

# Social Media Usage Strategic Intention by the Organizations and the Trends

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**Abstract:** *In nearly one and a half decades social media has touched almost everyone around the globe. The organizations and the people both are getting involved themselves in social media for gaining greater benefits from its applications. This paper looks at the approaches taken, strategic intent and the social media and innovation growing trend over the years, spanning 2000 to 2017. The paper analyzed around 89 articles from reputed online academic databases. A list of concepts and various approaches taken in the past and the strategic intent is summarized in this paper for easy understanding and reference for future research on the impact of social media on innovation. This paper can be looked upon as a representative reference for future research on understating the impact of social media on innovation and various approaches taken in the past by the researchers, finding the trend. Paper contributes to the extant literature in many ways, it has developed the approaches taken and the strategic intent reflected in the past research. Secondly, it has shown the research trend and its growing importance over the years. Thirdly, it can be looked by organizations trying to apply social media for innovation efforts and get a strategic view of the role social media plays in innovation.*

**Keywords:** social media, innovation, informal networks, co - creation, ideation, crowd sourcing

## 1. Introduction

With the advent of social media (SM) people have found a new place for sharing their views, reviews, knowledge and ideas over area of their interest in an open forum. On the other hand organizations have also realized that they can better understand consumers latent needs and desires by listening to them over social media as people express their feelings without any hesitation or fear over social media. Today almost all the top companies have social media applications for people's interaction inside and from outside the organization. They are looking at what people in general are talking over social media about their product and services and about them in general. However, after all the efforts it is very difficult for the organizations to apply social media for various stages of innovation, starting with idea generation. This paper highlights the approaches taken by the various researchers and developed the strategic focus emerging out of each of the 89 papers studied so that one can look at the research more strategically and apply in future research with right strategic focus. Paper also highlights the research trend over the years 2000 to 2017, this is the time when social media gained momentum and how its been seen over the years especially in relationship with innovation.

## 2. Literature Review

Social media (SM) helps understand emerging and latent needs. Companies that can harness outside ideas along with their internal R&D efforts are more likely to succeed in the era of open innovation (Chesbrough, 2003). SM provides original and feasible ideas, provides huge information and wider knowledge capture which may not be possible to get in an in - house R&D set up (Filieri, 2013). Provides lower cost of interaction, as many people participate in a co - creation activity thereby enhancing efficiency and effectiveness of co - creation activity (Piller et al., 2012).

Concentrating innovation generation on a few individuals is inefficient and costly and so it is needed to be concentrated on large number of individuals with wider skills and diverse

knowledge to lower the cost of design and prototyping (Von Hippel, 2005).

Social media can be used for open innovation for all the innovation processes (Mount & Martinez, 2014). Social media for open innovation can be used for all the stages of innovation processes like ideation, R&D and commercialization (Mount & Martinez, 2014). Social media affects idea generation, idea selection, idea execution, sustaining ideas and idea diffusion (Kastelle & Ohr, 2013). Open innovation can also be used for inbound processes like sourcing and acquiring and outbound processes like revealing and selling (Dahlander & Gann, 2010). It opens up the boundary of organization to the outside stakeholders. For organizations it helps in innovating new products and services resulting in the higher percentage of sales made up of newly developed products and aids radical innovation (Matthias & Andrea, 2012). Companies that pursues open innovation tend to produce more radical innovations than companies pursuing closed innovation, companies with more closed innovation strategies tend to produce incremental innovations (Matthias & Andrea, 2012).

Laursen and Salter (2006) studied the role of openness in innovation performance of U. K.2707 manufacturing firms and found that firms that are open to external sources and search channels are more likely to have higher levels of innovative performance. Firms need to have a right balance between inside out and outside in approaches for open innovation and R&D openness (Enkel et al., 2009). (Gassmann et al., 2010) came up with the nine perspectives of open innovation they are the spatial perspective; the structural perspective; the user perspective., the supplier perspective., the leveraging perspective., the process perspective., the tool perspective., the institutional perspective., the cultural perspective.

Companies like Procter & Gamble have used innovative technologies like simulation, prototyping, virtual reality and data mining to 'enable suppliers, customers and all the other sources of knowledge into company innovation process (Dodgson et al., 2006).

Nokia uses various social media applications to engage customers and understand where they are and what they want, with social media applications they have been able to generate more than 7500 ideas, this allows Nokia to be more close to its customers (Strategic Direction, Vol.29, Issue 8, pp 19 - 21). Engaging users on social media requires higher degree of specificity to harness the benefits of social media integration across innovation stages from ideation, prototyping to commercialization (Mount & Martinez, 2014).

