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# The evolution of social media influence - A literature review and research agenda



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### ABSTRACT

Every aspect of human activities has been influenced by social media, but how this influence is affecting individual decision making in different context had not been studied yet. This article tries to investigate social media influences at individual level with respect to different contexts such as organization, marketplace, and social environment. 132 articles had been selected for the review process. The findings have been presented using the lens of Theory, Context, Characteristics and Methodology. This article presents social media influence phenomenon within an individual. The article concludes by highlighting literature gaps and future research directions. This review makes the relevant contribution to the field of computer mediated communications.

### 1. Introduction

Twitter, Facebook, and LinkedIn are popular social media platforms each of it being used by different stakeholders across the world to interact with each other (Gong et al., 2017; Kane et al., 2014; Kitsios et al., 2022; Obembe et al., 2021). Social media is interactive and networked (Bechmann & Lomborg, 2013; Park et al., 2018). Every individual is motivated towards participating in virtual communities in exchange for rewards in form of friendship, appreciation, knowledge, participation (Sipahi, 2017) leading to crowd wisdom, financial support, collective creation, and many more. Individuals on social media are both producers and consumers of information. This had led to new term "proconsumer". Organizations used social media for reaching potential customers (Buechel & Berger, 2018) and shaping consumer's opinion regarding products (Gkikas et al., 2022; Ruggeri & Samoggia, 2018). Social media empower individuals in decision-making (Bulut & Karabulut, 2018; Sadovykh et al., 2015; Zhang et al., 2017). Similarly social media strengthens organizations relationship with stakeholders (Blevins & Ragozzino, 2019; Schniederjans et al., 2013; Youn & Jin, 2017). Careful adoption of social media is beneficial for the organizations for increasing sales, customer acquisition, corporate reputation (Sipahi E. ve Artantaș E, 2017) and many more (Ancillai et al., 2019; Cui et al., 2018; Dolan et al., 2019; Huang et al., 2015; Kumar et al., 2017; Meire et al., 2017; Vieira et al., 2019). Mismanagement of social media may lead to negative perception among stakeholders (Benthaus et al., 2016).

The influence of the content posted on social media depends on communicators, receivers, and contextual scenarios (Cheung & Thadani, 2012). Consumers experiences present on social media (Huang et al., 2014; Johnen & Schnittka, 2019; Levina & Arriaga, 2014; Xie & Lee, 2015), can be used for market intelligence (Aswani et al., 2018; Izogo & Jayawardhena, 2018; Joseph et al., 2017) for driving traffic and increasing sales (Bao & Chang, 2014; Chang et al., 2018; Lee et al., 2015; Rui et al., 2013). Alalwan, Rana, Dwivedi and Algharabat (2017) had presented the role of social media in promotions, advertisements, branding (Ramadan et al., 2018) and customer relationship management. Reviews present on social media influences the shopping and dining out choices of the customers (Nazlan et al., 2018; Yoo et al., 2013). Positive messages are associated with higher sales while negative messages are associated with lower sales (Rui et al., 2013). To best of our knowledge there is no article in literature which illustrates how individual decision making is being effected by social media posts in different contexts such as organizations, marketplace and social environment. Therefore this article tries to explore the following research question through systematic literature review: How does social media influence an individual's perception in different contexts i.e., workplaces, marketplaces and social environments?

The context classification scheme for studying social media influence on an individual had been adapted from Cao et al., and Lowry (2015), Zhang and Li (2005); and Zhang et al., and Carey (2009). Organization or workplaces setting includes colleges or universities as well when an individual's subjects are related to their studies. Marketplace in-

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### 1. Specify Research Questions - How social media influences an individual's perception in different contexts i.e., workplaces, marketplaces and social environments? 2. Develop Review Protocol – (a) Identify relevant studies by searching Scopus database on search term "social media", 'social network" "social site", "online public network", 'social communication" and 'social web" in title, abstract and keywords. (b) Subject area of the studies had been limited to "Business, Management and Accounting" only. 3. Validate Review Protocol - The review protocol had been reviewed formally by group of researchers.

Phase 1: Plan Review

### 4. Identify Relevant Research - Search term had been searched in title. abstract and keywords in Scopus database. 5. Select Primary

### Studies -Irrelevant studies on basis of title, abstract and inclusion/exclusion criteria were rejected

Phase 2: Conduct Review

- 6. Assess Study Quality - Only journal publication were considered for the review.
- 7. Extract Required Data – Article and source information
- 8. Synthesise Data -Context, objective, method adapted.

### 9. Write Review Report - Social media influence on an individual. Gaps in the literature and future research directions

### 10. Validate Report -The review had been internally validated.

# Phase 3: Document Review

### Fig. 1. Planning of the systematic literature review

cludes the context in which social media influence is being measured while doing marketing, banking (Ferm & Thaichon, 2021; Naeem & Ozuem, 2021) and commerce. Social environment refers to a general setting which differs from home setting, marketplace, organizational or workplace setting. Ngai et al., and Moon (2015) had summarized various constructs, theories and conceptual frameworks had been adopted in literature for understanding the adoption of the social media platforms. Authors of the study feels these desires and needs of human motivates him/ her to join the social media. Over the time he/she gets influence by the information available on the social media. This article focuses on studying the social media influence on an individual through systematic literature review (Brereton et al., 2007) with respect to TCCM approach (Theory, Context, Characteristics and Methodology). Adopting a framework or lens in literature reviews help in bringing objectivity to the analysis.

