# Social Media Impact on Employee Productivity at the Workplace: A Review 

${ }^{1}$ Shahrulanuar Mohamed, ${ }^{1}$ Safiah Sidek, ${ }^{2}$ Siti Zakiah Izharrudin,<br>${ }^{1}$ Norliah Kudus and ${ }^{1}$ Mahadi Abu Hassan<br>${ }^{1,2}$ Centre for Languages and Human Development, University Teknikal Malaysia Melaka, Tunggal, Malaysia<br>${ }^{1,2}$ Research Group IS3, C-Act, University Teknikal Malaysia Melaka, Tunggal, Malaysia


#### Abstract

Social media has become a common sight in many organisations. It has been regarded as an important means of personal and organizational communication. However, the organization faces big challenges toward the threats of social media utilization among employees such as disruption of their productivity. Thus, this study conducted a literature review to identify the types of social media used by employees at the workplace and its impact on the employees' productivity at the workplace. Using a systematic approach to analyse the literature, 37 Articles or studies have been selected for the review. It was found that it was found that the social media has become a common medium of communication for employees to collaborate, integrating and sharing knowledge among colleagues in organization. Further, it is categorized into social network (Facebook, Twitter, MySpace, LinkedIn, YouTube, etc.) email, blog, messaging, forums, Wikis and many others. The use of social media has brought benefits and challenges to the organizations. Further, the positive and negative impacts of social media usage were presented as well. Most of the studies selected indicated that social media usage is beneficial to the personal and organization productivity. It was found that most of the studies provided their finding based on cross-sectional data, in which they are unable to provide actual causality of the usage factor that really impacts the productivity of the employees at the workplace. This review is expected to contribute knowledge and practices for future study in identifying the causality of social media usage on employee productivity. This is important as the causality of the usage factor that contribute to harmful effects to the organization productivity can be tackled and intervened by using the intervention model of internet addiction.


Key words: Social media, social network, categories, employee's productivity, Malaysia

## INTRODUCTION

Social media has been claimed as a significant medium in fostering social connections that maintain or expand existing social networks. Organisations have been encouraging the usage of social media among their employees to create universal levels of connections within their organization and with other organisations. There are many types of social media such as social network, email, messaging and interest based network (music) media sharing network (YouTube, Vimeo and others) and search engine (Yahoo, Google). Social media can be useful to organizations as the interaction between employees would enhance collaboration and knowledge sharing within an organisation.

The use of social media provides unique ways of supporting social processes along with the management of data, information and knowledge sharing between employees and customers (Razmerita et al., 2014; Kaplan
and Haenlein, 2010). Furthermore, social support within the circle of research community influences employees to use the social media, especially during researching hours. The use of social media has both positive and negative impact to the employee's productivity. The convenience of interactions regardless of limitation of space and time encourages continual increase of social media usage among employees. Furthermore, some organisations have showed high performance and good collaboration among their employees facilitated by social media (Razmerita et al., 2014). Many studies have explored the use of social media among employees at the researching place which include social network, email, instant messaging and many others. Francois et al. (2013), Burke et al. (2009), Aripin et al. (2011) and Magnier et al. (2010). However, there are disadvantages of its excessive usage as it may disrupt employees' productivity at the work place such as wasting of resources, exposing to malware infection and social engineering attacks and causing damage to company's reputation (Sophia, 2009).

Corresponding Author: Shahrulanuar Mohamed, Centre for Languages and Human Development, University Teknikal Malaysia Melaka, Tunggal, Malaysia

The negative impacts have resulted in the growing interests among researchers to investigae the impacts of social media on employee's productivity and identify the types of social media used during researching hours. Furthermore, although there are an extensive studies on the impact of Internet on society for example, Sidek et al. (2016) investigated the Internet addictio among university students. Further, most of the studies related to internet addiction tend to focus on adolescent or university students (Sidek et al., 2016). However, there are very limited studies relating to social media usage among employees, particularly in Malaysian organisational context.

Due to the increased recognition of efficient and effective researchers and the importance of ensuring employee's productivity at the work place, it is timely to investigate the possible factors that disrupt employee's productivity at the workplace and in this case the use of social media.

This study presents a review of literature related to the use of social media and its impact on the productivity of workers at the workplace. In this case, a systematic approach for the selection of relevant researches has been adopted. The conduct of the literature was guided by two research questions:

- What are the types of social media used by employees at the workplace?
- What are the impacts of social media usage on employee's productivity at the workplace?

