Impact of Innovative Culture on Organizational Effectiveness: The Mediating Role of Social Media

Dr. Sambaji Rao[1], Prof. Vijai Nath Giri[2]
[1]School of Commerce, Narsee Monjee Institute of Management Sciences (NMIMS), Dhule Campus, Maharashtra
[2]Dept., of Humanities & Humanities Social, Sciences Indian Institute of Technology, Kharagpur, West Bengal
[1]pawar.rao@gmail.com;sambaji.rao@nmims.edu
[2]vng.iit@gmail.com; vng@hss.iitkgp.ernet.in

Abstract: The aim of the present study is to examine the relationship amongst the three variables i.e., innovative culture (IC), social media (SM) and organizational effectiveness (OE). The study also aims to explore the mediating role of social media on the proposed relationship. Based on the proposed framework, data were collected from 732 faculty of Indian technical education institutions through self-reported questionnaires. The data were tested utilizing Structural Equation Modelling (SEM) technique. The findings revealed positive relationship between IC and OE. Social media indicated a two-dimensional model, namely utilitarian, and hedonic purpose. Further, results indicated that social media for hedonic purpose mediated the relationship between innovative culture and organizational effectiveness. This paper offers significant insights to Higher Educational Institutions (HEIs) that may help the institutions to understand the importance of social media that may affect organizational effectiveness. Till date, social media as a mediator has received less attention in the context of technical educational institutions in India. The establishment of social media as a mediator between IC and OE in HEIs is unique.

Dr. Sambaji Rao
School of Commerce,
Narsee Monjee Institute of Management Sciences, Dhule, (MS)
pawar.rao@gmail.com;sambaji.rao@nmims.edu

The findings contribute to the existing body of literature on IC, social media, and OE in the non-Western context as the data were collected from the domain of private engineering colleges in India.

Keywords: innovative culture, social media (utilitarian, hedonic), organizational effectiveness

1. Introduction

In the current era of information, innovative culture and the rapid advancement of technological tools such as social media platforms play a critical role in the organization's success, HEIs are not an exemption. Some scholars (Deal & Kennedy, 1982; Kilmann, 1984; Freiling & Fichtner, 2010), define culture as the "glue" that holds members of an organization together. One of the reasons for the increase in unemployment in India is lack of innovation among HEIs. In the context India, Shrotriya and Dhir, S. (2018), revealed that Indian HEIs lack in innovation, which requires technology and desirable skills among engineering graduates. This was supported by the findings of (Singh et al., 2017) that innovative abilities and innovation skills are considered as determinants for benchmarking graduate employability. The influence of different types of culture has produced different levels of results. An innovative culture is characterized by exciting and dynamic environments (Wallach, 1983). Organizational members are able to perform effectively when they align themselves with

organizational culture and produce significantly a positive work outcome (Wallach, 1983; Lok & Crawford, 1999). At present, innovative culture and social media have emerged as the two most important elements of organizational effectiveness (OE). Technology in the form of social media tools can facilitate more easy ways to do work. Nowadays, many institutions such as

HEIs, government bodies, business firms are adopting social media for personal as well as professional use (Leftheriots & Giannokis, 2013). This includes branding, marketing, internal and external communication, information and knowledge sharing that fosters innovation and creativity. However, there is dearth of research on examining the influence of social media on creativity and organizational effectiveness (Roberts & Candi, 2014), particularly in the perspective of HEIs in India.

Social media are penetrating in every field of human life, including private and professional life. They have altered the way modern organizations are interacting with their internal and external environment (Kaplan & Hanaelin, 2010). Despite of their potentiality, many institutions still find it difficult to make communication through social media (Madsen, 2017). Individuals and higher education institutions (HEIs) can benefit from using social media by strengthening professional relationships and improving organizational effectiveness. These tools have introduced significant changes in the way communication takes place between institutions and individuals at large. However, the practical implication of sharing culture through social media remains unexplored. Studies examining the usage of social media in academic institutions is minimal (Carpenter, Takahashi, & Lertpratchya, 2016). This study aims to fill this gap by exploring the mediating role of social media between innovative culture and organizational effectiveness in Indian HEIs.

Organizational effectiveness is the extent to which organizations achieve their goals and objectives. Kreps (1985, p. 109), refers to OE as "dependent on how well organizational members are able to communicate and use relevant information." Recently, social media have influenced organizational effectiveness to a large extent by effectively improving internal communication among employees within the boundaries of an organization. Today, Internet and social media are seen as a facilitator of productivity (Rosensberg & Rosenstein, 1980; Peters & Reveley, 2015), as these tools are primarily developed for communication. Therefore, internal communication serves as a mechanism between individuals and an organization (Falcione et al., 1987).

There are abundant studies (Deshpande et al., 1993; Denison & Mishra, 1995; Chan et al., 2004; Pinho et al., 2014; Naranjo-Valencia et al., 2016) that have demonstrated the effect of IC on OE.

2. Literature Review

2.1 Organizational Culture

Peters and Waterman (1982) coined the term "culture." Since then it has become an important component of organizational effectiveness. There are a wide range of definitions on organizational culture. Wallach (1983) defined culture as 'the shared understanding of an organization's employees - how we do things around here.' Jones (2004, p. 195) defined "organizational culture is the set of shared values and norms that controls organizational members' interaction with each other and with the people outside the organization." Every organization, including HEIs, have a unique culture that differentiate it from other organizations. Institutions are guided by their vision and mission that promote organizational performance. It is clear from these definitions that there is no single organizational culture applicable to institutions.