The remaining sections are organized as follows. Next section briefly illustrates the methodology adopted for systematic literature review. Section 3 presents the systematic literature review findings using TCCM approach. In section 4, this article as the theoretical contribution to literature introduces "social media influence phenomenon on an individual". Last section discusses the implication of the findings followed by the conclusion of the study along with research agenda for future schol-

### 2. Methodology for systematic literature review

To study the evolution of social media influence on an individual, systematic literature review process suggested by Brereton et al. (2007) had been followed. Figure 1 presents the process followed for the selection of the articles. For developing the review protocol, existing studies like Brereton et al. (2007); Chauhan et al., and Kar (2016); Grover and Kar (2017); Grover et al., and Davies (2018a); Gupta et al., and Al-Khowaiter (2018); Rathore et al., and Ilavarasan (2017) had been considered. Adopting such a review protocol minimizes bias in interpretation and introduces objectivity in the data used for the analysis.

For undertaking the review, Scopus database had been used for identifying relevant studies published in 2019 or before. Scopus database has been used for this because Scopus is the most extensive database for both engineering and management focused scientific literature. In business world social media became popular after 2012 and academic literature also indicates social media evolved after 2000 (Boyd & Ellison, 2007). Therefore, the document published in 2000 and after had been considered for the review only. Firstly the keyword "social media" was searched in Scopus database. The keywords of first 100 articles were screened. After all the authors agreement following words were also included: "social media", "social network", "social site", "online public network", "social communication" and "social web". All the journal articles containing the above keywords in the "Article Title", "Abstract" and "Keywords" were considered. Only journal articles were considered for the review, to make sure that selected articles had been reviewed by the experts. Figure 2 illustrates the phase 2 of the review process. Area had been restricted to "Business, Management and Accounting". The articles selected in stage 4, were manually screened, and if the article provides any relevant information for the research question studied than that article had been selected further. Stage wise elimination and selection of the article had given 132 articles.

TCCM approach had been used in literature for structuring the insights derived from literature review (Paul & Rosado-Serrano, 2019). Each letter in a "TCCM" signifies something. "T" stands for theory, first "C" in "TCCM" stands for context, second "C" in "TCCM" stands for characteristics and "M" stands for methodology. For this article also, "TCCM approach" will be used for structuring the insights derived from literature review. These 132 articles were classified on the basis of the theory, context, characteristics and methods followed in the study. The context and method classification scheme had been adapted from Zhang and

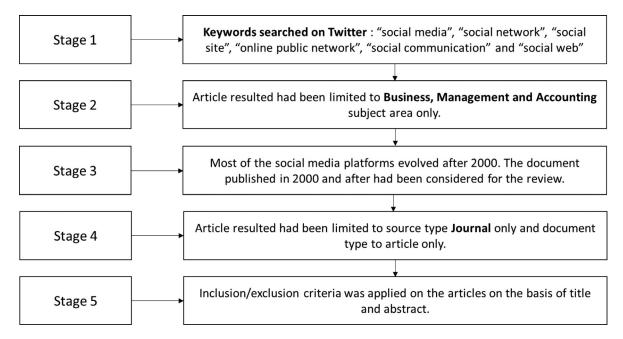


Fig. 2. Stage wise selection of the article for the review

Li (2005); Zhang et al. (2009); and Cao et al. (2015). The theory and characteristics had been grouped with respect to different context.

### 3. Findings on TCCM approach for social media influence

This section contains four subsections, theory, context, characteristics and methodology adapted in the selected articles. Second subsection, context had been further divided into three subsections on different contexts, workplace, marketplace and social environment.

### 3.1. Theory

Social media had been used by organizations for creating social space and building reputation (Colicev et al., 2019). Organizations are using user generated content available on social media as a knowledge resource. Some of the theories which had been used within organization context by other scholars were: knowledge-based theory (Díez-Vial & Montoro-Sánchez, 2014), relationship marketing theory (Risius & Beck, 2015), resource-based view theory (Schaupp & Bélanger, 2014), social identity theory (Li et al., 2013) and theory of social space (Karoui et al., 2015).

Within the marketplace contexts, scholars have used celebrity endorsement theory (Li et al., 2012), communicative ecology theory (Seol et al., 2016), flow theory (Huang et al., 2014), identification theory (Yoo et al., 2013), motivational theory (Yoo et al., 2013), network theory (Kiss & Bichler, 2008), product involvement theory (Li et al., 2012), psychological theory (Li et al., 2012), social presence theory (Xu et al., 2012), social support theory (Balaji et al., 2016), stakeholder theory (Jiang et al., 2014) and uses and gratifications theory (Huang et al., 2014; Xu et al., 2012) for increasing their brand influence on present and potential customers. Scholars had used crowd wisdom theory (Eickhoff & Muntermann, 2016) and information processing theory (Li et al., 2012) for extracting the market intelligence from user generated content present on social media. Levina and Arriaga (2014) had used Bourdieu's theory of cultural production within marketplace context. Some other theories which had been used in marketplace context are cognitive dissonance theory (Balaji et al., 2016) and overarching theory (Schlereth et al., 2013).

Social media had been used for communication purposes within the social environment context. Sense of community the-

ory (Mamonov et al., 2016), social comparison theory (Krasnova et al., 2015), edge-dual graph theory (Ding et al., 2011), social network theory (Suh et al., 2011), affective events theory (Wakefield & Wakefield, 2016), proximity theory (Suh et al., 2011) had been used within social environment for peer to peer learning. Within social environment with respect to individual assessment following theories had been used social identity theory (Cheung & Lee, 2010), self-determination theory (Ba & Wang, 2013; Wakefield & Wakefield, 2016) and cognitive fit theory (Zhu & Watts, 2010).

### 3.2. Context

This subsection contains three subsections on social media influence on individual with respect to different contexts: workplace, marketplace and social environment.

