This phenomenon recognizes that successful cooperation is usually carried out through informal networks that help employees improve their level of communication and collaboration with high-end information workers and not through the formal reporting hierarchy (Cross, Borgatti, and Parker,

2002; Coleman & Levine 2008; McAfee 2009). Social networks minimize the amount of time needed for employees and management to communicate with one another by decreasing the need of emails and formal communication among the workers (Swartz, 2008). Similarly, these websites increase the level of job visibility and organizational awareness of the employees and allow for an open dialogue without the use of formal networks. Moreover, another benefit of social networking sites is the management of organizationally-wide information (Smith et al., 2011; Tudu & Pathak, 2015).

With businesses following the strategy of outsourcing and vertical disintegration, social networking tools can be used to improve employees' entrepreneurial plans, as well as to increase the business productivity and work-life balance for employees (Karoly & Panis, 2004). Social networking sites offer a forum for people to exchange knowledge and build practicing communities. Using these platforms, people have access to others that can help them share their thoughts to others and understand the viewpoints of others while solving any problem. In addition, individuals may use such social websites to strengthen and maintain business connections (Asund, 2010). Social networking typically promotes communication and knowledge sharing among people, which can lead to higher or lower productivity. Social media should, however, be efficiently channeled to get the best out of employees, because employees can succumb to it (Ferreira & du Plessis 2009). In addition, businesses have used analytical techniques to turn social networking platforms like Twitter or Facebook into sources of knowledge for market analysis in which businesses identify trends as knowledge about consumers' experiences with their employees. Workers who browse the internet for different purposes tend to have improved job skills related to research and development purposes. Not only their brain remains fresh due to social media but also their research skills develop and improve as the result (Wilson, 2009).

Regardless of the numerous positive effects that social networking websites have on employee productivity, several other studies have found that a link between employee productivity and social media usage is difficult to be created (Aguenza, Al-Kassem & Som, 2012). More than 65 percent of workers worldwide visit social networking platforms at least once daily. Social media wastes important time of employees that they should spend on job affairs. Platforms like Whatsapp, Facebook, Skype, Twitter, and Instagram take a lot of important time of the employees on daily basis (Aguenza, Al-Kassem and Mat Som, 2012; Mhiripiri & Mutsvairo, 2013). Government departments have become increasingly worried about workers wasting their important job time on using social networking platforms (Wushe & Shenje, 2019). It is noted that Productivity of employees decreases by up to 1.5% through the use of social media during job hours. Social websites like LinkedIn, Facebook, Instagram, and Twitter cost businesses productivity as well as market efficiency (Razmerita, Philips-Wren and Jain, 2015; Fahmy, 2009). It is noted that the five key risk to social networking faced by management is perceived loss of productivity at the workplace, the data leakage from people who gossip openly in an open environment, the harm to the reputation of a company, scams by cyber criminals, and easy access to corporate information using obsolete passwords. In a survey in the UK, the use of social media in the workforce was blamed for losing productivity of £132 million a day and wasting 233 million hours a month (Wilson, 2009; Gravili, 2010; Jarrahi & Sawyer, 2012). The negative effects of using social networking sites are lack of focus on core job issues, loss of productivity in key business activities, social media addiction for staff, and increased risk of hacking of social media pages containing important information about the organization. Sensitive data could be distributed over social networks, which in the worst case could lead to affecting the level of competitive advantage, loss of privacy, and reputational harm. In line with this, businesses become more vulnerable to malware via social media (Sarbu, 2017; Cao, Vogel, Guo, Liu & Gu, 2012; Shami, Nichols & Chen, 2014). Social networking sites may cause businesses some concern. Cyber smearing has been one of employers' main concerns. Posting on social networks is vulnerable to cyber-crime by presenting incorrect information to the company involved that leads to abuse, bullying, threats, and embarrassment (Wise, 2009). Employees spending more time over the internet and social media tend to develop medical issues like sexual disorders, sleep disorders, stress, and depression all of which ultimately affect their level of productivity (Chen, Chen, Yang, 2008). Excessive social media usage can contribute to decreased job performances. Employees who remain busy exploring personal stuff over the internet and social networking websites perform less as compared to those using social networking websites and internet less frequently (Sarbu, 2017; Benzie, 2007). Social networking is also related to shift in behaviors, change of emotions, impatience, formation of self-centered personality, and a reduction of personal attention towards others by several minute as compared to what it had been a decade ago (Vidyarthi, 2011). Employee productivity decreases by addiction to excessive browsing. Employees doing activities like sharing statuses, uploading and posting photos, sharing information other than business information, and browsing the internet, and listening to music results in dragging their attention from important business issues (Pitt & Bennett, 2008; Richards, 2012). It has been observed that government employees spend time on social media networks in non-productive practices such as listening to music, personal interactions, and viewing videos. As workers invest more hours on social media, government departments' efficiency is subjected to effects (Wushe & Shenje, 2019; Munene, 2016; Shava, Chinyamurindi, & Somdyala, 2016).