Earlier, many scholars have studied organizational culture and contributed to different dimensions. They are theoretically different but essentially similar.

2.2 Social Media

The ubiquitous nature of Internet and social media have influenced every sphere of human lives including individual and firm level. At the organizational level, they have emerged as an administrative tool for the 21st Century HEIs (Audretsch, Lehmann, & Wright, 2014). There is an evidence which reveals the relationship of social media with other sectors such as education, industry, government, commercial, etc., Social media are also deployed for various purposes like marketing, branding, knowledge sharing, customer relationship, organizational communication, etc., Many studies claim that social media are utilized for various

purposes, like connecting and strengthening relations, information transfer, knowledge sharing and for relaxation. The present study attempts to illustrate how HEIs have been adopting social media for interaction among employees and knowledge sharing.

Kaplan and Haelein (2010, p.16) referred to social media are "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content." They represent a new phenomenon of networking. They have been assisting well established traditional channel of communication. They are an open source of knowledge and information that helps users to generate information, enabling innovative modes of sharing institutional information (policies, vision & mission), and ideas among individuals. As social media by its nature are open, they also encourage being open in expressing opinion and giving instant feedback. Today, the Internet and social media are recognized as facilitators of production (Peters & Revely, 2015) and creativity.

In the present competitive environment, HEIs need effective internal communication channels to deliver effective results. Individuals look for the most convenient channels for interaction among each other within and outside the organization. Research reveals that organization are increasingly making use of social media as facilitator of knowledge transfer. Earlier studies have revealed that use of social media in institutions can boost performance (Kwahk & Park, 2016) and increase spirit of cultural belongingness (Leidner, Koch, & Gonzalez, 2010). Individuals visit social media platforms at the workplace for utilitarian as well as hedonic purpose. The usage of social media for professional and personal purpose differs fundamentally. Utilitarian usage refers to goal-oriented, whereas hedonic usage refers to emotions such as happiness, fun, and fantasy (Leftheriotis & Giannakos, 2014).

2.3 Organizational effectiveness

Investigating the effectiveness of HEIs is an important issue as it is one of the vital variables in the study of the organization. OE is referred as the degree or extent to which an organization achieves its goals (Smart & St. John, 1996). Research has shown how strong culture affects performance. The link between the strength of culture and effectiveness depends on how organizations with a strong culture learn from

and respond to both their own experiences and adjust in their environment. Effectiveness of HEIs involves proper use of resources, standards of the instructions and research, teachers' capability and students' job opportunities (Uline, Miller, & Tschamman-Moram, 1998). The institution cannot achieve its vision and mission if they are not communicated properly to its members. Internal communication channels like social media play a constructive role in achieving organizational efficiency. Mantymaki and Riemer (2016) and Amidi et al., (2015) argued organizations are using social media for increasing organizational effectiveness.

2.4 Theoretical Background of the study

There are theories that are used as a foundation for the advancement of the research model. In social networking research many behavioral theories exist that can be applied to study the behavior of individuals at the personal and social level. Theories like technology acceptance model (Davis, 1989) is applied in marketing (Hajli, 2014) and the education sector (Chao et al., 2011); personality traits theory (Digman, 1990) is used in marketing (Pentina et al., 2013); social capital (Bourdieu, 1985) is used for knowledge sharing (Chang & Chuang, 2011); uses and gratifications theory (Katz, Blumler & Gurevitch, 1974) is used for customer relationship management (Porter & Donthu, 2008).

The current study applies the uses and gratifications theory (UGT), proposed by Katz, Blumler and Gurevitch (1974). It is used to know how individuals energetically use a particular media to fulfill their needs. UGT has its roots in communication studies and plays an important role in understanding its adoption among organizations. Thus, this theory is appropriate for understanding social media usage among individuals and organizations. UGT has been used extensively used in various disciplines as it can be relevant in understanding intentions of the users of social media. Based on this theory, the literature review describes that social media users have two purposes: utilitarian and hedonic. These two purposes are theoretically different. The main purpose of social media is to maintain and develop a new relationship and strengthen old relationships. Utilitarian usage is related to work purpose, whereas hedonic use is related to fun and entertainment (Leftheriots & Giannokis, 2014). Earlier researchers (Wang et al., 2016; Cao & Ali, 2018) have suggested investigating

the different uses of social media.

UGT rightly describes the motivation for social media usage. In accordance to UGT, individuals are focused in their preference for media usage. According to Ku, Chen, and Zhang, (2013), the intention of individuals in specific media usage to communicate with others depends upon its effectiveness to fulfill particular gratification and needs. There are studies (Al-Jabri et al., 2015; Gan et al., 2017) that have incorporated UGT in various areas of customary media and computer-mediated communication. These studies explain the link between UGT and social media usage. Thus, in the background of the present study, UGT is a suitable background to know the intention of using social media and their influence on organizational effectiveness.

According to UGT, the two needs of social media usage identified in the present study are utilitarian and hedonic. Ali-Hassan et al., (2015) have found utilitarian and hedonic are the dimensions of social media that can satisfy users' needs. Leftheriotis and Giannokis (2014) refer to utilitarian purpose is defined as rational and goal-oriented. Whereas, hedonic refers to fun, happiness, enjoyment, and fantasy that an individual experiences during the SM usage.

3. Conceptual framework

3.1. Innovative culture and organizational effectiveness

In today's vibrant environment with the advancement in ICT tools and numerous business challenges, it is important to know how individual creativity can be enhanced in the digital environment. In today's competitive world, HEIs are compelled to develop innovative skills among employees as well as students, as they have emerged as the key driving forces of organizational performance. Though there is enough research on the link between innovation and organizational effectiveness, there are limited studies about how social media enhances creativity in the age of information.