### 3.2.1. Organizations / Workplace

Literature indicates social media influences individual's performance (Ali-Hassan et al., 2015), knowledge (Bharati et al., 2015; Díez-Vial & Montoro-Sánchez, 2014), innovation capabilities (Dong & Wu, 2015; Eickhoff & Muntermann, 2016; Füller et al., 2014; Zhang et al., 2015), which subsequently impacts the individual performance in the firm (Du & Jiang, 2014; Huang et al., 2015; Li et al., 2013; Prokofieva, 2015; Risius & Beck, 2015; Schaupp & Bélanger, 2014; Schniederjans et al., 2013; Wu, 2013; Zhang et al., 2015; Zhou et al., 2015). Scholars also indicates besides these advantages social media usage has many risks associated with it on individual's routine (Ali-Hassan et al., 2015; Munnukka and Järvi, 2014; Karoui et al., 2015; Rode, 2016; Xia, 2013; Zhao and Chen, 2013).

Using social media tools, organizations can improve their word of the mouth and can build stronger relationships with present and potential customers (Benthaus et al., 2016; Huang et al., 2019; Park et al., 2021). In particular social media influences organization's different department such as operations, marketing, sales and services (Dolega et al., 2021; Schaupp & Bélanger, 2014). Primary business objectives of pursuing social media platforms is branding (Kumar et al., 2021), marketing and engaging stakeholders (Eschenbrenner et al., 2014). Figure 3(a), presents the keywords grouping of the selected articles with respect to organization context. The major themes arise from this grouping were social capital, twitter, impression management, knowledge sharing, knowledge

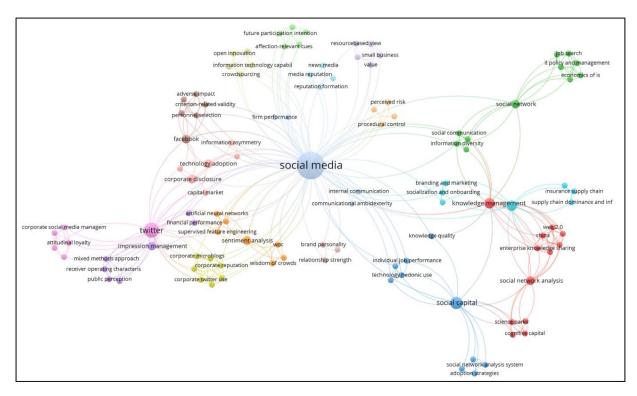


Fig. 3. (a). Association among keywords related to organization / workplace context. (b). Association among keywords related to marketplace context. (c). Association among keywords related to social environment context

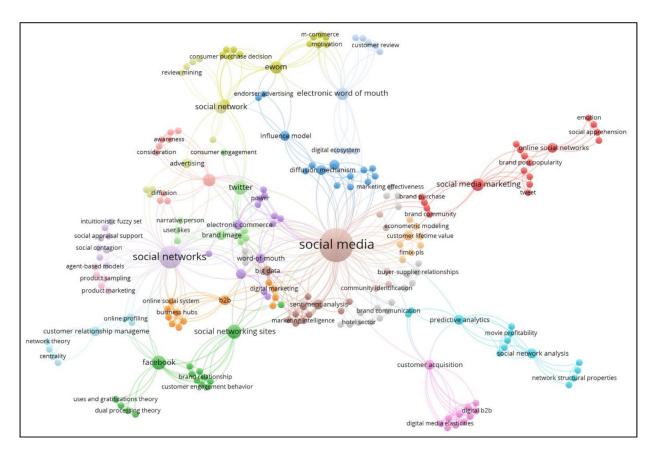


Fig. 3. Continued

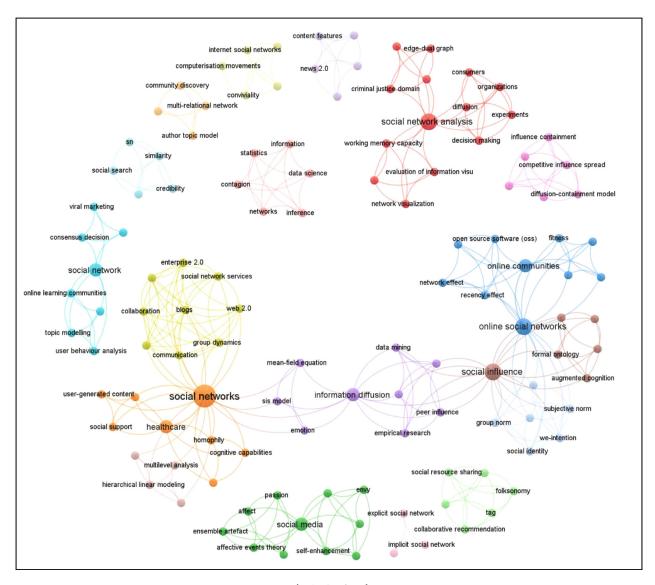


Fig. 3. Continued

management and social media. The figure 3(a), presents how social capital present on social media can be used for deriving economic activities of the organization. Figure 3(a) presents Twitter is being used for impression management, loyalty, reputation and for collective intelligence. Social media activities improve business communication which is directly related to social presence, firm performance and recruitment process. Scholars suggests careful adoption of social media is needed by the organizations (Huang et al., 2015). Mismanagement of social media engagement may lead to negative perception among individuals (Benthaus et al., 2016). During crisis situation, organizations may stimulate their loyal customers for support (Benthaus et al., 2016).

### 3.2.2. Marketplace

Figure 3(b) presents the groups of keywords of the selected articles with respect to marketplace context. Major themes which emerged were electronic word of mouth, social media marketing outcome, Facebook likes and Twitter, diffusion mechanism and sentiment analysis. The other themes arise from this grouping were, social influence model, advertising, user generated content, and social network analysis. Figure 3(b) also indicates Facebook and Twitter is being used for online profiling, brand image and brand relationship management.