Organizational strategies for openness needs to be properly checked whether openness will suit or not or how much openness is needed for being competitive (Dahlander & Gann, 2010). Managers need to be careful about selecting the openness; what to open, how much to open for idea generation or for idea selection to get the best ideas (King & Lakhani, 2013). How are companies managing both open and closed innovation successfully. When they go for open innovation and when not.

There are four archetypes of open innovation users like 'isolationists, scouts, explorers and professionals and they significantly differs from how they conduct open innovation in their firms (Keupp & Gassmann, 2009). Open innovation and outbound open innovation in general has both positive and negative effects on the firm performance (Laursen & Salter, 2006), (Lichtenthaler, 2015).

### 3. Research Methodology

The research looked at the empirical and peer - reviewed research papers to understand the previous studies done in investigating approaches taken and the strategic intent coming out of each paper, also the paper attempts to find impact of social media and innovation research growth trend and the direction it is moving. The paper did literature review of 89 papers from the business and management

academic databases such as Ebsco, Emerald, Jstor, Science Direct and Proquest. The scope of the research paper is mainly from the year 2000 to 2017 as one can see coming of social media during this time and the exponential growth it took afterwards during this period.

In depth analysis was done of the selected papers to understand in detail the various concepts and theories used in the past research and related findings, develop strategic intent coming out of each paper and to find the growing trend. Mostly refereed journal articles were included for research.

### 4. Analysis and results

The select papers were analyzed for the approaches take and the strategic intent that can be linked to. Then the papers shows the strategic focus that is emerging out of each paper studied along with the year and author for easy reference. As social media has gone through many growth trajectories, this paper has showcased its progress from the beginning and how social media was then and now, its growing importance can be seen from the depiction of social media research trend trajectory. The paper brings in focus approaches, strategies and trend for easy understanding of a rather difficult and elusive relationship between social media and innovation.

#### Various approaches taken and the strategic intent

Approaches taken is derived from the literature review of various papers. Strategic intent is carved out of these approaches by the author of this paper. This gives a snapshot of various focus area in the previous related research on social media and innovation. Strategic intent is derived by the author of this paper to aid the understanding of various strategies applied to harness social media in the innovation processes. This is some of the key approaches taken by the authors from across the world.

**Table 1:** Key approaches taken by past researchers and the emerged strategic intent

Sl. No.	Last name of the Authors	Year	Approach/key focus	Strategic intent
1	Still, Huhtamaki, Isomursu, Lahti, Huotari	2012	Analytics of both the usage and the user involvement can be utilized in understanding the impact of user involvement in the service.	User as co - creator
2	Cockayne, Roy	2004	Formation of innovation ideas in informal networks	idea creation through informal networks
3	BOWKER DUNN, MARY	2006	SOCIALIZATION FOR INNOVATION, THE ROLE OF DEVELOPMENTAL NETWORKS	Socialization networks for innovation
4	Erickson, Lisa B.	2013	CROWDSOURCING AS A NEW BUSINESS PRACTICE FOR INNOVATION, PRODUCTIVITY, KNOWLEDGE CAPTURE, AND MARKETING	Leveraging crowdsourcing for innovation, cost reduction, knowledge capture and marketing and branding
5	Barnes, Nora Ganim Jacobsen, Stephanie	2013	Roger's theory of diffusion and perceived attributes	understanding perception for Social media diffusion
6	Dahl Allison, Lawrence Jill, Pierce Jeff	2011	Building an innovation community	Building a sustainable innovation community
7	CORNELIO GEMMA SAN, CRUZ EDGAR GÓMEZ	2014	An approach to co - creation that could be synthesized as a set of creative practices involving collective processes where both industries and consumers contribute in a meaningful way.	co - creation and participation
8	Simula Henri, Töllinen Aarne, Karjaluoto Heikki	2013	The approach of integrating social media and crowdsourcing along with viral marketing for R&D, marketing and service & maintenance.	Customer seller interaction through crowdsourcing
9	Mustaffa Normah,	2011	Demographic background, amount of Facebook experience,	Understanding social media

