Chapter 19 Communicating for Innovation: The "Social" Enterprise and the Translation of Novel Ideas

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Abstract The process of innovation involves at least three stages: leveraging knowledge to generate ideas (idea creation), communicating about the adequacy of novel ideas to the top management based on the firm's strategic objectives (idea translation) and actually making innovative products and processes a reality (idea implementation). This chapter explores the channels and the conditions under which social media can improve the innovation process in enterprises. The analvsis is based on a multi-disciplinary review of academic literature to explore how social media can impact the first two stages of innovation: the creation and the translation of ideas. The findings are complemented by data collected from a survey about the uses of social media in private companies and by insights drawn from case studies of multinational companies that analyze the readiness of organizations to benefit from social media use. The central argument of this chapter is that social media help create "narratives" of innovation that provide companies with a common and clear innovation strategy for realizing the maximum potential from novel ideas. Organizations can be understood as 'networks of conversations' and much of the actual doing of strategy and innovation in organizations takes place via the process of sense-making across teams and business networks and communities. There are at least three channels in which the corporate use of social media can help the innovation process: by connecting people, which helps produce and communicate knowledge; by creating a new mindset, in which people are more engaged and willing to innovate; and by making sense of knowledge in the context of the firm overall strategy. These benefits can only occur when the use of social media is complemented with organizational enablers such as structural decentralization and individual empowerment.

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19.1 Introduction

Innovation has historically been a strong driver of company success. It refers to the use of novel ideas or methods in order to create new products that bring value to customers and also more efficient business processes within the organization. While some innovations involve fundamental scientific breakthroughs, many innovations are the result of recombinations of existing ideas in new contexts. Since the knowledge that produces new ideas is usually dispersed across organizational and geographical boundaries (either embodied in human minds or in firm processes), an important part of the innovation process involves the use of communication channels for identifying ideas that have business potential.

Social media represent one of the latest triggers of rapid change in the way people work, interact and consume. These media include a wide range of digital technologies that facilitate communication and that foster user participation and user-generated content. Blogs, social networks or online customer communities are all social media. Some applications were originally the reserve of individuals outside of work (e.g. Facebook) but organizations have seen the potential benefits of social media and are leveraging these applications not only to communicate externally with customers and partners, but also to connect their own employees and to facilitate communications and collaboration between them and with external stakeholders (e.g. industry practitioners and other experts such as academics).

The rising use of social media in enterprises is taking place in a context where the process of innovation has been opening up to more actors. Social media are reinforcing that trend. Open-source collaboration had already changed our conceptions of how innovation in society may occur since "open" innovations (e.g. the Linux Kernel project in the software industry) often do not have owners and collaboration among diverse stakeholders occurs without the structural mechanisms traditionally associated with organizational teams.¹ The innovation process within firm boundaries, i.e. for innovations owned by specific companies, is also "opening" in its own way by incorporating ideas from a wider range of actors and sources, some of them internal to the firm (e.g. employees) and some of them external.² Social media is accelerating this. Customers, for instance, are increasingly engaged with companies in the co-creation of new products through online customer communities,³ a process that departs from traditional models in which

¹ For instance, stable membership, goal-sharing, interdependence among group members.

 $^{^2}$ Chesbrough (2003) argues that open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their technology.

³ Some early examples include Procter & Gamble's Connect+Develop website, where people submit innovations, and Best Buy's IdeaX, a social platform that collects ideas from shoppers, then allows other shoppers to vote those ideas up or down.

key innovation processes such as new product development were built and managed solely inside the firm.

The use of social media in the workplace has given birth to the notion of Enterprise 2.0, which is a combination of the new social technologies⁴ and organizational practices that are "more social" such as flatter hierarchies and employee empowerment. Employees are increasingly regarded as a potential source of ideas. Andrew McAfee (2006) was the first author to introduce this concept and defines it as the "platforms that companies can buy or build in order to make visible the practices and outputs of their knowledge workers". These new organizational practices have emerged in parallel to the transformation of the Internet from website environments limited to the passive consumption of content to Web 2.0 environments that facilitate the connection of people and collective creation of content.