According to Wallach (1983) innovative culture is characterized by exciting and dynamic environments. These type of institutions are innovative places to work, filled with challenges and risk. Individuals always face stress and burn-outs. The adjectives used

for this type of institutional culture are challenging, enterprising, creative, and driving. Research has shown a relationship between innovative culture and organizational performance. Deshpande et al., (1993) in their research on corporate culture and innovativeness in Japanese firms have found that adhocracy (innovative) is associated with the best performance. An innovative culture is one of the important components that has given institutions a competitive advantage. It is seen as a symbol of organizational success. Pinho et al., (2014) in their study on hospital culture have found that adhocracy (innovative) culture has a significant influence on the performance of organization. Further, their findings were supported by Naranjo-Valencia et al., (2016) on a range of Spanish firms. Their findings revealed that the innovative culture has positively predicted performance.

Institutions that advance in refining the effectiveness of their internal interaction practices deliver effective results (Yates, 2006). Countries like India are emphasizing on research and innovation, which are key in promoting a dynamic and vibrant environment in academics. Recently, the Human Resource Minister of India speaking at Institutions' Innovation Council (IIC, 2018) program said that the quality education in higher education can only be achieved by embracing best practices in innovation. Minister has also established an "Innovation cell" at AICTE with a purpose to systematically nurture the culture of innovation in all the HEIs across the country. Heskett and Kotter (1992) stated that the investigation of the link between culture and academic innovations can provide valuable understandings for the management of HEIs. From the literature, it is apparent that the present generation of individuals are living in a highly informative society, where everybody is connected to each other in some way. Today, access to information is key for the success of any organization, including HEIs. Networking between institutions, as well as individuals, has become part and parcel of institutional activities.

This gives educational institutions an opportunity to exchange information, opinions and valuable ideas on the tip of fingers. Therefore, the following hypothesis has been formulated:

H1: There will be a positive relationship between innovative culture and organizational effectiveness.

3.2. Innovative culture and social media for utilitarian and hedonic purposes

The innovative culture encourages independence that gives an opportunity to express new ideas, views, and opinions. Despite the increase in the number of organizations using social media, limited research is available on innovation and social media (Wang and Miao, 2015). According to Kiron et al., (2013) social media not only helps to understand the market, improve customer relations, enhance reputation, it also helps to innovate and improve productivity; acquire and retain employees. Today, successful academic institutions are dependent on ICT tools that foster innovation and collaboration for the benefit of the next generation. As social media are relatively a new field of research, scholars have contributed relatively little to this emerging area.

Academicians are utilizing networking tools for different purposes like for interaction with co-workers, research, knowledge sharing and professional development. As a result of technological advancements, HEIs are supporting innovation by embracing different approaches. Risser (2013) has shown how a new entrant teacher used social media platforms to support his/her professional development, to connect with more skillful teachers, searching for resources, and enriching his/her professional knowledge. In another study, Vuori (2012) emphasizes that organizations have been using social media to innovate. Social media are potential sites where knowledge is shared through a variety of communication platforms. In order to share creativity or innovative culture, an effective internal communication channel is necessary (Ye et al., 2015).

It is also found that individuals who are placed in the knowledge-rich network and work for various groups from different departments within the organization are more innovative and productive (Aral et al., 2012). According to Greenhow and Gleason (2015), the nature of HEIs has begun to transform towards greater openness and transparency by utilizing various social media platforms. They help in the knowledge base and participating in the dialogue. They also assist scholars in sharing their work, interact with the audience, generating quality research for the betterment of an institution as well as society.

Some HEIs use social media to share scholarly information among individual by providing free access to journals. The University of Huddersfield Press has been actively engaging its faculty over social media to support academic interactions and publish research outside the academic world. In a more recent study, Hartgerink and van Zelst (2018) concluded that the advancement of research activities in HEIs should be made public via social media as this would allow not only to share knowledge of a particular study but also helps to connect to other related studies. This would lead to knowledge to creation, encourage innovation and evidence-based solutions to challenging problems. Academic community looks for to take maximum advantage of social media and the incredible value they bring with them like knowledge and connections to evolve the ways academic activities are performed (Chapman & Greenhow, 2019). Therefore, the following hypothesis has been framed:

H2: Innovative culture will be positively related to social media for utilitarian purposes.

On the other side, Ali-Hassan et al., (2015) have shown that SMHP can an indirect effect on innovativeness and employee performance. Employee usage of social media for the hedonic purpose is likely to give innovative ideas. For example, when an individual is spending his/her time on video gaming or some other entertainment activity this could lead him/her to some creative solutions on one of the work-related problems and contribute to organizational performance. Pleasure or fun-related information can lead employees towards relaxation (Singh et al., 2014), thereby, in turn, enhances their performance. It was found by Hernandez et al., (2014) that employees having strong social interaction in their day-to-day activity, are generally more positive, innovative, and productive at the workplace. There is enough evidence related to social media usage for work-based practices, but hedonic usage of social media has less evidence (Muhdi & Boutellier, 2011). As the relation between hedonic of social media and innovative behavior has been established in the findings of the Ali-Hassan et al., (2015), there is a need to examine further this relation for the higher educational institutions with an innovative culture. Therefore, the following hypothesis has been instigated:

H3: Innovative culture will be positively related to social media for hedonic purposes.