	Ibrahim Faridah, Mahmud Wan Amizah Wan, Ahmad Fauziah, Kee Chang Peng, Mahbob Maizatul Haizan		The adoption rate, Purpose of use, Social factors that influenced the usage of Facebook	users motivations
10	Inauen Matthias, Schenker - Wicki Andrea	2012	Approach of inside - out open innovation	Analyzing the influence of outside - in approach on firm innovation performance.
11	Singh Nitish, Lehnert Kevin, Bostick Kathieen	2012	external users, regional, cultural, between regions usage patterns	Using social media for reaching consumers
12	Breed, Jason	2011	outside in approach, stakeholder approach	external sources and search channels for innovative performance
13	DAKHLI MOURAD, DE CLERCQ DIRK	2004	human capital and social capital	Harnessing human capital and social capital for innovation
14	Narayanan Madhavan et al	2012	social media and business	Social media for enhancing business
15	Dodgson, Gann, Salter	2006	Use of Innovation technologies mainly those that help create innovative products. data mining, simulation, prototyping and visual representation	Connecting and developing product through innovation technologies
16	Criado, Almazan Rodrigo, Gil - Garcia	2013	tools, goals and topics on social media	Connecting and developing through social media
17	Strategic direction	2013	Extending idea generation to include various stakeholders and unknown participants has proved a masterstroke.	Social media and stakeholder participation for innovation
18	Zheng Lei, Zheng Tuo	2014	Finding Performance of government agencies' use of social media	Social media for information and interaction
19	Bechmann Anja, Lomborg Stine	2013	Literature review to find the user creation as sense making and economic revenue	Using social media for value creation through user participation
20	Mergel	2013	Social media adoption and resulting tactics in the U. S. federal government	Using social media for interaction, engagement, representation and networking
21	Martini, Massa, Testa	2013	The firm, the platform and the customer: A “double mangle” interpretation of social media for innovation	Social media usage and co - evolution
22	Mount, Martinez	2014	Approach of innovation stages	Social media for open innovation
23	Füller et al	2014	Comparison of Contributions Across User Types	tapping innovation through innovation communities
24	Reviews For Leaders of Technological Innovation. Robert McNamee	2011	Social media revolution and innovation	Social media for innovation
25	Anania	2013	innovation through centre of excellence	innovation through centre of excellence
26	Mergel	2012	Social media innovative tactics, challenges	social media as innovation tool
27	Trainor	2012	approach of social CRM for organizational capability development and performance	social CRM for organizational capability development
28	Smith	Not given	social media and its influence on research and users, communications, marketing and branding	social media for communications, marketing and branding
30	Kastelle, Ohr	2013	approach of studying social media usage at various innovation process levels for organizational innovations at the two case study companies.	using social media for innovation
31	De Moor	2013	approach of studying the socio technical collaboration pattern to understand the social innovation and how it can be used for building communities platforms.	collaboration and social innovation
32	Füller	2010	approach of motivation, personality, partner, process and tools, content and task to understand the different types of virtual co creation	co - creation using virtual environment
33	Corney et al.	2010	Crowdsourcing as a tool to facilitate machine intelligence in a knowledge - based factory.	leveraging crowdsourcing
34	Golooba, Ahlan	2013	Service - oriented architecture for service systems in research and innovation undertakings in higher education institutions.	value co - creation
35	Chang, chen, lee	2014	A crowdsourcing development approach based on a neuro -	leveraging crowdsourcing for