Despite these transformations, it is not yet clear whether social media is strengthening the process of innovation or not. The process of innovation involves at least three stages: leveraging knowledge to generate ideas (idea creation), communicating about the adequacy of novel ideas to the top management based on the firm's strategic objectives (idea translation) and actually making innovative products and processes a reality (idea implementation).⁵ The current literature on social media focuses on the first stage, the process of idea creation, but opinions about the benefits are divergent. McAfee suggested that social media help exploit the "collective intelligence" of different actors, which results in more knowledge and ideas. However, when the concept of Enterprise 2.0 emerged, other academics and industry specialists believed that it was "old wine in new bottles"⁶ given that its objectives are similar to what knowledge management practice had been trying to achieve for decades with no success.⁷ In addition, multiple firms have expressed concerns that social media may lead employees to get distracted and waste time.

This chapter explores the channels and the conditions under which social media can improve the innovation process. The analysis is based on a multi-disciplinary review of academic literature in the areas of information systems, organizational knowledge and organizational communications in order to explore how social media can enhance the first two stages of innovation: the creation and the translation of ideas. The findings are complemented by data from a survey of more than 200 private companies about the uses of social media and by insights drawn from case studies of multinational companies that analyze the readiness of organizations

⁴ In addition to social networks, other social technologies include wikis, podcasts, social bookmarking, etc.

⁵ Although social media can also help during the diffusion of new products by creating a market pull effect within communities that spills over into the mass market (Hienerth and Lettl 2011), this issue is beyond the scope of this chapter.

⁶ See, for instance, http://blogs.hbr.org/davenport/2008/02/enterprise_20_the_new_new_know.html

⁷ Knowledge management (KM) comprises a range of strategies and practices used in an organization to identify, create, represent, distribute, and enable adoption of insights and experiences that comprise knowledge.

to benefit from social media use.⁸ Section 19.2 discusses how social media can impact the stages of idea creation and idea translation. We propose three channels: the connection effect, the cognitive effect and the mindset effect. Section 19.3 highlights the key success factors for the use of social media in enterprises, particularly in the workplace. Section 19.4 concludes.

19.2 Idea Creation and Translation with Social Media

The first step in the innovation process is creating new ideas for solving existing problems or for exploiting new opportunities. Ideas emerge from a firm's existing knowledge sources. Knowledge can be embodied in individuals, either employees or external stakeholders, and in firm business processes. Previously, firms allocated the innovation effort to specialists and to R&D departments. However, the history of innovation is littered with discoveries that arise from fortuitous interactions between individuals who were unaware that their separate efforts had mutual relevance (Hargadon 2002).

Knowledge creation emerges when people engage in dialogical exchanges and transfer knowledge (Tsoukas 2009), usually through more social interaction and exchange relationships (Inkpen and Tsang 2005; Obstfeld 2005). Figure 19.1 presents the end-to-end innovation process, from the creation of novel ideas to the implementation of such ideas in innovative products and processes. In this model, interactions among knowledge sources involve more *horizontal* knowledge transfers between individuals and teams and thus more idea creation (channel *A* represents the process of knowledge, which is not always easy to codify and store because it is rooted in actions, procedures, routines, ideals, values, and emotions (Alavi and Leidner 2001). Tacit knowledge must be converted into explicit knowledge in order to share it and make sense of it, which implies paying attention to the contextual and relational aspects of knowledge.⁹

Knowledge translation involves (i) making sense of knowledge and novel ideas and (ii) communicating to the firm's decision makers the ideas that are likely to bring business value (both process are represented in channel B). The latter implies *vertical* knowledge transfer of refined ideas. Knowledge creation does not necessarily lead to innovations or value creation; value is created only when knowledge is "actionable" and applied where it is needed (Alavi and Leidner 2001; Levine and Prietula 2012). Actual idea implementation depends on additional factors such as the availability of financial resources or organizational political power (channel C).

⁸ The survey and the case studies were developed by a team at INSEAD eLab in 2012.

⁹ The competence to do global product development, for instance, is both collective and distributed, grounded in the everyday practices of organizational members (Orlikowski 2002).