3.3 Social media and organizational effectiveness

The concept of social media is gaining importance across the globe. Achieving organizational effectiveness is one of the important objectives of many organizations around the world. This is possible through internal communication channels like social media. Today's workforce prefers social media to gather information and for communication and instant feedback. Like several emerging technologies, usage of social media by employees, have been debatable. Some argued that the social networking usage by employees enhances employee productivity. This is supported by the findings of Bughin and Chui (2010).

In the present age of networking and digital information, social media have become part of personal and professional life. Quirdi, A. E., Ouirdi, M. E., Segers, and Henderickx, (2015) have found that social media tools can enable internal communication across departments, regions, and hierarchical levels. Organizations, including HEIs, need to be well equipped with the latest infrastructure and support its employees to give high-quality results. Santra and Giri (2009) concluded that making organizational effectiveness is dependent on technology. Similarly, social media use increases work performance (Leftheriotis & Giannakos, 2014). In the context of educational institutions, Healey (2015) concluded that social media are game changers in HEIs. Today, many HEIs are trying to integrate these tools into their organizational activities. Bull et al., (2008) found that networking can bridge the gap amongst faculty in terms of scholarly interaction and knowledge sharing, and in turn, can lead to the organization's success.

From the literature, it is evident that modern organizations have recognized social media as one of the key components of competitive advantage at the individual and organizational level. The effects of various digital media are certainly witnessed in the Indian educational institutions in the form of increasing reputation, branding, communication, etc.,

3.4 The effect of using social media for the utilitarian and hedonic purposes on organizational effectiveness

Leftheriotis and Giannakos (2014, p. 137) defined the term 'utilitarian' as "the degree to which an individual believes that using a particular tool would enhance his or her job performance." Social media tools have become popular among teachers for the utilitarian purpose (Greenhow et al., 2018). Social media like any other tool can also be integrated within the organization, as there is a need to deliver various

benefits that support the workplace. North (2010) added that not many organizations have gained from social media usage in the workplace. Similarly, Ishtaiwa and Dukmark (2013) found that social media usage for utilitarian purpose enlightened creativity and critical thinking of teachers.

In another study by Sharma and Pillai (2017) faculty adopt social media not only to communicate with personal networks but also with their co-workers for various academic purposes. Similarly, Sobaiah et al., (2016) are of the opinion that academicians have agreed that social media can be recognized as one of the important tools for academic activities in HEIs. There is enough research on social media adoption in academic institutions for both professional and personal development. In this context, Chen and Bryer (2012) found that faculty members use Facebook for personal development, whereas some use LinkedIn for their professional growth. Therefore, the following hypothesis is framed:

H3(a):Social media for the utilitarian purposes will have a positive impact on organizational effectiveness.

Leftheriotis and Giannakos (2014, p. 137) refer to the term hedonic as "the degree to which employees perceive using social media to be a fun and emotionally stimulating experience." Social media for the hedonic purpose is used because users like them and focus on the fun, entertainment and pleasure giving aspects of the time spent with the technology. Here, people use social media for entertainment. The social media for hedonic usage not only helps to establish social network but has a positively influenced employee creativity (Ali-Hassan, et al., 2015). Similarly, Rayna and Striukova (2015) opined that day-to-day interaction and information exchange by active users of social media has brought about key consequences for firms and the way they innovate. Ali-Hasan et al., (2015) concluded that as the link exists between innovative culture (behavior) and SMHP, there is a need to further investigate this established relationship, particularly for those organizations whose primary objective is to innovate. As suggested in the earlier section, the possible benefits of networking are increasing creativity and knowledge transfer (Ford & Mason, 2013). Based on the above infomation, following hypothesis is proposed:

H3(b): Social media for the hedonic purposes will

have a positive impact on organizational effectiveness.

3.5 The mediating role of social media between innovative culture and organizational effectiveness

Internal social media usage by employees can influence on innovativeness at work and this could enhance organizational effectiveness. Innovativeness is referred to as a means by which institutions produce a new process and system to adapt to external and internal changes (Dougherty & Hardy, 1996). Today, social media are used for different purposes by employees like uploading information, posting developments, sharing videos or photos, to share innovative ideas or giving constructive feedback for improvements (Leonardi, 2014). Social media are powerful tools of knowledge repository and can transfer information that enhances performance. Technology in educational institutions was introduced with the aim to create interactive forums through the Internet and satellite communication etc. If the Indian educational sector intends to increase their performance in the future, it will have to re-design infrastructure by creating state-of-art facilities, deploying technology not only for teaching and learning but also for effective administrations. The undeniable development of social media has triggered revolution in the communication process in both personal and professional lives.

3.6 Social media for Utilitarian and Hedonic purposes as a mediator between innovative culture and organizational effectiveness

Today, many institutions are utilizing social media platforms to foster idea generation and information dissemination. Organizations, including HEIs benefit greatly by deploying social media as a mechanism for interaction. A number of firms are embracing social media as a communication channel to improve innovation (Leonardi et al., 2013) and employee productivity (Han et al., 2015). Employees individually are trying to brainstorm unique ideas for the professional purpose (Uryan, 2015). Innovative culture and social media are common by their open nature. Social media are transparent that encourages interaction. According to Corso and Robinson (p. 98, 2013), social media tools are recognized as "a great facilitator of creative thinking." Social media usage for educational purposes helps various stakeholders to develop skills in creativity, collaboration, and

communication. As social media give freedom to express ideas, share research-related information, and give instant feedback which is essential to promote and protect innovation in HEIs. In a more recent study on faculty and social media, Kumar et al., (2018) have found that faculty members used social media mainly for collaboration and building a community of practice. Thus, social media are important vehicles through which innovation can take place and enhance organizational effectiveness. Hence, following hypothesis is framed:

H4(a): Social media for utilitarian will mediate the relationship between innovative culture and organizational effectiveness.