			fuzzy network for creating innovative product concepts	innovation
36	Romero, Constantinides, Brüninkc	2014	Based on the different antecedents derived from the U&G approach a model has been developed, which considers the different motivators that stimulate customers' willingness to participate in the co - creation process.	customer involvement in co - creation
37	LI, Sakamoto	2014	approach of collective opinion, truthfulness and information sharing on social media	understanding collective opinion through social media
38	Gebauer, Füller, Pezzei	2013	The dark and the bright side of co - creation, triggers of member behaviour in online innovation communities	understanding behaviour triggers in online innovation communities
39	Filieri	2013	the approach of using web and social media for customer co creation for new product development, promotion, packaging and CSR	Consumer co - creation
40	Bjork, Magnusson	2009	approach of group centrality on idea quality	Idea quality through network connectivity
41	BILGRAM, BARTL, BIEL	2011	approach of Netnography, qualitative and online survey for understanding the consumer co - creation	co - creation through open innovation
42	Füller et al.	2012	the impact of consumers' creativity components on creative output as well as interest in co - creation activities may be asymmetric.	Creativity for ideas generation
43	Prahalad, Ramaswamy	2000	The distinguishing feature of the new marketplace is that consumers become a new source of competence for the corporation	Customers as a new source of competence
44	SAWHNEY, VERONA, PRANDELLI	2005	Approach of front end and back end usage of internet tools for new product development stages.	Internet as a collaboration platform for co - creation
45	Chesbrough	2007	Approach of business model innovation using 6 types of business model framework	business model innovation
46	Bullinger et al.	2010	approach of competition and cooperation in testing innovation contest innovativeness	competition and cooperation for innovativeness
47	Bartl et all	2012	A Manager's Perspective on Virtual Customer Integration for New Product Development	Customer integration for new product development
48	Fuller et all	2006	Community based innovation, how to integrate members of virtual communities into new product development	Virtual communities based innovation
49	Von Hippel	2005	Democratizing innovation, the evolving phenomenon of user innovation	User as innovator
50	Battistella, Nonino	2013	finding relationship between motivation and innovation roles.	motivations for web based innovation platforms
51	WEST, LAKHANI	2008	exploring the role of communities in open innovation	innovation communities for open innovation
52	Hautz, Hutter, Füller	2010	patterns in the evolution of an online innovation community and users' interaction behaviour	users for innovative content
53	LAURSEN, SALTER	2006	firms who are more open to external sources or search channels are more likely to have a higher level of innovative performance	external sources and search channels for innovative performance
54	Enkel, Gassmann, Chesbrough	2009	outside in, inside out plus the balanced approach.	outside in and inside out plus balancing in open innovation
55	Piller, Walcher	2006	Toolkits for idea competitions, a novel method to integrate users in new product development	integrating users in new product development
56	Piller, Vossen, Ihl	2012	build on Fiske's (1992) relational theory and conceptualization of markets by Heyman and Ariely (2004)	impact of social media on co - creation and innovation
57	Truong	2012	culture moderates the relationship between consumer innovativeness, perceived novelty, perceived value, perceived risk, and attitude toward innovation.	culture, innovativeness and perceived novelty
58	King, Lakhani	2013	strategy of open innovation, how to open and manage problems	Open innovation for best ideas
59	Chesbrough	2003	strategy of open innovation.	strategy of open innovation
60	Hargadon	2003	strategy of technology brokering	innovation strategy of technology brokering
61	West, Bogers	2014	review of open innovation articles	leveraging external sources of innovation
62	Baldwin, von Hippel	2011	cost of each type of innovation model	User and open collaborative innovation
63	Huizingh	2010	various perspective and research on open innovation	Open innovation
64	Bogers, Afuah, Bastian	2010	user as innovator, research critique and future studies	users as innovators
65	Chesbrough	2003	case study of Xerox closed innovation and spin offs open	Open innovation



			innovation approach	
66	Bayus	2012	Dell's idea storm ideation website analysis using secondary data to test the hypothesis	crowdsourcing for new ideas
67	Keupp, Gassmann	2009	To measure the 'openness' of the firm's innovatory activities, using 'breadth' and 'depth' dimensions of open innovation	Open innovation breadth and depth
68	Füller	2006	uses intrinsic and extrinsic motivational factors to study why consumers engage in virtual new product development.	consumers for new product development
69	He, Wang	2015	uses intrinsic and extrinsic motivational factors as well as case study method to explore situational factors for innovation process.	using social media for innovation
70	Shaw, Richard	2015	social media as a platform for getting innovative ideas as a starting point	social media for marketing and innovation
71	Krell	2009	Outside in, within and collaborative approaches, trust, truthfulness, process innovation, recession time innovation, everyone's a part	collaboration for innovation in good times and bad times
72	Bugshan	2015	Co - innovation, online communities and co - innovation, social capital and ideas are dealt to show how online communities can co - innovate	social capital for co - innovation and ideas
73	Charalabidis, Loukis, Androusoyopoulou	2014	approach of the wicked problems theory and innovation of diffusion theory on three pilot applications	social innovation through social media
74	Gangi, Wasko, Hooker	2010	customers as innovators, dell ideastorm	customers ideas for innovation
75	Jawecki, Fueller, Verona	2008	consumers as source of creativity and innovation	consumers as source of creativity and innovation
76	Pena	2012	The presence and use of strong social networking within an organization propels innovation into a state of rapidity and incremental improvements as valuable people (consumers, customers, vendors, thought leaders, etc.) weigh in instantaneously with ideas and counter points throughout the development.	public social networks in innovation process
77	Dolinska	2015	Innovation process links knowledge management (KM) activities i. e. sharing, exchange, integration, creation, protection and practical using internal and external knowledge resources of the innovation network participants	knowledge based view, innovation networks and innovation
78	Baden - Fuller	1995	combining both outside - in and inside - out approaches	inside out and outside in strategy
79	Chan	2010	Approach of three stages of new product development; idea generation, design and engineering, testing and launching for testing CBI and speed to market	Speed to market through community based innovation
80	Kosonen et al.	2014	Uses and gratification approach	Idea crowdsourcing
81	Bharti, Agarwal, Sharma	2014	various perspective and research on value co - creation	value co - creation
82	Saarijarvi	2012	customer value proposition was chosen as a central management concept to approach and evaluate the strategic nature of value co - creation.	value co - creation
83	Helms, Booi, Spruit	2012	five social media innovation strategies, honeycomb model of user, content and time dimension	social media users in innovation tasks
84	Dong, Wu	2015	attempts to examine the business value of firms' strategic use of social media technologies in crowdsourcing	social media and crowdsourcing
85	Martini, Massa, Testa	2014	This article investigates a customer co - creation project employing front - end innovation (FEI), enabled by social media, in a large Italian food manufacturer, Barilla.	customer co - creation
86	P. Singaraju et al	2016	To explicate the granular dynamics of resource integration in value co - creation processes between firms and customers enabled by social media platforms.	social media and value co - creation
87	Konsti - Laakso	2017	how can citizen online communities support open innovation practices in the public sector? Second, what kinds of contributions are produced through social media platforms?	local knowledge idea sharing
88	Brem, Bilgram	2015	viability for lead user search of both approaches, highlight differences, and depict the underlying processes.	Innovation partner involvement in co creation
89	Tietze et al.	2014	To own or not to own: How ownership impacts user innovation—An empirical study	ownership and user innovation