Social media have the potential to boost both the creation and translation of knowledge in firms by overcoming barriers to knowledge transfers such as limitations of an individual's cognition, motivation or obstacles emerging from characteristics of social networks and ties (Levine and Prietula 2012). The main channel by which this boost occurs is by improving the firm's *social capital*, which encompasses many aspects of a social context, such as social ties, trusting relations, and value systems that frame and facilitate individual actions (Tsai and Ghoshal 1998).¹⁰ We identify three channels that social media can exploit: facilitating the proliferation of networks that connect people for the benefit of the firm (i.e. connection effect); helping actors to make sense of knowledge (i.e. cognitive effect); empowering employees and users to be innovative (i.e. mindset effect).¹¹ The connection effect involves connecting people from different teams and practice domains for the creation of knowledge (relevant for channel *A*) and connecting different management levels for communicating such knowledge (relevant for channel *B*).

19.2.1 Connection Effect (horizontal): Empowering the Collective Wisdom to Create Knowledge

The connection effect has to do with the benefits of connecting people in networks, which can either have an intra-corporate nature (i.e. groups/teams operating under a unified corporate identity) or involve externals (including alliances with partners and specialists for the exchange, sharing and co-development of products and technologies). Networks have been shown to enable knowledge creation and firm performance because they exploit the "collective wisdom", i.e. cognition distributed across people, teams, practice domains and innovation streams.¹² This, in turn, facilitates the recombination of ideas to generate novelty (Janhonen and Johanson 2011; Wagner and Majchrzak 2007).

Employing social media to generate and manage knowledge involves individual acts of offering knowledge to others as well as integrating knowledge that others

¹⁰ Some scholars have conceptualized social capital as a set of social resources embedded in relationships; others have given a broader definition of social capital, including not only social relationships, but also the norms and values associated with them. Inkpen and Tsang (2005) identify three dimensions of social capital: structural, cognitive and relational. The conditions related to these three dimensions that facilitate knowledge transfer in an intra-corporate network involve the decentralization of the network (with no hierarchies), shared vision and collective goals, reward criteria to reduce mistrust among members.

¹¹ This is usually determined by the structure configuration in terms of hierarchies and flexibility.

 $^{^{12}}$ Faraj et al. (2011) show that online open communities generate knowledge through social interactions.

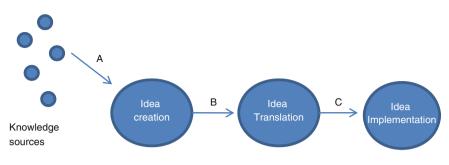


Fig. 19.1 The innovation process

have contributed (often through a process of crowdsourcing).¹³ One benefit of social media identified by the multinational companies we interviewed is that it breaks down organizational silos, thus bridging "structural holes", i.e. gaps between groups or individuals who were not previously connected.¹⁴ One example is Gemalto, a global provider of digital security solutions. Breaking down silos and enhancing information sharing across business units is crucial for this company because many of its products depend on several departments: for example, pay-by-phone products involve both the telephony and the financial services departments. The creation of new knowledge thus depends on connecting people and teams.

Social media can make the discovery of novel ideas more likely if they encourage interactions between people with different backgrounds and capabilities.¹⁵ Whereas each interaction either with a colleague or with external people has the potential to yield new information, knowledge transfers bring more value when social interactions take place in teams and networks where people are more diverse (Cummings 2004). Also, interactions with people who are socially distant, beyond the close circle of collaborators, are more likely to bring novelty (Burt 1992; Frey et al. 2011). This is the case, in part, because individuals who interact infrequently are more likely to obtain information from different sources and because ongoing interactions among people within a group tend, over time, to reduce the variation in their knowledge and behavior (Gray et al. 2011).

New knowledge can particularly identify emerging needs across different parts of the organization. Unlike previous knowledge management initiatives, enterprise 2.0 practices linked to the corporate use of social media let content structures emerge from open social interactions (instead of imposing centralized structures in advance). This implies that only those ideas that are most relevant for the business

¹³ Crowdsourcing is the practice of obtaining ideas or content from a large pool of people (especially in online communities).

¹⁴ The concept of structural hole was introduced by Burt (1992).