Extracting marketing intelligence from social media for influencing individual preferences is one of the popular topics in academic liter-

ature (Huang et al., 2014; Levina & Arriaga, 2014; Watanabe et al., 2021; Xie & Lee, 2015). Studies indicates market intelligence had been extracted for increasing profits, enhancing sales, driving traffic and many more (Clemons, 2009; Jaeger & Höhler, 2021; Lash & Zhao, 2016; Schlereth et al., 2013; Xu et al., 2012; Yu et al., 2013).

Kazienko et al., and Blysz (2013) had proposed the system for acquiring clients through social media. Van Dam and Van De Velden (2015) had proposed the methodology for identifying the customers through online trajectories. Bao et al., and Gao (2013) had proposed the model for predicting indivdual's interest through their activities on social media platforms. Li and Shiu (2012); Lin et al., and Wu (2015); and Susarla et al., and Tan (2012) had proposed a mechanism for diffusing advertisements and messages over social media platforms. By analyzing individual preferences Li et al. (2012) had proposed a social endorser advertising system for businesses. Bitter and Grabner-Kräuter (2016) had illustrated an online environment in which they had posted different variations of a brand-related post on Facebook and had triggered different responses from users. Kiss and Bichler (2008) had stated selection of an initial set of customers for a marketing campaign matters for maximizing the reach of the messages. Li and Li (2013) and Li and Lai (2014) had purposed the mechanism for summarizing collective opinions present on social media.

**Table 1**Organization/workplace characteristics

Characteristics categories (Literature Instances)	Characteristics	Literature instance where characteristics had been used in particular context	Study count
Intangible attributes (5)	Social presence / Reputation / Social capital	Bharati et al., 2015, Rode, 2016, Xia, 2013	3
	Co-creation of ideas	Zhang et al., 2015	1
	Reciprocal benefits	Rode, 2016	1
Content – Algorithmically computed (1)	Sentiment analysis / Emotions	Ghiassi et al., 2016; Meire et al., 2019	2
Network Parameters (4)	Employees' network positions	Wu, 2013	1
	Homophily / Community	Füller et al., 2014	1
	Tie / Tie Strength	Ali-Hassan et al., 2015, Xia, 2013	2
Network analytics (1)	Structural holes	Díez-Vial & Montoro-Sánchez, 2014	1

He et al., and Shen (2015) had proposed a framework for extracting marketing intelligence for businesses. Jiang et al. (2014) had proposed stakeholder-based event analysis framework for identifying important stakeholder groups. Literature indicates customer engagement on social media has the potential of impacting service quality, perceived usefulness and customer enjoyment (Seol et al., 2016; Tafesse & Wood, 2021). Zhang et al., and Chowdhury (2011) had analyzed consumer engagement on Twitter using path analysis. Zheng et al., and Lin (2013) had developed a system for mining the reviews posted by the customers.

### 3.2.3. Social environment

Figure 3(c) presents the groups among keywords of the selected articles with respect to social environment context. The major themes were social identity, social influence and information diffusion, social network analysis and healthcare as a domain. Within the social environment context, studies focus on diffusion of the messages on social media for increasing social influence over the individuals (Ahn et al., 2021; Chesney, 2014; Ding et al., 2011; Garg et al., 2011; Huang et al., 2014; Kumar et al., 2021; Lai & Turban, 2008; Li et al., 2013; Liu et al., 2015; Liu et al., 2016; Saulwick and Trentelman, 2014; Suh et al., 2011; Sundararajan et al., 2013; Takac et al., 2011; Wakefield & Wakefield, 2016; Wang et al., 2015; Zhang et al., 2013; Zhou et al., 2014; Zhu & Watts, 2010).

The other themes from this grouping were social media, social network analysis, IS adoption, information diffusion, healthcare and group enterprise 2.0. Social media facilitates production, sharing, and communication of information among different social networks (Ameripour et al., 2010) for various purposes (Cheung & Lee, 2010) such as self enhancement (Ba & Wang, 2013; Krasnova et al., 2015), technology adoption (Mamonov et al., 2016; Peng & Woodlock, 2009), learning (Yan & Tan, 2014; Yan et al., 2015) and many more.

Kim and Park (2013) had proposed the topic driven social rank algorithm for showing interest driven search results. Fang, Hu, Li and Tsai (2013) had developed a method for predicting adoption probabilities within networks by considering structural equivalence, social influence, confounding factors, and entity similarity. Li and Du (2014) had proposed the framework for identifying opinion leaders in the virtual network along with measuring opinion effectiveness. Li, Li and Zhu (2016) had proposed the link-based classification model (on the basis of the opinions) for partitioning the virtual networks into the classes.

Li, Jin, Wang, and Zeng (2016) had proposed the opinion summarization method using convolutional neural networks. Shah, Yu, Verma, Tang, Shaikh, and Zimmermann (2016) had made the system for generating multimedia summary automatically from real time events. Yuan et al., and Xu (2016) had purposed the text analytics framework for extracting latent semantics from the textual descriptions. Grover et al., and Ilavarasan (2018)b) has also demonstrated how the impact of influence can have polarizing impact on social communities during elections.

### 3.3. Characteristics

Table 1 presents the organization/workplace characteristics. Literature indicates within organization/workplace characteristics context four categories had been monitored for social media influence these are: organization invisible attributes such as social presence, reputation and social capital (Bharati et al., 2015; Rode, 2016; Xia, 2013); co-creation of ideas (Zhang et al., 2015); and reciprocal benefits (Rode, 2016); content – algorithmically computed such as sentiment analysis / emotions (Ghiassi et al., 2016; Meire et al., 2019).