Whereas, Cole and Griffiths (2007) have found that a "multiplayer online role-playing game" helps in developing strong relationships via friendships. In contrast to television and computer gaming, fun or entertainment via social media tools is based on communication with individuals. Similarly, Hamari et al., (2014) in their assessment on gamification, revealed positive experiences like fun, pleasure, enthusiasm, and engagement. Social media for hedonic communication can support knowledge sharing, and work-related issues can be addressed by the socially and cognitively (Leftheriotis & Giannakos, 2014). From the above information, it is apparent that the ubiquitous nature of the Internet is capable of altering how creativity and innovation are fostered and managed by organizations. Social media allow institutions to improve their innovation capacity. Thus, social media have emerged as a new mechanism through individual creativity passes to organizational effectiveness. Therefore, based on the literature the following hypothesis has been formed:

H4(b): Social media for hedonic purposes will mediate the relationship between innovative culture and organizational effectiveness.

Based on the review of the literature, the current study has identified two objectives:

• To investigate the influence of innovative culture on organizational effectiveness.

• To examine the mediating role of social media between innovative culture and organizational effectiveness.

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An innovative culture is important for any organization as it gives many benefits such as innovative ways of doing business, the development of new products or services. Today, as HEIs in India are facing numerous challenges like internal environment, lack of dedication among employees, raising unemployment, volatile market, rapidly changing technology, competitive market, etc., Internet or social media tools with vast information empower employees to innovate new business practices (Chesbrough, 2003). Nowadays, social media usage for scholarly communication is increasing; this leads to organizational transformation and accelerating innovation (Recker et al., 2016). Limited research is available on social media usage and innovative culture (Agarwal, Gupta, & Kraut, 2008; Leonardi, 2014; Kuegler et al., 2015; Ali-Hassan et al., 2015). The idea of using social media as a communication channel in educational institutions is being explored in India. The effects of digital media in academic institutions and its role as a communication channel are worth for research.

4. Method

4.1 Sample

This study used the faculty of engineering colleges across India. The sample consisted of Lecturers, Assistant Professors, Associate Professors, and Professors. A total of 2680 questionnaires were distributed, 1120 filled forms were returned. 732 completely answered questionnaires were received and used for analysis.

4.2 Measures

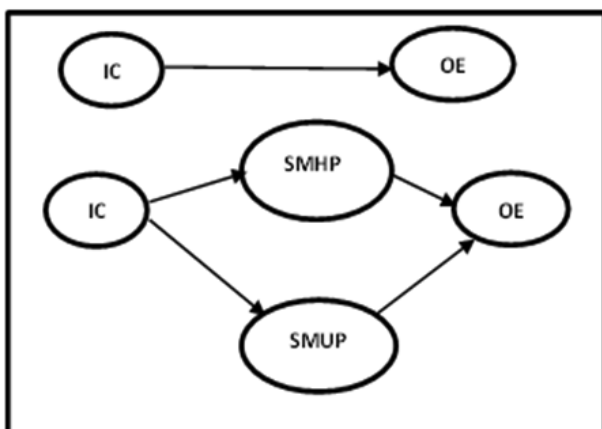Various scales, validated in earlier research were

Fig. 1: Conceptual Model   Source: Authors

modified and used in the present study. The innovative culture was measured using Wallach's (1983) OCI scale with 8 items. The 5-point Likert scale answered against each item ranging from 'describes my organization most of the time (5),' 'does not describe my organization (1).' Social media was measured with a 10-item standard scale (Leftheriotis & Giannokos, 2014). The scale is the two-dimensional measurement with social media for the utilitarian purpose (SMUP) and social media for the hedonic purpose (SMHP) with 5-items on each dimension. A sample item includes, 'using social media for your work is functional,' 'using social media for your work is delightful.' The answers ranged from strongly agree (5) to strongly disagree (1). A five-point Likert scale was used for rating of all the items. Organizational effectiveness (OE) was measured using Mott's (1972) effectiveness scale. A sample item included: do the people in your Institute/College/University seem to get maximum output from the resources (money, people, equipment, etc.) available? That is, how efficiently do they do their work? The scale comprised 10 items. Survey questions were modified and designed based on a five-point Likert scale that range from very high (5), to very low (1).

4.3 Data Analysis

4.3.1 Confirmatory factor analysis (CFA) for Innovative culture

Confirmatory factor analysis (CFA), with AMOS 23 was utilized in the present study. Results for the construct, innovative culture were analysed for estimating goodness-of-fit indicator (GFI) through the root mean squared error of approximation (RMSEA), Comparative Fit Index (CFI), and Tucker-Lewis Index (TLI). Applying confirmatory factor analysis, 4 items (out of 8 items) were retained with standardized loadings (range = 0.49 to 0.76; $p < 0.001$), and with the Average Variance Extracted (AVE) was 0.66. The model had sufficient fit indices (χ^2/df = 1.36, CFI = 0.98, TLI= 0.99; GFI = 0.99, RMSEA=0.02). The results are reported in table 1.

The construct reliability was 0.76, indicating sufficient internal consistency (Hair, Black, Babin,

Table 1

Goodness-of-Fit Results					
	GFI	TLI	CFI	p-value	RMSEA
1.36	0.99	0.99	0.98	.001	0.02

Anderson, & Tatham, 2010), which is well above the recommended threshold of .70. The four items were deleted because of high standard residual covariance (IC 1) and low factor loading (IC 2, IC 3, & IC 4).