Literature review: This stage involves the selection of sources from journal, conference, thesis and many others to identify the relevant literature for the purpose of this study, a number of electronic database sources from 6 sources have been selected which are Science Direct, Scopus, Google Scholar, PDF search engine and Emerald. The search was conducted using the primary key words or individual terms such as social media+employee or social network+employee or email+employee or messaging+employee or bloggs+ employee or Wiki+employee or youtube+employee). The key words were searched based on different combination. Then, the studies are selected based on the relevant disciplines of study which has been expanded to social science business management, electronic, education and information and technology. Due to the expansive information, the search was narrowed down to based on three criteria which are time frame of publication, flawness in previous methodology and focus of the study. The using of rationales on conducting SLR has been summarized in Table 1.

Table 1: Criteria for the paper selection

| Criteria | Rationale |
| :--- | :--- |
| Time frame of publication | Year 2008 and above <br> Publication before 2008 will be excluded <br> except for articles that cover theories |
| Flawness of methodology | Publication with appropriate research <br> methods | | Focus on the impact of social media usage |
| :--- |
| on employee's productivity |

The search was subsequently narrowed down by focusing on the two research questions. In this case, the criteria of inclusion and exclusion criteria was adopted to ensure the similarity and quality of papers selected. The relevant papers were selected based on the criteria presented in Table 2.

Conducting the literature review: The selection of study were conducted systematically following the steps suggested by Kitchenham et al. (2009). Firstly, the question adressed in this study must be broken down into individual term for quick expansive search. Next, the papers will be selected based on the "title of method" which gave us about 156 studies. We then proceeded the search by using boolean operators to conduct the search string and we found about 87 studies that are relevant. As we go to the next step by scanning the abstract of the chosen paper, only 54 study met the objective of this study. Then, we retrieved the reference lists from primary studies with similar key words and there are about 13 studies that were really eligible to be used for review. The total primary studies with the second search paper are about 67 studuies. We then adopted the inclusion and exclusion criteria and we found 37 studies or studies which were highly eligible to be accepted as relevant data in our study. The adoption of inclusion and exclusion criteria were based on Kitchenham et al. (2009) quality checklist. The quality checklist were scored based on three potential answer based on score $1=$ yes, score $0.5=$ medium and score $0=$ no. Following the inclusion and exclusion criteria in Table 2 and conducting the scoring, we accepted those papers that have the scor of $50 \%$ and above. Meanwhile, study that have the score $<50 \%$ based on Table 2 were rejected. In this case, we accepted only 37 studies to be analysed and reviewed.

Reporting the literature review: This stage focuses on reporting the findings of the review. The selected 37 studies were analysed based on the two research questions. In this case, comparison analysis was conducted. The results of the finding are presented in the subsequent sections.

Asian J. Inform. Technol., 16 (1): 32-37, 2017
Table 2: Inclusion and exclusion criteria

| Criteria | Inclusion | Exclusion |
| :--- | :--- | :--- |
| Topic or scope | Papers that focus on the impact of social media usage <br> on employee productivity <br> Definition of conceptualisation <br> Concepts used show similar meaning to the individual <br> term of this study <br> Variables that have similar meaning or related to the terms <br> or definition | Papers that are not related or dispersed from any of this scope |
| Key variables | Should be an employee/workers/staff/human showing different meaning <br> resource/labor/socialmedia categories at thier workplace | Other than the participants stated in inclusion criteria |
| Participants | Years of publication should be 2008 onwards <br> Studies that provide the social media usage <br> among employees and its impact toward their productivity | Years of publication before 2008 <br> Time frame |
| saties that show interest on other areas that do not involve |  |  |

## MATERIALS AND METHODS

This study focuses on presenting the existing knowledge related to the use of social media at the work place and its impact to employee's productivity. The review was guided by two research questions stated earlier. In this case, this study adapted the systematic literature review approach suggested by Kitchenham et al. (2009). According to Kitchenham et al. (2009) the systematic literature review comprises three stages, namely planning, conducting and reporting.

## RESULTS AND DISCUSSION

This study presents the findings of the literature review guided by the two research questions.

RQ1: What are the types of social media used by employees at the workplace? Based on the analysis of the 37 studies, it was found that employees used social media for three main purposes which are communicating, entertaining and disseminating knowledge and information. Examples of types of online technology stated in the studies are social network (Facebook, Twitter, LinkedIn, Youtube, MySpace and others) email, messaging, forum, blogs and Wiki's.