¹⁵ Previous INSEAD eLab research shows that companies that combine tools for employees and externals are also more agile. Agility is the firm's capability to detect opportunities for innovation and seize those competitive market opportunities by assembling requisite assets, knowledge, and relationships with speed and surprise (Sambamurthy et al. 2003).

would emerge at the top of conversations. Social bookmarking, for instance, allows individuals to easily discover what information sources other people in the firm find interesting and useful (Gray et al. 2011).

Social media are not a panacea, though. Literature in the anthropology of technology has shown that in certain cases technologies may reinforce or take the shape of existing social hierarchies and divisions, despite the rhetoric about breaking down silos. But even if they do break silos, the proliferation of digital social networks has some drawbacks. On the one hand, exposing people to too many platforms can create scarcity in users' time and effort so they are less likely to bring value to any single platform (Wang et al. 2013). Involving too many people in a given platform, on the other hand, might become counterproductive due to information overload (Laursen and Saltern 2006, find an inversed U shape for the link between the number of community participants and innovation). An executive from Lyonnaise des Eaux, a France-based utility company, suggested that the best way to break silos and enable collaborations between different divisions is to connect the right people, i.e. key people that take decisions. Otherwise, firms run the risk of facing a situation of "infobesity", where employees are overwhelmed by information overload.

19.2.2 Connection Effect (vertical): Communicating Knowledge and Innovations

In addition to connecting people horizontally across teams, social media can connect people vertically so that key people (usually the top management or other decision-makers) have access to the knowledge generated by lower management levels. At L'Oreal, a global cosmetics company, the enterprise social network (called ePop) is considered to be a time-saving tool for senior executives who can access knowledge more efficiently and also transmit their knowledge to other people by posting them on the social network instead of answering to each query individually.

People generating novel ideas, the "idea scouts", are often well-connected to knowledge sources outside and across the company but do not necessarily have strong connections and power inside the firm. Therefore, the "idea connectors", employees who know who is doing what inside the company and know how to overcome internal barriers to idea adoption,¹⁶ need to have access to "idea scout" knowledge. MAPFRE, the Spain-based global insurance firm, has successfully connected these two axes of information flow via social media. The company has an idea "Incubator", an internal social platform where employees can participate and vote for the best ideas. A challenge is posted to the group, then participants propose ideas, critically discuss them, and vote on the best ones. The best ideas are presented to a committee that then decides which to fund and develop further.

¹⁶ The notions of "idea scout" and "idea connector" were obtained from Whelan et al. (2011).

19.2.3 Cognitive Effect: Making Sense of Knowledge with Innovation Narratives

Innovations are not likely to occur if emerging knowledge is not properly understood and there is not a clear vision of the firm strategy. In a full cycle of knowledge translation, firms convert implicit knowledge into explicit knowledge, which is then 're-internalized' when people across different business units understand the new knowledge and identify the most relevant uses (Nonaka and von Krogh 2009). However, new knowledge often faces the challenge of interpretive barriers to innovation (Dougherty 1992). Ideas that come from different parts of the organization may remain underused to the extent that people are unable to see their relevance to their own work. Ideas are not always comprehensible and may not appear legitimate to others.

The company innovation "vision" and the activities related to such vision must be understood not only by the top management but by all employees in order to continuously translate ideas into actual innovation. Social media help track ideas because they leverage spontaneous moments of personal innovativeness, unlike the traditional workplace where casual problem solving may leave no memory of the event. In particular, social media have the potential to create a narrative that helps keep fluid participants informed of the state of the knowledge in the company. Organizational memory is a key component of organizational learning (Tippins and Sohi 2003). When companies are able to depict past innovations as well as project future developments in a structured manner, along with the contextual details surrounding their occurrence, they create innovation "narratives" that facilitate coordinated action.

Social media, along with fostering innovation narratives, can also improve the cognitive dimension that provides shared meaning and understanding between members (i.e. shared goals, shared culture). Organizations are formed by 'networks of conversations'¹⁷ and organizational communication based on narratives helps members understand the practices of strategy and constitute an overall sense of direction or purpose, of refocusing organizational identity, and of enabling and constraining ongoing activities (Fenton and Langley 2011).¹⁸

Social media should not only focus on keeping trace of "Eureka" moments but also on keeping such ideas alive. 3M Corporation, a company that has been able to sustain innovation for over a century, has been encouraging employees to cultivate events driven by serendipity and opportune moments.¹⁹ 3M realized that ideas that emerged during opportune moments could be lost amid daily routines.