Network parameters such as employees' network positions (Wu, 2013); homophily (Füller et al., 2014) and tie strength (Ali-Hassan et al., 2015; Xia, 2013) had been measured in literature. Within network analytics category structural holes (Díez-Vial & Montoro-Sánchez, 2014) had been monitored within the workplace context. The popular among these are intangible attributes followed by network parameters. In organization intangible attributes "social presence / reputation / social capital" is popular followed by other characteristics, i.e., co-creation of ideas and reciprocal benefits. Scholars are measuring organizations relationship strength with network analytics by measuring tie strength and structural holes. Network parameters such as employee's positions and community had been monitored by scholars.

Table 2 presents the characteristics monitored by scholars within marketplace context. Literature indicates within marketplace context five categories of characteristics had been monitored for social media influence i.e., profile attributes, content - user generated & algorithmically computed, network parameters and platform characteristics. Within the profile attributes user's characteristics, preferences and language had been studied (Balaji et al., 2016; Bao et al., 2013; Grant, 2016; Kazienko et al., 2013; Li & Shiu, 2012; Lin et al., 2015). Within user generated content customer reviews and product reviews had been studied (Bao & Chang, 2014; Ku et al., 2021; Li & Du, 2011; Yoo et al., 2013; Zhang et al., 2011; Zheng et al., 2013).

Within algorithmically computed content topic models (Jiang et al., 2014) and sentiments of the posts had been studied (Eickhoff & Muntermann, 2016; He et al., 2015; Jiang et al., 2014; Li & Lai, 2014; Rui et al., 2013; Yu et al., 2013). Within the network parameters following characteristics had been studied: "in-degree" or "out degree" of connections (Kazienko et al., 2013; Phang et al., 2013; Schlereth et al., 2013; Susarla et al., 2012); position within network (Kazienko et al., 2013; Levina & Arriaga, 2014); network size (Schlereth et al., 2013; Seol et al., 2016); betweenness, closeness and reciprocity (Phang et al., 2013); tie strength (Balaji et al., 2016; Bitter & Grabner-Kräuter, 2016; Li & Du, 2011; Li & Lai, 2014; Luarn et al., 2015); homophily (Li & Du, 2011; Pagani & Mirabello, 2011; Susarla et al., 2012); centrality (Kiss & Bichler, 2008); and social influence (Levina & Arriaga, 2014; Li & Shiu, 2012; Li et al., 2012; Lin et al., 2015). Within the platform characteristics followers (Piehler et al., 2019; Zhang et al., 2011) and likes (Chang et al., 2019; Lee et al., 2015; Wessel et al., 2016) had been studied. The popular among these are network parameters followed by algorithmically computed content (i.e. sentiment analysis) and user preferences. Like

Table 2 Marketplace characteristics

Characteristics categories (Literature Instances)	Characteristics	Literature instance where characteristics had been used in particular context	Count
Profile attributes (6)	User characteristics / preferences	Balaji et al., 2016, Bao et al., 2013, Grant, 2016, Li & Shiu, 2012, Lin et al., 2015	5
	Language	Kazienko et al., 2013	1
Content - User generated (5)	Electronic word of mouth (e-WOM)	Li & Du, 2011, Yoo et al., 2013, Zhang et al., 2011	3
	Customer reviews	Bao & Chang, 2014	1
	Product reviews	Zheng et al., 2013	1
Content – Algorithmically computed (7)	Topic Modelling	Jiang et al., 2014	1
	Sentiment analysis / Emotions	Eickhoff & Muntermann, 2016, He et al., 2015, Jiang et al., 2014, Li & Lai, 2014, Rui et al., 2013, Yu et al., 2013	6
Network Parameters (24)	"In-degree" or "Out degree"/ Connections	Kazienko et al., 2013, Phang et al., 2013, Schlereth et al., 2013, Susarla et al., 2012	4
	Position within network	Kazienko et al., 2013, Levina & Arriaga, 2014	2
	Network size	Schlereth et al., 2013, Seol et al., 2016	2
	Betweenness	Phang et al., 2013	1
	Closeness	Phang et al., 2013	1
	Tie / Tie Strength	Balaji et al., 2016, Bitter & Grabner-Kräuter, 2016, Li & Du, 2011, Li & Lai, 2014, Luarn et al., 2015	5
	Reciprocity	Phang et al., 2013	1
	Homophily / Community	Li & Du, 2011, Pagani & Mirabello, 2011, Susarla et al., 2012	3
	Centrality	Kiss & Bichler, 2008	1
	Social influence	Levina & Arriaga, 2014, Li & Shiu, 2012, Li et al., 2012, Lin et al., 2015	4
Platform characteristics (3)	Followers	Piehler et al., 2019, Zhang et al., 2011	2
	Likes	Chang et al., 2019, Lee et al., 2015, Wessel et al., 2016	3

**Table 3**Social environment characteristics

Characteristics categories (Literature Instances)	Characteristics	Literature instance where characteristics had been used in particular context	Count
Profile attributes (7)	User characteristics / preferences  Garg et al., 2011, Huang et al., 2014, Li et al., 2013, Mamonov et al., 2016, Wakefield & Wakefield, 2016, Yan et al., 2015, Zhang et al., 2013		7
Content - User generated (2)	Comments	Liu et al., 2015	1
-	Expertise	Li et al., 2013	1
Content – Algorithmically computed (2)	Sentiment analysis / Emotions	Wang et al., 2015, Yan & Tan, 2014	2
Network Parameters (10)	Co-membership	Peng & Woodlock, 2009, Yan & Tan, 2014, Zhang et al., 2013	3
	Information diffusion	Cheung & Lee, 2010, Li et al., 2013, Susarla et al., 2016, Wang et al., 2015	4
	Tie / Tie Strength	Ding et al., 2011, Suh et al., 2011	2
	Centrality	Zhu & Watts, 2010	1
Platform characteristics (3)	Hashtags	Huang et al., 2014	1
	Retweets	Chesney, 2014; Jalali & Papatla, 2019	2
	Likes	Chesney, 2014	1

organization context in marketplace context tie strength had been computed along with social influence.