4.3.2 Social media

A five-point Likert scale was used for all the 10 items to answer. When all the items were tested utilizing confirmatory factor analysis, 9 items were retained (5 items on SMUP & 4 items on SMHP), the loadings of all the items were significant on respective factors (ranging from 0.68 to 0.85). The AVE for SMUP; and SMHP were 0.75 and 0.81, respectively. One item (SMHP 1) was deleted due to low factor loading. The two-dimensional model had an acceptable model fit indices ($\chi 2$ /df = 2.88, CFI = 0.99; TLI= 0.98; GFI = 0.98, RMSEA = 0.05). The construct reliability was .91. The Goodness-of-fit results are reported in table 2.

4.3.3 Organizational Effectiveness

Table 2

Goodness-of-Fit Results					
	GFI	TLI	CFI	p-value	RMSEA
2.88	0.98	0.98	0.99	.001	0.05

The scale comprised 10 items. The survey questions were modified and designed based on a five-point Likert scale ranging from 'very low (1)' to 'very high (5).' The unidimensional model had an acceptable model fit indices ($\chi 2$ /df = 2.89, CFI = 0.98; TLI= 0.97; GFI = 0.98, RMSEA = 0.05). The average variance extracted (AVE) was 0.67. The construct reliability was 0.88. The Goodness-of-fit results are reported in table 3.

5. Results

Table 3

x^2/df	Goodness-of-Fit Results				
	GFI	TLI	CFI	p-value	RMSEA
2.89	0.98	0.97	0.98	.001	0.05

5.1 Relationship between IC and OE

Structural Equation Modelling (SEM) analysis showed an adequate model fit with ($\chi 2$ /df = 2.46; CFI = 0.97; GFI = 0.97; TLI = 0.96; RMSEA = 0.05). Results indicated that IC positively and significantly predicted OE (β = 0.35, p = 0.001), Hence, H1 was

accepted. The Goodness-of-fit results are reported in table 4.

5.2 Relationship between IC and dimensions of social media

Table 4

x^2/df	Goodness-of-Fit Results				
	GFI	TLI	CFI	p-value	RMSEA
2.46	0.97	0.96	0.97	.001	0.05

Results revealed adequate model fit with ($\chi 2$ /df = 2.89; CFI = 0.98, GFI = 0.97, TLI = 0.97, RMSEA = 0.05). Results as shown in table 5, suggested that IC predicted both the dimensions of social media (i.e., social media for utilitarian

purpose with β = 0.60, p = 0.001, and social media for hedonic purpose with β = 0.50, p = 0.001) respectively. The results supported hypotheses H2(a) and H2(b) respectively.

5.3 Relationships among the dimensions of social media and OE

Table 5

x^2/df	Goodness-of-Fit Results				
	GFI	TLI	CFI	p-value	RMSEA
2.89	0.97	0.97	0.98	.001	0.05

The SEM model showed an adequate model fit with (($\chi 2$ /df = 2.58; CFI = 0.97, GFI = 0.95, TLI = 0.96, RMSEA = 0.05). Results revealed that SMHP have positively and significantly predicted OE with (β = 0.27, p = 0.001), supporting H3(b). Whereas, SMUP did not predict OE (β = 0.08, p = 0.339). As the obtained p-value is insignificant, hence, H3(a) was rejected.

As per the suggestions of Hair et al., (2010), all the above SEM models showed required model fit with χ

Table 6

x^2/df	Goodness-of-Fit Results				
	GFI	TLI	CFI	p-value	RMSEA
2.58	0.95	0.96	0.97	.001	0.05

2 /df below 5.0, CFI, GFI and TLI approximately 0.90 or above, and RMSEA below 0.08.

5.4 Mediation Analysis for the proposed model

To examine the proposed hypotheses AMOS 20.0 was applied. We have utilized the SEM technique along with AMOS. The results are presented in Table 7.

5.4.1 Mediation of social media between IC and OE:

Social media for the hedonic purpose (SMHP): Mediation was investigated to test an indirect effect of

Table 7 : IC predicting OE and the mediating effect of social media

Steps	Hypothesis	Path	b	β	S.E	C.R	p-value	Decision
1	H₁: IC →OE (+ve)	IC → OE	0.35	0.26	0.04	6.93	0.001	Accepted
2	H₂ₐ: IC → SMUP (+ve)	IC→ SMUP	0.60	0.76	0.07	11.21	0.001	Accepted
	H₂ᵦ: IC →SMHP (+ve)	IC→ SMHP	0.50	0.70	0.07	9.93	0.001	Accepted
3	H₃ₐ: SMUP → OE (+ve)	SMUP → OE	0.08	0.05	0.05	0.96	0.339	No Mediation
	H₃ᵦ: SMHP → OE (+ve)	SMHP → OE	0.27	0.15	0.05	3.34	0.001	Partial Mediation
4	H₁: IC→OE (+ve)	IC → OE	0.26	0.19	0.04	4.78	0.001	
	H₂ᵦ: IC → SMHP (+ve)	IC → SMHP	0.50	0.65	0.06	10.15	0.001	
	H₃ᵦ: SMHP → OE (+ve)	SMHP →OE	0.21	0.12	0.03	4.23	0.001	

Note: β is unstandardized beta; SE is the standard error; b is the standardized beta; CR is the critical ratio; IC is innovative culture; SMUP is social media for utilitarian purpose; SMHP is social media for hedonic purpose; OE is organizational effectiveness.