¹⁷ Blaschke et al. (2012) suggest that such networks define the nature of organizations and why they exist.

¹⁸ Using the narratives argument, these authors link organizational communication theory and strategy as practice.

¹⁹ This case study was developed by Garud et al. (2011).

Consequently, the company put in place mechanisms to keep ideas alive. In particular, the company has been developing innovation narratives that serve as memories linking the company's past, present and future.

19.2.4 Mindset Effect: Enhancing Individual Innovativeness

The mindset effect has to do with the creation of an employee mindset that is more "participative" and results in more *personal innovativeness*.²⁰ User-friendly social media platforms that leverage user-to-user interactions successfully engage users into core business processes, enhancing their readiness to create knowledge (Hienerth et al. 2011). However, individual knowledge creation also depends on having an innovation mindset. At Groupe ADEO, one of the biggest global companies in the Do-It-Yourself industry, employees started developing bottom-up social collaboration initiatives to promote innovation, particularly in terms of process efficiency (a project called Humaneo).²¹ Humaneo's sponsors focused more on changing the mindset of employees rather than on the tools used for collaboration. Once empowered, network members could then look for company "sponsors" to help them nurture their ideas.

The results of our interviews with multinational companies, where questions about idea generation and innovation were posed, suggest that social media can generate a "feasibility mindset", i.e. employees of all levels have a better sense of how to convert innovations. If social media foster the process of knowledge translation through innovation narratives, then people gain an appreciation of the resources that exist in different parts of the organization and how to draw on them to generate new products and services or novel ways of solving problems. Innovation narratives can symbolize the boundaries of acceptable behavior in organizations, create a common ground for social action, and inspire new ideas (Bartel and Garud 2009). ²²

Research has also found a positive link between the use of social media and higher *emotional capital* in the organization, which involves both greater trust and bonds between employees and also a feel of attachment to the company's values. Both effects can enhance the personal innovativeness mindset. People that trust each other are more likely to let resources such as ideas, people's time and passions flow in and out of networks and communities.²³ Employees who have a

²⁰ Personal innovativeness refers to the extent to which an individual actively generates, discovers, and promotes creative ideas. Organizational factors such as managerial style, job complexity, and leader behaviors may affect employee innovativeness.

²¹ Humaneo was initiated in 2008 by a group of employees who wanted to share new human resources practices they had witnessed in the Silicon Valley.

²² Narratives are especially instrumental in socializing newcomers.

²³ Passion drives participation by enticing people to develop the community's knowledge base (Faraj et al. 2011).

feeling of "belonging" are also more likely to contribute their ideas.²⁴ These feelings are based on a collective identity, often bolstered by stories that identify the group's purpose and core practices (Koschmann 2013; Wry et al. 2011).

19.3 Key Social Media Success Factors

There are more and more stories in which companies using social media innovate and achieve business benefits. Danone, a global player in the food processing industry, has used an enterprise social platform (called Dan 2.0) to share best practices across business units so that new products launched in some national markets are more easily replicated in other markets. This allows the firm to save time and money that was previously spent on new product development. The Plazza enterprise social platform at France Telecom-Orange allows employees to test new products, which saves money on external testing for product innovation. GDF Suez Energy Services (GSES), a business line of the energy utility company GDF Suez, is using a global company-wide enterprise social network to develop ideas and projects proposals faster. Some projects invite employees to take part in participatory innovation processes (e.g. the project "Imagine"). This agility has helped the firm succeed in various calls for tender (e.g. energy efficiency contracts for airports).