# 3. Research Methodology

#### 3.1 Sample selection

The target population for this study was Prince Sattam bin Abdulaziz University's administrative staff in the main campus, Al-Kharj. All the target population has a free internet access on the campus and in their offices. The simple random sampling is applied to select sample subjects that represent the most suitable ones in providing data about the factors and dimensions of the study.

# 3.2 Data collection and analysis

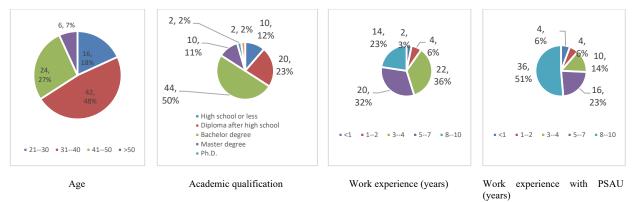
This study is a quantitative method that was designed to investigate the impact of online social media networks usage on the employee productivity on the workplace at Prince Sattam bin Abdulaziz University. This study used the questionnaire as an appropriate data collection instrument to answer the following research question: To what extent does the usage of the online social media networks influence the employee productivity? The questionnaire of this study is adopted and adapted from the extant research (e.g., Yeshambel et al., 2016; Munene & Nyaribo, 2013). The questionnaire consists of two different sections. The first section included subject information and the second subject included demographic information and questions related to the usage of the online social media networks on the workplace and how this usage influences their productivity. The questionnaire contained of 8 demographic questions, 4 closed and open-ended questions, and 5 Likert-scale statements.

Data was obtained over a period of one month. The questionnaire was designed using the "Google Forms" technology in order to make it easier and faster to reach as many employees. The link of the questionnaire is distributed out to the employees via emails or WhatsApp groups in collaboration with other colleagues. This process resulted in 88 usable questionnaires for the analysis. The analysis of the data was completed using the SPSS version 20 of Windows. A descriptive statistical analysis using variance analysis, frequencies and percentages were used to describe the demographic information and answer the research question.

#### 4. Findings and interpretations

#### 4.1 Sample characteristics

The majority of the respondents (86%) were male, (50%) were holding a bachelor degree, (30%) have a general work experience for more than 10 years, (41%) have a work experience with PSAU for more than 10 years. Fig.1 shows other personal characteristics of the participants in our survey.



# 4.2 The regularly usage of the OSMNs by PSAU's employees

The PSAU's employees were asked to indicate their regularly usage of the online social media networks on the workplace among the following sites: YouTube, Twitter, Facebook, Facebook Messenger, Wechat Instagram, WhatsApp, Snapchat, Google +, LinkedIn, Myspace, Pinterest, Reddit, QQ, Tumblr, Qzone, TikTOk, Viber, Line, Telegram, Skype, Badoo, Weibo, Ask.fm, Flickr, VK, Odnoklassniki, or Meetup as shown in the following Fig. 2:

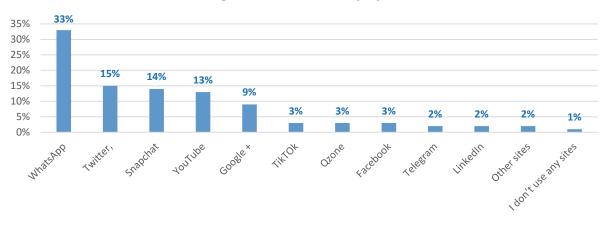
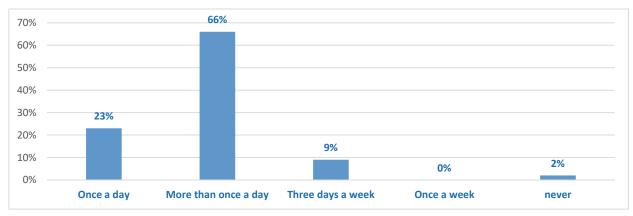