IC on OE through the two-dimensional social media variable. According to Bontis, Booker, and Serenko (2007), mediation occurs when the mediating variable is introduced, and this variable decreases the direct relationship path between the independent variable (IC) and the dependent variable (OE). This effect can be tested by the indirect effect of the independent variable through a mediating variable (Cheung, 2009). From table 7, it has been proved that IC has a significant indirect effect on OE through SMHP (p <.01) at the 5 percent level of significance. Thus, hypothesis H3(b) is supported. The findings of the present study support the mediating effect of SMHP mediated between IC and OE. Therefore, it can be concluded that SMHP can function as a facilitator between IC and OE. The present findings get support from the earlier research (Corso & Robinson, 2013). As per the recommendations of Baron and Kenny's (1986) three-step approach, we have also examined the partial or full mediation effect among the variables. As reported in table 7, SMHP partially mediated the relationship between IC and OE.

Social media for the utilitarian purpose (SMUP):

In contrast to earlier findings, the present study did not find a significant link between SMUP and OE. Surprisingly, the results of the present study have revealed that SMUP did not mediate the relationship between IC and OE.

In this study, IBM SPSS (23.0) was applied to validate and test the conceptual model. The findings of Pearson correlation analysis, mean, standard deviation, and Cronbach α (diagonal in bold) between variables are shown in Table 8. The findings reveal that there is a moderate positive relationship between IC and the two dimensions of social media (SMUP & SMHP).

The SEM technique was utilized to test the proposed hypotheses. The standardized path

Table 8. Descriptive Statistics and Correlations among variables

Variables	IC	SMUP	SMHP	OE
IC	.76			
SMUP	.18**	.88		
SMHP	.13**	.66**	.81	
OE	.36**	.26**	.29**	.88
M	3.96	3.68	3.08	3.79
S. D	.92	.97	1.01	.90

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 (2-tailed)
Note: All correlations are significant at p<.01;
Pearson correlation with N=732;
Reliability estimates are shown in bold across the diagonals.
Source: Authors

coefficient for the proposed hypotheses is reported in Table 7. The hypothesized relationships are shown in Figure 1. In the present study, it has been found that innovative culture and social media for hedonic purpose are related to organizational effectiveness. Innovative culture has positively predicted the two dimensions of social media and organizational effectiveness. Social media for hedonic purpose have positively predicted organizational effectiveness. However, SMUP did not.

5. Discussion

The aim of the present study was to examine the mediating role of social on the relationship between innovative culture and organizational effectiveness. It was found that social media for hedonic purpose mediated the relationship between innovative culture and organizational effectiveness in the context of HEIs. This study contributes to the existing body of literature on organizational communication. In this study, we have investigated what are the intentions of employees of HEIs for social media usage, and its mediating role between innovative culture and

organizational effectiveness. In addition, this study also examined the influence of IC on OE.

This study attempted to contribute literature on IC, SM and OE. The initial part of our study was to investigate the association between IC and OE. The findings have shown that IC is significantly and positively related to OE. We have examined how innovative culture or innovation could predict OE, as well as the dimensions of social media. In line with the earlier research, this study revealed that innovative culture, as well as social media, are required to support the innovative ideas of employees and achieve better organizational performance. Organizations are trying to deploy social media to improve innovation and employee productivity (Leonardi et al., 2013; Han et al., 2015; Recker et al., 2016). Though, there are an increasing number of studies on social media adoption in organizations, research on different uses of social media in organizations, particularly in HEIs is limited. According to Roberts and Candi (2014), there is less amount of studies examining what influence social media have on innovative culture and organizational performance. This research attempts to fill this gap.

The outcomes of the present study also revealed that employees' usage of social media for the hedonic purpose (fun, entertainment, relaxation, etc.,) predicted OE. This is in agreement with previous studies (Ali-Hasan et al., 2015). Apart from this, SMUP is unrelated to OE. This indicates that employees of HEIs who are concerned about the work and betterment of organizational performance still rely on traditional means of communication (notice, memo, circular, email, etc.,) but not on social media. Thus, this result (SMUP) is inconsistent with earlier studies, which supported that SMUP significantly predicted OE (Sharma & Pillai, 2017). This study contributes by examining the effect of social media in accessing organizational information and demonstrate how HEIs can effectively utilize social media to enhance their performance through social media. To the date, few empirical studies have investigated the role of social media as a communication mechanism that provides us a more complete understanding of OE in the context of Indian HEIs. In particular, there is limited research about how HEIs utilize social media to spur creativity (Mount & Martinez, 2014).

Next, the findings of the present study revealed that social media for hedonic purpose can function as a mediator between innovative culture and organizational effectiveness. Results highlighted that SMHP mediated the relationship between IC and OE. However, SMUP could not function as a mediator between IC and OE. Social media in their different formats is a facilitator of innovation. These tools allow organizations to improve their innovative capacity. The current study explored the impact of IC on OE and the mediating role of two-dimensional social media (SMUP & SMHP). Innovative culture positively and significantly predicted OE ($\beta = 0.39$, p = 0.001). Social media for hedonic purpose positively predicted OE. The findings of the study are shown in Table 8. In the proposed model, where social media for the hedonic purpose (SMHP) is introduced between IC and OE, the effect of IC on OE has decreased. Therefore, SMHP partially ($\beta = 0.27$, p = 0.001) mediated the relationship between IC and OE. According to the modern method of mediation proposed by Zhao, Lynch Jr & Chen (2010), this is found to be complementary. However, social media for the utilitarian purpose (SMUP) did not mediate the relationship between IC and OE. The structural equation model had an adequate model fit indices with (χ^2 /df = 2.56; GFI = 0.95; TLI= 0.96; CFI = 0.97, RMSEA = 0.05). Thus, social media can function as a mechanism between IC and OE. Here, Corso and Robinson, (2013, p.98) rightly asserted that "Social media is recognized as a great facilitator of creative thinking."