However, not all companies succeed with the use of social media. The advantages of using new information technologies in enterprises come from embedding these technologies in the organization. Technologies need to be implemented through a set of enabling organizational assets and practices.²⁵ Providing "users" of digital technologies active roles in the creation of knowledge requires, in addition to the firm's technological competences,²⁶ the availability of adequate skills. People need the technical skills to work with new software but they are also increasingly expected to engage in more cognitively complex tasks such as generating their own knowledge and content. Moreover, developing social skills such as mediation and negotiation are also important for communicating with other co-workers in digital communities (O'Mahony and Ferraro 2007). Most importantly, companies need organizational and management triggers that prepare

²⁴ Huy and Shipilov (2012) found that executives who use social media to build emotional capital within their employees' communities reap real benefits in terms of improved information flows, collaboration and higher employee motivation.

²⁵ Following the resource-based view of the firm, companies compete on the basis of internal organizational resources that are heterogeneously distributed among firms. Aral and Weill (2007) show how differences in such IT capabilities or organizational enablers explain differences in firm performance (in dimensions such as profitability, market valuation, costs and innovation).

²⁶ Technological competences usually refer to flexible and integrated IT infrastructures and to mature IT governance.

them to do things in a more "social" way. Some of these organizational challenges are discussed below.

19.3.1 Transforming Contestation into Collaboration

Communicating through social media is not costless. People need to clarify and verify information. Also, the proliferation of contrasting ideas can create "tensions" between participants. Dysfunctional confrontation may make social interactions unproductive and undermine innovation (Dougherty 1992). However, tensions are not necessarily bad if they can be used as the catalyst for knowledge collaboration. Online communities have shown that it is possible to transform contestation into collaboration. Open-source projects often hold divergent interests but discover areas of convergent interest and are able to adapt their organizing practices (governance, membership, ownership, and control over production) to collaborate. Firms that respond to these tensions generatively (rather than in restrictive ways) are more able to realize the potentials from social media-enabled social interactions (Faraj et al. 2011).

19.3.2 People Empowerment and Leadership

The potential of social media to act as a lever for knowledge transfer depends on the degree of openness, freedom, and employee empowerment in corporate environments (Schneckenberg 2009). Organizations that adopt, instead, approaches that reduce interactions and lock people into 'thought worlds' (Dougherty 1992) or that institute rules and routines to govern employee interactions and insist on their rigid application may be dampening emergent dialogical processes (Tsoukas 2009).

People empowerment is important because it fosters personal innovativeness. For instance, ensuring anonymity may sometimes be an effective way to encourage people to contribute ideas (Faraj et al. 2011), yet creativity usually receives a boost when top management explicitly credits and recognizes individuals' contributions (Jeppesen and Frederiksen 2006). People are often driven by incentives such as pride of authorship and peer recognition (Franke et al. 2010; Hienerth et al. 2011).²⁷ The MAPFRE Incubator is a good example. The ideas generated either in the Incubator or through the content generated in blogs are personalized (a profile

²⁷ When members of online communities innovate, they do not do it anonymously or randomly in cyberspace, but with reference to identity, reputation, technologically derived status and collegial networks (Fleming and Waguespack 2007).

and picture of the person are presented along with the idea itself), creating incentives to participate.

Empowering people *per se* is not useful if the company does not have a clear common strategy for the business and its innovation efforts. Figure 19.2 shows that companies that reward individual efforts and ideas through recognition are more likely to realize benefits from social media in terms of the personal innovativeness of employees. However, individual recognition is not as effective if not complemented with a clear strategy for social media that is aligned with the corporate business strategy.

Although social media often remove preconceived notions about how knowledge should be created and structured and let structures emerge "bottom-up" over time as a result of users' interactions, the emergence of leaders and the involvement of the top management is important. The reason is that communication with social media is not free of frictions. As we saw above, people with different backgrounds (i.e. different professions or different business units) tend to discuss and disagree. Perhaps more relevant, people usually are not able to prioritize information and then act on it.

Collaboration through social media requires leaders who acquire individual expertise to select, reflect, and re-distribute content on the basis of the quality of the given information and to recognize patterns within information overload. Leaders also need the ability to develop holistic action frameworks out of contextualized information, to control information and shape collegial and managerial perceptions and to make reasoned and reflected decisions on the basis of specific information (Schneckenberg 2009).²⁸ Leaders in digital communities, usually the "idea connectors", raise dialogue between "idea scouts" and top management in charge of converting ideas into innovation and business value. If knowledge emerging from social media is costly to codify and the ability to make reasoned and reflected decisions can only be acquired through experience in the company, then the involvement of the top management becomes necessary to facilitate the matching between problems and solutions. This intensifies the utilization of knowledge (Garicano and Wu 2012).