Fig. 2. The regularly usage of the OSMNs

Fig. 2 shows that 33% of the respondents regularly use WhatsApp, 15% regularly use Twitter, 14% regular use Snapchat, 13% regularly use YouTube, 9% regularly use Google +, 3% regularly use TikTok, Qzone, and Facebook, 2% regularly use Telegram, LinkedIn and other sites, and 1% do not use any online social media networks.

#### 4.3 The frequency usage of the OSMNs by PSAU's employees

The PSAU's employees were asked to indicate the frequency of using the online social media networks on the workplace as to whether they use the sites once a day, more than once a day, three days a week, once a week, or they never use it as shown in the following Fig 3:

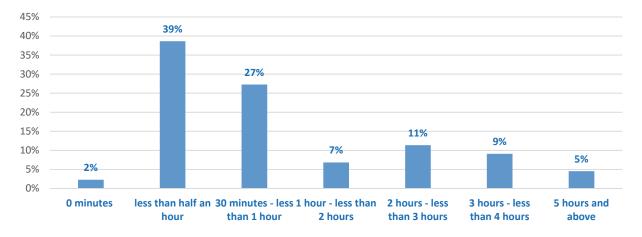


#### Fig. 3. The frequency usage of the OSMNs

As shown by Fig. 3 that the majority of the respondents (66%) access to the online social media networks more than once a day, 23% access the OSMNs once a day, 9% access the OSMNs three days a week, and 2% do not use the OSMNs.

#### 4.4 The time spent on OSMNs by PSAU's employees

The PSAU's employees were asked to indicate the period of time they spend a day using the online social media networks on the workplace as to whether they spend less than half an hour, 30 minutes - less than 1 hour, 1 hour - less than 2 hours, 2 hours - less than 3 hours, 3 hours - less than 4 hours, and 5 hours and above. The respondents' answers are showing in Fig. 4:



#### Fig. 4. Time spent on the OSNBs

As shown by Fig. 4, that the majority of the respondents (39%) spent less than half an hour a day accessing the OSMNs, 27% spend from 30 minutes to less than 1 hour, 11% spend from 2 hours to less than 3 hours, 9% spend from 3 hours to less than 4 hours, 7% spend from 1 hour to less than 2 hours, 5% spend more than 5 hours, and 2% do not spend any minutes accessing the OSMNs on the workplace.

# 4.5 The purposes of using the OSMNs by PSAU's employees

The purposes of using the OSMNs by the PSAU's employees were asked as to whether the respondents use the OSMNs for keeping in touch with family and friends, finding personal networks, building business contacts, searching for work related information, sharing work-related information with colleagues, entertaining and passing time, or other purposes. The respondents' answers are showing in Fig. 5:

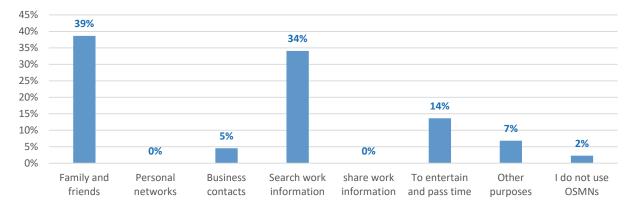


Fig. 5. The purposes of using the OSMNs

Fig. 5 illustrates that the majority of the respondents (39%) use the OSMNs to keep in touch with their families and friends, 34% use the OSMNs to search for work-related information, 14% use the OSMNs to entertain and pass time, 7% use the OSMNs for other purposes, 5% use the OSMNs to build business contacts, 2% of the respondents do not use the OSMNs, and none of the respondents use the OSMNs for finding personal networks and searching for work-related information.

#### 4.6 OSMNs and productivity among PSAU's employees

Respondents were asked to rate different items of using OSMNs and the productivity as presented by Tables 1 and Table 2.