(Source: author's own creation) (Approaches taken by various researchers and the strategic intent)

**The trend showing the impact of social media on innovation in the past**

**Evolution of Social media and innovation research trend**

The literature review of social media and innovation showed the past issues and topics various researchers have dealt with. As the social media and innovation relationship was understood over a due course of time one can see what were the key focus areas of research during various years. The literature review revealed following research trends during the past one and half decade. The very fact that social media on mass scale was adopted by people and by the organizations during the early 2000s, one can see the research also gained momentum after the mass utilization of social media by the users, consumers and the organizations.

(Here is the list of key focus areas of social media and innovation research during the past one and half decade.)

**(2000 - 2005: the formative years)**

During the early years of social media and innovation research which was as an outcome of internet revolution the core issues dealt with was not very different from core business and innovation concepts like co - opting, consumers as a source of competence, open innovation, informal networks, collaborative innovation, democratizing innovation and how breakthroughs happen.

With the launch of social media sites like Facebook, (2005) Twitter (2006), Youtube (2005) and mass utilization of these internet based technologies by the general mass and the companies alike for personal and professional motives, the user base of these social media sites became phenomenal, more than the size of some of the countries combined together.

**(2006 - 2010: The mass utilization, normative years and rise of social media power)**

At the advent of these social media sites and mass utilization by the users and the companies alike the core concepts during this period (2006 - 2010) were socialization for innovation, the role of technology for open innovation, integrating virtual communities into new product development, openness of firm's external search strategies and their performance, toolkits for ideas competition, business model innovation. From 2008 onwards the importance of online communities came into prominence and researchers dealt with areas of communities in open innovation, innovative consumer behaviour in online communities, network connectivity and innovative idea quality, open R&D and open innovation, users of open innovation, impediments to innovation, beyond boundary innovation - recessionary innovation. Also process of innovation, consumer motives, crowdsourcing, community based innovation, different forms of openness, role of users and their innovative content, users as innovators, getting customers ideas to work, community based innovation and speed to market became focus areas.

During this period the importance of online communities, users and consumers as source of ideas, process of innovation, social media and innovation strategies of companies using social media became more visible. Some

researchers also dealt with recessionary innovation using social media and open innovation collaborations.