The top management and the idea connectors are more effective when they assume a mediating rather than directing or monitoring role during virtual collaborations (Sutanto et al. 2011). At AkzoNobel, the largest decorative paints and performance coatings company in the world, the governance of social media is more about facilitating collaboration than about telling people what to do. The use of social media has grown organically, based on business needs, and the company supports whatever employees need to be productive, including training on core skills (such as team work, personal and team effectiveness, etc.) that are relevant for using social media effectively.

²⁸ Fleming and Waguespack (2007) discuss the role of leadership and brokerage in open innovation communities (beyond firm boundaries). Leaders deal with balkanization and cooptation by commercial interests.

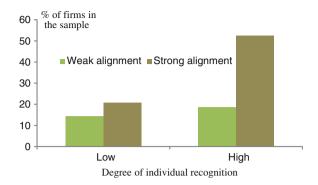


Fig. 19.2 % of firms that reported benefits from social media in terms of the personal innovativeness of employees: sample divided by degree of individual recognition and maturity of social media strategy alignment. (*Source* INSEAD eLab based on a survey of 203 companies around the world. Note: *Personal innovativeness* measures, using Likert scales, the extent to which employees create innovative ideas in a more entrepreneurial work environment. Alignment measures the extent to which the social media strategy of the firm is aligned with the corporate business strategy. The degree of recognition refers to the firm's culture of rewarding individual achievements)

19.3.3 Sustaining Organizational Change

Perhaps the most challenging part for firms adopting social media has to do with the accompanying organizational changes that are often required. Given that they foster horizontal communications and a greater reliance on people over processes and competencies over official positions, social media can indeed disturb hierarchical structures within firms and call for a new type of management. Firms are increasingly expected to adapt core elements of business models more centered in "users" of digital technologies (Hienerth et al. 2011). This involves giving a more active strategic role to people, either external (i.e. customers) or internal (i.e. employees).

As information technologies have become increasingly modular and recombinable, so have organizational processes and forms. Organizing no longer needs to take place around hierarchy as was the case with "command and control" models (Pentland and Feldman 2007). Our survey data shows that decentralization²⁹ makes firms more likely to report benefits from social media in terms of better information flow, more collaboration and, most interestingly, more employee innovation. Bayer Material Science, the chemical division of the pharmaceutical firm Bayer, reports that its enterprise social network has led to a more

²⁹ The specific question in the survey is: Please choose for each statement below the level of agreement: "Teams in our organization are empowered to make their own decisions about pace, direction and method of work". Those firms with more decentralization have a higher score.

open collaboration environment, where the content employees contribute is more important than where they are in the organizational diagram.

However, changing work practices is not easy as there is a certain degree of organizational inertia. People within the firm may fear the loss of familiar routines, status or power (Hannan and Freeman 1984). Organizational power struggles and conflicting goals sometimes represent a barrier to the successful implementation of new technologies (Denyer et al. 2011). In addition to power conflicts across management levels, barriers for the adoption of social media sometimes emerge across business units, as specific professionals may feel threatened by the "open innovation" process that social media enable. At GSES, some employees considered sharing information through social media as a potential loss of power and, for some cases (employees from R&D or Engineering who have an "internal" business), a loss of revenues. At Gemalto, salespeople often see information as a source of comparative advantage. Nevertheless, such barriers are decreasing over time. At Groupe ADEO, the Human Resources department initially showed some resistance to Humaneo because they viewed the innovation activities related to this project as part of their field of competence. Today, the HR department is one of the most dedicated sponsors of this project and the company is building the enterprisewide ADEO Community Network, which spreads to multiple business functions and will host several communities, among which Humaneo.

19.4 Conclusions

Companies fear that investing in social media is a waste of resources and time. However, the emergence of enterprise 2.0 practices is more than a collection of software, bringing organizational changes that can be relevant for creating value. There are at least three channels through which the corporate use of social media can help the innovation process: by connecting people, which enhances knowledge production; by creating a new mindset, in which people are more engaged and willing to innovate; and by making sense of knowledge in the context of the overall firm strategy. The central argument is that social media help organizations create "narratives" of innovation that create a common and clear strategy for realizing the maximum potential from novel ideas. In addition to connecting and engaging people with novel ideas, social media can transform how companies innovate via a focus on storytelling that contributes to sense-making across teams and communities.