Table 3 presents the characteristics monitored by scholars within social environment context. Literature indicates within social environment context five categories of characteristics had been monitored for social media influence i.e., profile attributes, content - user generated & algorithmically computed, network parameters and platform characteristics. Within the profile attributes category user characteristics and preferences had been studied (Garg et al., 2011; Huang et al., 2014; Li et al., 2013; Mamonov et al., 2016; Wakefield & Wakefield, 2016; Yan et al., 2015; Zhang et al., 2013).

Within the network parameters following characteristics had been studied such as co-membership (Peng & Woodlock, 2009; Yan & Tan, 2014; Zhang et al., 2013); information diffusion (Cheung & Lee, 2010; Li et al., 2013; Susarla et al., 2016; Wang et al., 2015);

ties strength (Ding et al., 2011; Suh et al., 2011) and centrality (Zhu & Watts, 2010). Within the platform characteristics following characteristics were monitored: hashtags (Huang et al., 2014); retweets (Chesney, 2014; Jalali & Papatla, 2019) and likes (Chesney, 2014). The popular among these are network parameters followed by profile attributes.

### 3.4. Methodology

The method classification scheme for studying social media influence on an individual had been adapted from Cao et al. (2015), Zhang and Li (2005); and Zhang et al. (2009). The methods had been divided into two components: empirical and non-empirical. Empirical had been further divided into quantitative, qualitative and other. Quantitative contains the following methods: (a) social network analysis: observe and

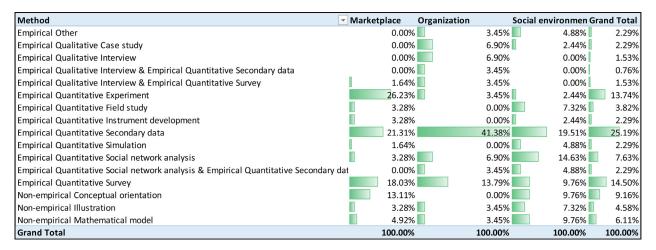


Fig. 4. Methodology adopted by context in the selected articles

analyze social networks structures; (b) experiment: manipulate independent variables; (c) field study: experimental design carried out in natural settings; (d) survey: large number of observations with no manipulation variables; (e) instrument development; (f) simulation: test model with artificial data; (g) secondary data: a study using existing data such as published statistics, archival data, financial and accounting reports. Qualitative contains the following methods: (a) case study: investigates one or few cases in detail; (b) interviews. Non-empirical contains the following methods: (a) conceptual orientation: propose, present, or describe frameworks; (b) illustration: present opinions supported by experiences and examples; (c) mathematical model.

Figure 4 presents the methodology adopted by context for the selected articles, for systematic literature review. For studying the influence of the social media within the organization context, 41.38% of the articles had adapted empirical quantitative secondary data method, followed by 13.79% of the articles had adapted empirical quantitative survey method and 6.90% of the articles had adapted empirical qualitative case study and empirical qualitative interview each.

For studying the influence of the social media within the market-place context, 21.31% of the articles had adapted empirical quantitative secondary data method, 26.23% of the articles had adapted empirical quantitative experiment, followed by 18.03% of the articles had adapted empirical quantitative survey method and 13.11% of the articles had adapted non-empirical conceptual orientation. For studying the influence of the social media within the social environment context, 14.63% and 19.51% of the articles had adapted empirical quantitative social network analysis and empirical quantitative secondary data method respectively, followed by 9.76%, 7.32% and 9.76% of the articles had adapted non empirical conceptual orientation, empirical quantitative field study and empirical quantitative survey respectively.

### 4. Discussion

Using social media an individual satisfies his / her desires and makes connections with other individuals present on social media. The study on the basis of the finding concludes social media has a tremendous influence on an individual. Social media enables an individual to connect, share, access and receive information across the borders. Irrespective of physical location, employees through social media platforms can participate in all the business processes. Social media empowers an individual for performing better at the workplace.

Social media provides a virtual marketplace for the organizations for campaigns, promotions, advertisements (Djafarova & Bowes, 2021), customer engagement (Bailey et al., 2021; Garrido-Moreno et al., 2018; Hua et al., 2021), customer retention (Garrido-Moreno et al., 2018) and crowdsourcing innovation. Social media facilitates individuals in

building public perception for increasing their reputation in market (Etter et al., 2019; Rapp et al., 2013). Uses and gratifications theory is popular within the marketplace context. Self-determination theory and social identity theory popular within the social environment context.

Section 3.3 illustrates the characteristics categories. The article captures the study of the following characteristics categories: intangible attributes; profile attributes; content - user generated & algorithmically computed; network parameters & analytics; and platform characteristics. The popular among these characteristics categories are network parameters followed by profile attributes. Table 4 presents the overview of social media influence on individual with respect to different context such as organization or workplace setting, marketplace and social environment setting. Individual uses social media for self enhancement, empowerment, job search (Garg & Telang, 2018), selection (Van Iddekinge et al., 2016) and job security with respect to workplace context. Using social media, individual collects the opinions and reviews of the products and services with respect to marketplace context. On the basis of the literature review this article presents the social media influence phenomenon taking place within the individual in the next subsection, followed by this next sub section presents the implication for practice.