# Table 1

The usage of the OSMNs and productivity

	•	Likert scale						
	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disa- gree	Mean	St.Dev
1	Using the OSMNs at office assists me in	40	28	10	10	0	4.11	1.017
	completing the work duties successfully	(45%)	(32%)	(11%)	(11%)	(0)		
2	Using the OSMNs at office improves the	29	27	18	10	4	3.86	1.112
	performance of work duties	(33%)	(31%)	(20%)	(11%)	(5%)		
2	Using the OSMNs at office does not influ-	10	10	12	20	36	2.30	1.407
3	ence performing the work duties	(11%)	(11%)	(14%)	(23%)	(41%)	2.50	
4	Using the OSMNs at office wastes my of-	6	8	32	18	24	2.48	1.191
	fice hours	(7%)	(9%)	(36%)	(20%)	(27%)		

The percentage ratings of the OSMNs and productivity of the respondents are measured using 5-point Likert scale. The "strongly agree" rate indicates to a high level of agreement to the item, the "agree" rate indicates to a moderate high level of agreement to the item, the "neutral" rate indicates to a medium level of agreement to the item, "disagree" rate indicates to the low level of agreement to the item, and the "strongly disagree" rate indicates to a very low level of agreement to the item. As for the first statement "using the OSMNs at office assists me in completing the work duties successfully," the majority of the respondents (75%) indicated to a positive attitude towards the usage of the OSMNs in assisting them to complete their office work. With respect to the statement stating that "using the OSMNs at office improves the performance of work duties," the majority of the respondents (64%) indicated to a positive attitude towards using the OSMNs in enhancing their office work duties, the majority of the respondents (64%) have a negative attitude towards this statement which confirms that using the OSMNs enhances the employees' productivity in carrying out their office work duties. Regarding the statement states that "using the OSMNs at office work duties. Regarding the statement states this statement, which approves that using the OSMNs at workplace does not waste their office hours. In general, these four statements indicate to a positive attitude towards using the SAU's employees' productivity.

# Table 2

The overall evaluation of the OSMNs and productivity

	Likert scale						
 Statements	A positive impact	A positive impact to some extent	I do not know	A nega- tive im- pact	A negative im- pact to some ex- tent	Mean	St.Dev
The use of the OSMNs at office has an impact of the productivity of the employ- ees	28 (32%)	24 (27%)	16 (18%)	0 (0)	20 (23%)	3.68	1.157

As for the attitude of the respondents towards the overall impact of using the OSMNs on the productivity at the office, the majority of the PSAU's employees (59%) perceive using the OSMNs at office enhances their productivity. This result is consistent with the previous theoretical and empirical studies such as (e.g., Aknin, Elizabeth, Ashley, Adam and Michael, 2013; Richards, 2012; Salanova, Llorens & Ventura, 2014; Cardon & Okoro, 2010; Cross, Borgatti, and Parker, 2002; Coleman and Levine 2008; McAfee 2009; Swartz, 2008; Smith et. al., 2011; Tudu & Pathak, 2015; Ferreira & du Plessis, 2009; Wilson, 2009; Asund, 2010).

#### 5. Conclusion and recommendation

The purpose of this study was to examine the impact of the OSMNs' usage on the productivity at the workplace among 88 administrative staff at Prince Sattam bin Abdulaiziz University for the academic year 2020-2021. The findings of this study were consistent with the previous theoretical and empirical studies that indicated to a positive impact of the OSMNs on the employee productivity. The results of this study confirm that PSAU's employees use the OSMNs on their offices to enhance their work duties. As a consequence, for enhancing the employee productivity when using the OSMNs, it is recommended for PSAU decision makers to maximize the potential benefits of using the OSMNs at workplace by adopting and encouraging the employees to use relevant OSMNs for office work that can assist them in doing their work duties faster and easier. The PSAU should educate its employees about the features of the relevant OSMNs such as searching and sharing features. This, consequently, will assist employees to improve and enhance their productivity on the workplace.

Albeit this research reported meaningful results explaining the impact of using the OSMNs on employee productivity at workplace, it is still subject to a limitation in which future line of research can investigate it. The sample size of this study consists of 88 employees which is considered a small sample size. In this regard, there is an opportunity for the future research to consider using a large sample of PSAU's employees and involving other PSAU's branches. The future research can also consider a sample of the teaching staff at PSAU to investigate these issues.

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