**(2011 - 2015: greater use of social media for innovation, benefits realization)**

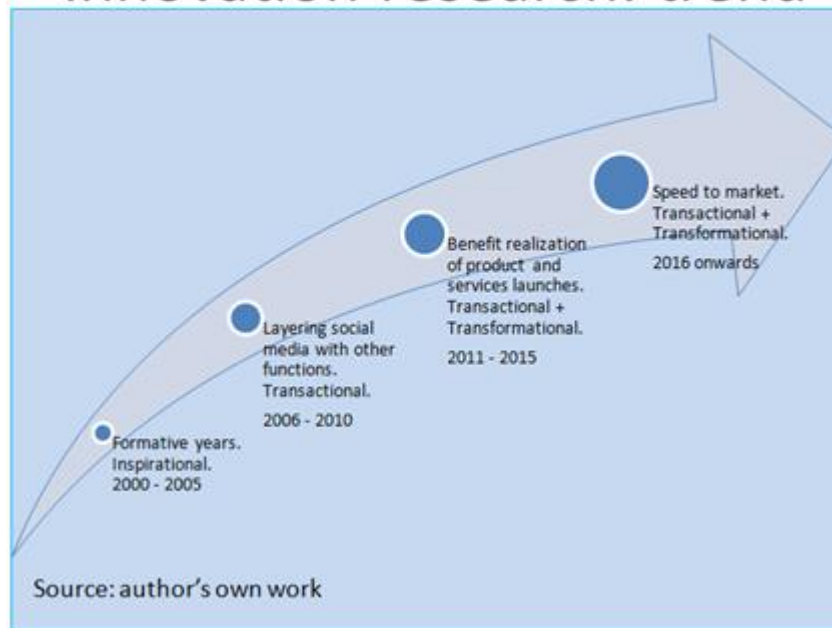
With the realization of ever growing power of social media in all spheres of social and organizational activities, researchers became more vocal about user involvement and its benefits in innovation activities, co - creating new products, producer innovation, user and open collaborative innovation, social media fostering radical innovation, relating social media technologies to performance, capabilities based perspective, consumer motivation, creative talent, open innovation, customer co - creation and the focal firm, consumer innovativeness, culture, crowdsourcing new product ideas. Now researchers began to look inside the content of the social media innovation sites, value from co - creation mechanisms, economic, functional, emotional, symbolic customer value propositions. Crowdsourcing gained more importance and was related to productivity, knowledge capture and marketing. Government also started to look at social media for innovative ideas for public services and development. The overarching view was how social media aids innovation, actor roles in social media, value creation, user participation, the firm the platform and the customer, online communities and R&D innovation, voice of community, the role of social media in all phases of the innovation process, creativity and collaboration patterns, service value co - creation, consumer co - creation and new product development, motivation for innovation, open innovation for best ideas. Co - creation and participation became even more important for innovation, SM tools for open innovation, user roles and contributions, social impacts, perceived truthfulness, leveraging external sources of information. Fostering social innovation, user motivation, value co - creation, customer co - creation, process based framework, SM insights for product development, co - innovation, knowledge based developments, understanding user motivation, outbound open innovation, business value of social media technologies, search for innovation partners.

**(2016 onwards)**

Sharing knowledge, extrinsic motivation, resource integrations approach, external search, search for and generation of local knowledge, use by governments. Information technology and external search in the open innovation age were the key areas. With the above mentioned focus areas of the past research one can see the following trend in social media and innovation.

2000s- 2005	The internet revolution, formative years for social media. Grappling with the phenomenon. (Inspirational)
2006 - 2010	Rise of power of social media, tapping the social media for various reasons like branding, marketing, tapping leads, consumer behaviour etc. Tapping the phenomenon. Layering social media with branding, marketing and CRM functions. (Transactional)
2011 - 2015	Realization of benefits of using social media for product and services launches. (Transformational)
2016 onwards	Social media for speed to market and transformational services. (Transformational)

# Progress of social media and innovation research: trend



The research trend clearly shows the intensity with which the social media gained momentum and how organizations and researchers are trying to get higher outcome from social media within and outside organizations. Clearly, it indicates the progression of from why social media? to need to have social media to must have social media for the organizations.

## 5. Findings and Suggestions

The findings are the approaches, strategies and growing importance of social media usage for innovation. One can see how social media has grown from informational source to transformational source within a short span of one and a half decade. Further studies can be done on understanding if the ideas sourced from social media have more radical or incremental ideas for innovation.

## 6. Conclusion

Many recent researches has found that even top organizations have failed in understandings the role social media can play in their innovation efforts and organic growth. It is even more elusive a question to understand how to use social media strategically for innovation. Firstly, this paper has presented various approaches and strategic intent applied in the past research for looking at the use of social media for innovation process strategically, especially idea generation. Also presented the growth of social media research in context of innovation and its growing importance by showing the trend over more than one and half decade.

This paper has its limitations; first the review of the selected articles from the databases may not be exhaustive. More recent papers can be included from different sources. Future research can look at the various models and variables to understand the key determinants for the success of social media use for innovation.

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