A summary of the types of social media used by employees at the workplace is shown in Fig. 1. As shown in Fig. 1, 17 studies focused, on social network while 11 studies focused on social media in general. Other types of online platform identified as the focus of the study were Twitter ( 3 studies), Blog ( 4 studies) email ( 2 studies), messaging (1 study), Youtube (1 study) and Facebook (1 study). However, there is no study that focus on the use of linkedIn, forums and Wiki's among employees.

Facebook is considered as the most popular social network used during researching hours. It is claimed that the social network contributes to the expansion of markets, creation of social unity increase in employee's loyalty, collaboration and knowledge sharing between employee and clients (Yeshambel et al., 2016).


Fig. 1: Types of social media used by employees
The social networks can be divided into two groups, for leisure and business networks (Martensen et al., 2011). LinkedIn is the most popular network for business networks in the world while facebook is considered as the main stream for social network adopted by employees. Employees mainly used SNS for business network for the purpose of aiming to maintain their relationship with superior business partners, colleagues and client. Employees who visit social network for leisure will always do their personal activities by communicating with family and friends outside the company.

Although, there are a lot of controversial issues regarding to the social media usage among employee, some studies show that it helps to increase their motivation level, innovation, satisfaction organizational commitment, absenteeism and ultimately their job performance (Moqbel, 2012). Some studies have showed strong relationship between social capitals with social adoption in the organization. Social media can be used to enhance individual's social capital which later gives impact to the nature and quality of employee's job performance. Four studies were found to focus on the blogging types of social media used by employees. Blogs can be characterised as a pool of resources
which provide high quality information that replaces the traditional mechanisms of firms and markets (Wattal et al., 2009).

Three studies were conducted to identify the adoption of Twitter at the work place. Twitter is considered as as social network which are mostly used by young employees during working hours. However, Twitter were ranked below than Facebook because the popularity of Facebook gained more interest from younger and older employees to visit online social network.

Only two studies focused on email usage among employee. Email has been used primarily for communication between coworkers, managers of higher position and clients in the organization to ensure an effective communication process in the organization. This proved that email has been claimed as an effective communication channel in improving work practices and increasing productivity (Jackson et al., 2001).

There are only one study conducted on Youtube and messaging usage among employees at the workplace, respectively. Youtube is a part of social network while messaging is not directly part of social network. Youtube can be used as a learning or entertainment sources with respect to the purpose of the employees visiting the Youtube site. This actually has raised concern among researchers that employees have been using Youtube for privacy matters durign researching hours. Messaging has been highlighted as an efficient medium to encourage employees to interact with the manager and co-workers related to research purposes in textual form and it is not limited to office matters (Aripin et al., 2011).

As a summary, it can be concluded that that there are various types social media used by employees at the workplace. The most common type of social media used is the social network. Facebook is the most popular social network browsed by employees during researching hours. They mostly used Facebook for personal matters which have direct impact on their productivity. There were limited number of studies that investigte the usage of other types of social media among employee. The majority of studies analysed in this review focused mainly on the purpose and impact of using social media during working hours. However, there is very limited study that explored the types of social media used by researchers particularly in organizations in Malaysia.

RQ2: What are the impacts of social media usage on employees' productivity at the workplace? There is an extensive study on the impact of social media on employee's productivity. The impact were identified based on the usage of social media which influence them
to frequently visit social media at the workplace. Further, the studies discussed both positive and negative impacts of social media usage. Seven studies stated that there was a strong relationship between social media usage and employee productivity (Seman, 2014; Yeshambel et al., 2016; Magnier et al., 2010; Murphy, 2013; Leftheriotis and Giannakos, 2014; Ashraf and Javed, 2014). However, only Moqbel (2012) argued there was no significant relationship between social media adoption on job performance of employees in the US and Yemen as he claimed that there were mediating variables that influenced job performance.

Most of the studies argued that there was positive impact on social media usage at research compared to the negative effects. The majority of the employees tend to use social media intensely at working place for business networks such as bonding relationships, enhancing collaboration, connecting globally and getting easy access to new people and expertise, generating knowledge, viewing work related information, establishing effective communication channel among workers, superiors, partners and clients, increasing number of business contacts, enhancing companies marketing, recruiting skilled employees, securing high security and safety (Steinfield et al., 2009; Ferreira and Plessis, 2009; Magnier et al., 2010). The social media also displayed maximum benefit of usage at the working place by increasing the social capital and innovatiness in the company.