6. Implications

The practical implication of sharing organizational culture through social media platforms, as an internal channel of communication in HEIs, remains relatively unexplored. At the workplace, almost every organization is utilizing the benefits of social media. In the case of HEIs, it has been observed that organizations hesitate to deploy and teacher struggle to use social media during office hours with a fear of loss of productivity. But usage or implementation of social media when handled effectively would lead to a newer level of performance. Communication among co-workers leads to creativity among employees. Today, creativity at an employee or organizational levels is the result of continuous interaction process among employees, which is vital for HEIs to know how social media and innovative culture play an important role in achieving institutional goals. Thus, it has been empirically proven that continuous and open

communication leads to absorption of mission, vision, and urgency of innovation among organizations, including HEIs. Therefore, social media are incredible tools that set the tone of innovation and align innovative culture with organizational performance.

7. Contribution

The present study was able to examine the effect of IC on OE and the mediating role of social media on the relationship of IC and OE. This study contributes by exploring the impact of IC and OE, which can be enhanced through SMHP. This significantly influences organizational effectiveness. This study makes a unique contribution by examining the mediating role of social media between innovative culture and organizational effectiveness, particularly in the context of Indian HEIs. As earlier studies were undertaken in the Western world, neglecting other developing countries like India. So, this study has filled this gap.

From a practical point of view, the present study allows HEIs to look differently how HEIs effectively permits social media usage in a creative environment that is efficient not only from an organizational perspective but also form employee perspective. It is also important to understand how free or low-cost social media platforms are beneficial to institutions that can lead to better internal communication and optimal performance of HEIs. Apart from a practical perspective, our study theoretically contributes by emphasizing the importance of innovation and networking in enhancing organizational efficiency.

8. Recommendations for future research

The current are confined to private technical institutions only, further research can include public sector colleges. Next, it is recommended that further studies can be explored in other sectors. In the present study quantitative technique was applied, in future, scholars can apply a mixed-method, both quantitative and qualitative techniques along with scheduled interviews that might provide better insights into teachers' social media usage. The present study has discussed social media as a mediator that exhibits indirect effects on the proposed relationship between Innovative Culture (IC) and organizational effectiveness (OE). Further research can incorporate psychological and organizational variables as mediators. The present model can also be extended by

examining the effects of other variables like leadership, organizational commitment, etc.

9. Limitations

This study includes only private engineering colleges. Future research can include public sector institutions for generalization of findings. The future research can undertake longitudinal study that can give a better understanding of employees behavior pattern and how social media influences organizational performance. Also, future research may explore the influence of demographic factors (gender, age, qualifications, etc.,) on the usage of social media in academic institutions.

10. Conclusion

This study attempts to see at social media as communication phenomena. It is an attempt to emphasize that HEIs should provide a place for social media as an internal communication channel as it results in socializing new entrants individuals about mission ethical values and organizational behavior and enhancing organizational effectiveness. Institutions with a social media mechanism are likely to be interesting and compelling. Integration of social media with organizational culture is crucial in achieving innovative levels of performance. With the advent of ICT, the impacts of organizational practices are also changing. At present, the environment of HEIs have reflected the increasing use of social media for internal communication, scholarly interaction, disseminate information, branding, advertisement, etc., In the years to come, with the rapid transformation in the communication process, social media will emerge as a mainstream communication channel.

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Appendix

Innovative culture (does not describe my organization–1 to describes my organization most of the time 5).

(1) The management style is characterized by risk taking and innovation.
(2) My organization is results oriented (getting the job done).
(3) My organization is characterized as creative. (4) My organization is a pressurized place.
(5) My organization is a very stimulating and dynamic place.
(6) My organization creates new challenges. Being on cutting edge is emphasized.
(7) Enterprising – my organization emphasizes acquiring new resources.
(8) My organization is a competitive place.

Social Media (strongly disagree – 1 to strongly agree – 5).

(1) Using social media for your work is effective.
(2) Using social media for your work is helpful.
(3) Using social media for your work is functional.
(4) Using social media for your work is necessary. (5) Using social media for your work is practical. (6) Using social media for your work is fun.
(7) Using social media for your work is exciting.
(8) Using social media for your work is delightful.
(9) Using social media for your work is thrilling.
(10) Using social media for your work is enjoyable.

Organizational Effectiveness (Very High – 1 to Very Low – 5).

(1) Thinking the efforts given by the people you know in your institution, their efforts are……
(2) What is the standard of teaching by the professors in your Institute/College/University? (3) How good would you say is the quality of the research done by the professors and students in your institute?
(4) Do the people in your Institute/College/University seem to get maximum output from the resources (money, people, equipment, etc.) available? That is, how efficiently do they do their work?
(5) How good a job is done by the people in your institute in anticipating problems that may come up in the future and preventing them from occurring or minimizing their effects? In such situations, peoples' responses are …
(6) From time to time newer ways are discovered to organize work and newer equipments and techniques are required to do the work. How is the involvement of people to do the job with these changes......
(7) When changes are made in the routines or equipment, how quickly do the people in your Institute/College/University accept and adjust to these changes? Their acceptance and adjustment to these changes are……
(8) The proportion of the people in your Institution/College/University readily accepting and adjusting to the changes are…..
(9) From time to time emergencies arise, such as crash programs, schedules moved ahead, or a breakdown in the flow of work. In handling emergency situations, people performances are…...
(10) How good would you say is the quality of the infrastructure in your institution?