# 4.1. Theoretical contribution – Introducing social media influence phenomenon

After reviewing the academic literature in this section authors of the articles introduced social media influence phenomenon which is taking place within an individual in different context. For social media influence phenomenon five theories had been combined: uses and gratification theory given by Blumler and Katz in 1974, social capital theory suggested by Putnam in 1993, social cognitive theory by Bandura in 1986, acculturation suggested by Redfield, Linton and Herskovits in 1936 and diffusion of innovation theory given by Rogers in 1995, their connections had been illustrated in Figure 5.

Literature indicates media had been used by users to gratify their needs (Blumler & Katz, 1974). The users need can be classified as effective, cognitive, personal and social. The user's gratification depends on three factors, i.e., social context, content and media exposure (Katz et al., 1973). While the user is trying to use the social media for their needs, they will try to use the facilities provided by the social media such as sharing, bookmarking, querying, and connecting with their fellow mates and many more. The connections of the user with his/her fellow mates may be regarded as the social capital of the user on social media platforms.

Social capital is the goodwill available to an individual on the platform (Putnam, 1993). The individual's goodwill can be used for sharing information and influencing others. Information sharing de-

**Table 4**Overview of social media influence at individual

Context	Outcome of influence
Organization / workplace Marketplace Social environment	Empowerment; self – enhancement; job performance; job security; recruitment Purchases; brand reputation, earned reviews; customer retention self-expression; social connections; perception;

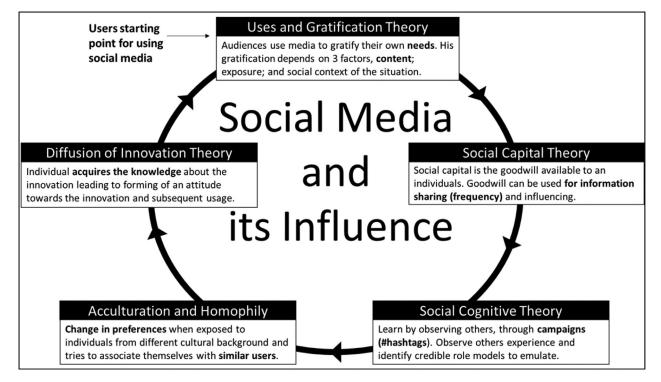


Fig. 5. Social media influence phenomenon

pends on relational, structural and cognitive dimensions (Nahapiet & Ghoshal, 1998; Chiu et al., 2006; Pinjani & Palvia, 2013). The propagation of post highly depends on user characteristics and frequency. Once the post has been published, other users try to comprehend the information and learn from it.

Bandura (1986) through social cognitive theory had highlighted about two types of learners. Learners who learn through their actions comes under enactive learner category. Learners who learn by observing others comes under vicarious learner's category. In the present scenario vicarious learners will learn from other user's post. In social media, hashtags (i.e., # symbol followed by user-generated keywords), cluster users opinions on a topic. Using which users can learn from other experiences and subsequently emulate in their lives. The experiences documented in the posts have the potential of changing individual's preferences.

This change of individual preferences, due to direct or indirect contact with different cultural background of the users, has been termed as acculturation in literature (Redfield et al., 1936). Acculturation can be at an individual or group level (Ogden et al., 2004). At individual level acculturation can be characterized as change in perception, attitudes, values, and personality. These changes may initiate innovation-decision process with an individual.

An individual has two options, either of accepting the innovation or of rejecting the innovation associated with the information (Rogers, 1995). An object, idea or practice which is new to the society can be characterized as an innovation. If an individual accepts an innovation, he/she subsequently spread the same to the other users online or offline. Online an individual can use the social media platform facilities such as sharing, liking, bookmarking and many more for spreading the innovation practice across the society.

### 4.2. Implication for practice

This section contains the three subsections. The first sub-section illustrates the best practices for organizations to influence an individual on social media. The second sub-section illustrates the best practices for producers, manufacturers, distributors, and retailers to influence an individual on social media. The third sub-section illustrates the best practices for government and non-government accounts on social media.

# 4.2.1. Best practices for an organization on social media to influence an individual

After this extensive literature review, the authors of the study had come up with the following best practices for an organizations on social media: (a) Electronic word of mouth matters the most, stimulates your customers to leave positive tone messages on social media and negative messages (Rui et al., 2013) and grievances should be avoided and should be resolved outside the social media platform (Blevins & Ragozzino, 2019; Schniederjans et al., 2013; Youn & Jin, 2017). (b) Social media helps in creating the social space and brand value ((Benthaus et al., 2016; Read et al., 2019), but organizations should always keep in mind mismanagement of social media may lead to negative perception (Benthaus et al., 2016). It is highly advisable to use the social media accounts carefully. (c) In today's digital era social media presents the view of internal processes and growth. Therefore, organization while posting should keep in mind prospective employees and other individuals are looking up to these posts (Bharati et al., 2015). Their post can increase the prospective employees hungry to join the organization at the same time can diminish as well. (d) If needed during crisis situation organizations may stimulate their loyal customers for evoking