The utilitarian and hedonic values were one of the factors that encourage employees to continously engaged in social media at research, hence giving a significantly positive impact on employees performance (Leftheriotis and Giannakos, 2014). Ali et al. (2015) argued that hedonic use of technology together with the social and cognitive uses of social media mitigate positive influence on innovative performance.

Besides providing maximum benefit to the organization, it also displayed major challenge in creating legal and ethical threats to the organization. The social media also can be used for leisure activities such as communicating with friends and family outside from the work places. The engagement of the employees on the social media can result in illegal and unethical behavior such as privacy invasion and discrimination. Some of the employees have the potential to show an inapropriate behaviour by surfing on pronographic websites, involved with cyber criminal, privacy violations loss of company information which can lead to the disruption of their productivity at the workplace.

Consistent with the findings supported by Kaupins and Park (2010), Brooks (2015) showed that the

Table 3: The positive and negative effects of social media

Positive effect
The information can be easily updated
Facilitates collaboration and opportunities for potential business partners or clients; maintain good relationship between employer and employee; create unity among employees
Increase innovation, motivation and workflow efficiency among employees facilitate socialization among employees through accumulation of digital usage
Develop hedonic and utilitarian values related to work
Sharing and gaining knowledge through social media usage for productive work
Effective channel of communication for business networks
Enhance marketing and improve clients relations
Get high profit through productive and skilled employees in exploring business contacts with greater social capital

Negative effect
Non-control of updated information can be used in social engineering attacks Malware infection; spammers and virus writes can set up false profiles of the company's identity, hence reducing the number of business contacts

Reduce innovation and motivation level

Technostress a negative psychological effect
Generate unreliable content; lost of confidential/sensitive organizational information
Bandwidth hogging which leads to a waste of resource and problems to IT administrators
Legal liability due to vandalism or negligent acts or omissions that damage organization reputation
Loss of income due to unproductive hours
personal usage of social media during researching hours can lead to negative consequences both on the efficiency and well-being of employees. High level of negative psychological with the adoption of social media at the working place can lead to performance deterioration of employees. Furthermore, there were other threats related to the usage of social media at work place. Employees have the tendency to face severe health risk, in which they can become addicted to the virtual world. Some of the studies emphasised that more than half of the respondents identified as heavy users of social network sites during researching hours. This implies that they were using their researching hours for activities which are not productive for the organisation. Das and Sahoo (2011) claimed that the employees experienced $1.5 \%$ decrease in their productivity when they visit social network sites, especially the Facebook. The benefits and challenges of using social media at the workplace are summarised in Table 3.

## CONCLUSION

The focus of this review was to investigate the existing literature related to the common types of social media used by employees at the workplace and the impacts of the social media on their productivity at the workplace. Adopting a systematic literature review suggested by Kitchenham et al. (2009) 37 Articles have been selected and analysed. Based on the analysis, it was found that the social media has become a common medium of communication for employees to collaborate, integrating and sharing knowledge among colleagues in organization. The social media can be categorized into social network (Facebook, Twitter, MySpace, LinkedIn, YouTube, etc.) email, blog, messaging, forums, Wikis and many others. The use of social media has brought benefits and challenges to the organizations. Most of the primary studies selected have been proved the social
media usage is benefit toward the personal and organization productivity. However, some of the studies showed negative effects of using social media at the workplace.

Based on the analysis there is a research gap as most of the studies provided their finding based on cross-sectional data. The cross sectional data are unable to provide actual causality of the usage factor that really impacts the productivity of the employees at the workplace. This review is expected to contribute knowledge and practices for future study in identifying the causality of social media usage on employee productivity. This is important as the causality of the usage factor that contribute to harmful effects to the organization productivity can be tackled and intervened by using the intervention model of Internet addiction.

## ACKNOWLEDGEMENT

We acknowledge the financial support from the Ministry of Higher Education, Malaysia and the University Teknikal Malaysia, Melaka for their assistance in this research. All researchers acknowledge the support of the grants PJP/2015/PBPI (5D)/S01 460.

## REFERENCES

Ali, H.H., D. Nevo and M. Wade, 2015. Linking dimensions of social media use to job performance: The role of social capital. J. Strategic Inf. Syst., 24: 65-89.
Aripin, N., H. Mustafa and A. Hussein, 2011. Instant Messaging (IM) used in the Workplace. J. Techno.Soc., 3: 1-18.
Ashraf, N. and T. Javed, 2014. Impact of social networking on employee performance. Bus. Manage. Strategy, 5: 139-150.

Brooks, S., 2015. Does personal social media usage affect efficiency and well-being?. Comput. Hum. Behav., 46: 26-37.
Burke, S.C., S. Snyder and R.C. Rager, 2009. An assessment of faculty usage of YouTube as a teaching resource. Int. J. Allied Health Sci. Pract., 7: 1-8.
Das, B. and J.S. Sahoo, 2011. Social networking sites-A critical analysis of its impact on personal and social life. Int. J. Bus. Soc. Sci., 2: 222-228.
Ferreira, A. and D.T. Plessis, 2009. Effect of online social networking on employee productivity. South Afr. J. Inf. Manage., 11: 1-11.
Francois, A., A. Hebbani and S. Rintel, 2013. Facebook in the university workplace. Media Int. Aust., 149: 15-27.
Jackson, T., R. Dawson and D. Wilson, 2001. The cost of email interruption. J. Syst. Inf. Technol., 5: 81-92.
Kaplan, A.M. and M. Haenlein, 2010. Users of the world, unite: The challenges and opportunities of social media. Bus. Horizons, 53: 59-68.
Kaupins, G. and S. Park, 2010. Legal and ethical issues associated with employee use of social networks. Adv. Bus. Res., 1: 82-93.
Kitchenham, B., O.P Brereton, D. Budgen, M. Turner, J. Bailey and S. Linkman, 2009. Systematic literature reviews in software engineering-A systematic literature review. Inform. Software Technol., 51: 7-15.
Leftheriotis, I. and M.N. Giannakos, 2014. Using social media for work: Losing your time or improving your work?. Comput. Hum. Behav., 31: 134-1 42.
Magnier, W.R., M. Yoshida and T. Watanabe, 2010. Social network productivity in the use of SNS. J. knowl. Manage., 14: 910-927.
Martensen, M., K. Borgmann and M. Bick, 2011. The impact of social networking sites on the employer-employee relationship. Proceeedings of the 24th Bled E-Conference on E-Future Creating Solutions for the Individual Organisations and Society, June 12-15, 2011, ESCP Europe, Bled, Slovenia, pp: 242-256.

Moqbel, M., 2012. The effect of the use of social networking sites in the workplace on job performance. Ph.D Thesis, Texas A\&M International University, Laredo, Texas. http://citeseerx.ist.psu.edu/viewdoc/ download?doi=10.1.1.306.5755\&rep=repl \& type=pdf
Murphy, H., 2013. Social media use among employees: Influences of organizational climate, job involvement and organizational commitment. MSc Thesis, Clemson University, Clemson, South Carolina. http://tigerprints.clemson.edu/all_theses/1625/
Razmerita, L., K. Kirchner and T. Nabeth, 2014. Social media in organizations: Leveraging personal and collective knowledge processes. J. Organ. Comput. Electron. Commerce, 24: 74-93.
Seman, S.A.A., 2014. Organizational member use of social networking sites and work productivity. Int. J. Innovation Manage. Technol., 5: 30-34.
Sidek, S., N. Kudus, S.Z. Izharrudin, M. Kamalrudin, M.A. Hassan and S. Mohamed, 2016. Factors Influencing Internet Addiction Among University Students: A review. Sci. Int., 28: 1343-1346.
Sophia, V.Z.A., 2009. The impact of social networking 2.0 on organisations. Electron. Lib., 27: 906-918.

Steinfield, C., J.D. DiMicco, N.B. Ellison and C. Lampe, 2009. Bowling online: Social networking and social capital within the organization. Proceedings of the 4th international Conference on Communities and Technologies, June 25-27, 2009, University Park, PA, USA, pp: 245-254.
Wattal, S., P. Racherla and M. Mandviwalla, 2009. Employee adoption of corporate blogs: A quantitative analysis. Proceedings of the 42nd Hawaii International Conference on System Sciences HICSS 09, January 5-8, 2009, IEEE, Canyon, Texas, ISBN: 978-0-7695-3450-3, pp: 1-10.
Yeshambel, T., M. Belete and Y. Mulualem, 2016. Impact of online social networking on employees productivity at work place in university of gondar: A case study. Int. J. Comput. Appl., 135: 18-24.