 Table 5

 Characteristics which can be studied in different contexts

Context			
Characteristics categories	Organization/ Workplace	Marketplace	Social Environment
Intangible attributes	Social presence		• Emotional support
	<ul> <li>Reputation</li> </ul>		
Profile attributes		<ul> <li>Preferences</li> </ul>	<ul> <li>Preferences</li> </ul>
Content - user generated		• e-WOM	<ul> <li>Comments</li> </ul>
		Reviews	Expertise
Content - Algorithmically computed	<ul> <li>Sentiments</li> </ul>	<ul> <li>Topic Modelling</li> </ul>	<ul> <li>Sentiments</li> </ul>
		<ul> <li>Sentiments</li> </ul>	<ul> <li>Emotions</li> </ul>
		<ul> <li>Emotions</li> </ul>	
Network Parameters	<ul> <li>Positions in networks</li> </ul>	<ul> <li>"In-degree" or "Out degree"/</li> </ul>	<ul> <li>Co-membership</li> </ul>
	<ul> <li>Community</li> </ul>	Connections	Social influence
	<ul> <li>Ties / Tie strength</li> </ul>	<ul> <li>Position within network</li> </ul>	<ul> <li>Information diffusion</li> </ul>
	-	<ul> <li>Network size</li> </ul>	• Tie / Tie Strength
		Betweenness	Centrality
		<ul> <li>Closeness</li> </ul>	·
		Tie / Tie Strength	
		Reciprocity	
		Homophily / Community	
		• Centrality	
		Social influence	
Network analytics	Structural holes	oodan mindinee	
Platform characteristics		• Followers	Hashtags
Tantoria camacteristics		• Likes	• Retweets
		LIRCS	• Likes
			- TIVC9

counter movement (Benthaus et al., 2016). (e) It is highly advisable that organizations should plan diffusion of the advertisements according to user preferences. User preferences from social media can be extracted by using the platform characteristics such as like (Chang et al., 2019; Lee et al., 2015; Wessel et al., 2016), retweets (Jalali & Papatla, 2019) and hashtags (Huang et al., 2014). (f) for social endorser advertising precautionary measures should be taken for selecting initial set of endorsers (Li & Shiu, 2012; Li et al., 2012; Lin et al., 2015; Susarla et al., 2012).

# 4.2.2. Best practices for producers, manufacturers, distributors, and retailers on social media

Marketplace gets extensively influence by word of mouth and product perception. Therefore, authors of the study would like to suggest the following practices to producers, manufacturers, distributors and retailers on social media: (a) the user generated content present on social media is the knowledge resource for producers, manufacturers, distributors and retailers (Bao & Chang, 2014; Chang et al., 2018; Lee et al., 2015; Rui et al., 2013). It can be used for product co-creation, customer targeting (Buechel & Berger, 2018), consumer segmentation (Ruggeri & Samoggia, 2018) and many more purposes. (b) Producers, manufacturers, distributors and retailers can get the glimpse of the people preferences by tracing their online trajectories on social media (Ruggeri & Samoggia, 2018).

# 4.2.3. Best practices for government and non-government accounts on social media

Now social media is regarded as one of the channel for information broadcasting purposes. Authors of the study will plea the governments and non-governments organizations for the following purposes: (a) to use the social media as a tool for rumor refuting purposes. (b) The agenda's on social media is being discussed in national or global context, this facilitates citizens for raising voices for rights but at the same time there is a need for monitoring these discussion. Therefore, authors of the study will like to suggest the governments to set up a team for social media monitoring purposes.

### Conclusion and implication for research

Social media platforms unite the people, facilitates sharing of information for various purposes such as self enhancement, product usability,

learning, branding, innovation, customer engagement and many more. Also, social media platforms satisfy the human need and desire for social connection and relationship. The article presents the social media influence phenomenon which tries to explain how social media posts is influencing an individual decision making. The article also summarizes the theories and methodologies being used in prior literature for studying different characteristics in different contexts. The study also identifies literature gaps illustrated in implication for research section. Social media can be used for understanding social, economic, and behavioral aspects of the mankind with the help of different characteristics categories such as: individual profile attributes, user generated content analyzed algorithmically, network analytics and platform characteristics.

The authors of the study had come up with table 5 which can be used by the research scholars for future research projects. Table 5 presents the characteristics categories as rows and contexts as the columns. The values in each cell contains the characteristics which can be studied by the scholar, for example, (a) by applying algorithms on content the sentiments and emotions of the consumers can be computed in marketplace along with consumers preferences; (b) by computing network parameters such as co-membership, centrality, tie and tie strength within the social environment the social influence and information diffusion can be measured. Scholars have indicated real time conversation on social media can be used for analyzing various matters, concerns and issues (Lai & Turban, 2008; Sundararajan et al., 2013). Some scholars indicated that big data analytics can be used for studying networks on social media (Cao et al., 2015; Grover & Kar, 2017). Cao et al. (2015) had presented the evolution of social networks within the information system research.

Lot of data has been generated on social media on daily basis. The data can be used by the users for collectively making the sense for different situations such as product purchases, political deliberation, climate change, technology adoption and many more. Social media data can also be used for market intelligence (Culotta & Cutler, 2016; Naylor et al., 2012) for entertainment, viral diffusion of messages and crowd source marketing. The authors of the study would like to highlight that the social media platforms are providing the account holders with lot of information on their activity and their social perception, i.e., retweets, likes, followers and hashtags and many more. Therefore, authors would like to advise if future researchers can use platform characteristics to come up with new procedures for branding and advertising purposes. The "social media influence phenomenon" proposed in this article had

been derived from the articles selected for the literature review, this is the limitation of the article therefore we would like to suggest to future researchers the same can be tested through quantitative or qualitative methods.

Further our network analysis on association among keywords (Figure 3a, 3b and 3c) indicates the contexts of influence that has been explored in existing literature, based on linkages developed based on association among author keywords. The linkages among contexts which has not been established in these network diagrams are important areas to focus for future researchers. These areas provide possible explorations for theoretical contribution in the space of social media influence. For example, theories on interpersonal influence, customer relationship management and electronic word of mouth have not been explored in existing literature, and this inference can be drawn from figure 3b. Similarly, from figure 3c, it can be comprehended that relationships between concepts like subjective norms, information diffusion and competitive influence have not been explored in social environmental contexts. The future research areas listed above, if explored further will help us in gaining more knowledge on social media influence.

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