The literature about the benefits of the corporate use of social media on the process of innovation is still scarce. Little has been said about the role of social media on innovation communication. Using social media in enterprises has some drawbacks and assessing the benefits of the three channels proposed in this chapter requires empirical validation using firm-level or team-level data. Taking advantages of the benefits of social media requires new organizational practices. Initial evidence from case studies to date suggests that collaboration and employee innovation with the use of social media are enabled by a certain degree of organizational decentralization ("breaking hierarchies") and by rewarding individual initiatives through recognition. Although specific business needs must be identified and basic guidelines are required, too much organizational control over communication and interaction processes may be detrimental: in many interviews we heard that governance is more about facilitating things and about people feeling free to collaborate than telling them what to do. Further research should shed more light on the organizational changes required for firm success with the use of social media.

References

- Alavi, M., & Leidner, D. (2001). Review: Knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107–136.
- Aral, S., & Weill, P. (2007). IT Assets, organizational capabilities, and firm performance: How resource allocations and organizational differences explain performance variation. *Organization Science*, 18(5), 763–780.
- Bartel, C. A., & Garud, R. (2009). The role of narratives in sustaining organizational innovation. Organization science, 20(1), 107–117.
- Blaschke, S., Schoeneborn, D., & Seidl, D. (2012). Organizations as networks of communication episodes: Turning the network perspective inside out. Organization Studies, 33(7), 879–906.
- Burt, R. S. (1992). *Structural holes: The social structure of competition harvard university press*. Cambridge: MA.
- Chesbrough, H. (2003). Open innovation: The new imperative for creating and profiting from technology. Boston, MA: Harvard Business School Press.
- Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management Science*, 50(3), 352–364.
- Denyer, D., Parry, E., & Flowers, P. (2011). "Social", "Open" and "Participative"? Exploring personal experiences and organisational effects of enterprise2.0 use. *Long Range Planning*, 44, 375–396.
- Dougherty, D. (1992). Interpretive barriers to successful product innovations in large firms. *Organization Science*, 3(2), 179–202.
- Faraj, S., Jarvenpaa, S. L., & Majchrzak, A. (2011). Knowledge collaboration in online communities. Organization Science, 22(5), 1224–1239.
- Fenton, C., & Langley, A. (2011). Strategy as practice and the narrative turn. *Organization Studies*, 32(9), 1171–1196.
- Fleming, L., & Waguespack, M. (2007). Brokerage, boundary spanning, and leadership in open innovation communities. *Organization Science*, 18(2), 165–180.
- Franke, N., Schreier, M., & Kaiser, U. (2010). The 'I Designed It Myself' effect in mass customization. *Management Science*, 56(1), 125–140.
- Frey, K., Luthje, C., & Haag, S. (2011). Whom should firms attract to open innovation platforms? the role of knowledge diversity and motivation. *Long Range Planning*, 44(2011), 397–420.
- Garicano, L., & Wu, Y. (2012). Knowledge communication, and organizational capabilities. Organization Science, 23(5), 1382–1397.
- Garud, R., Gehman, J., & Kumaraswamy, A. (2011). Complexity arrangements for sustained innovation: lessons from 3M corporation. *Organization Studies*, *32*(6), 737–767.
- Gray, P. H., Parise, S., & Iyer, B. (2011). Innovation impacts of using social bookmarking systems. *MIS Quarterly*, 35(3), 629–643.

- Hannan, M., & Freeman, J. (1984). Structural Inertia and Organizational Change. American Sociological Review, 49(2), 149–164.
- Hargadon, A. B. (2002). Brokering knowledge: Linking learning and innovation. *Research in Organization Behavior*, 24, 41–85.
- Hienerth, C., Keinz, P., & Lettl, C. (2011). Exploring the nature and implementation process of user-centric business models. *Long Range Planning*, 44(2011), 344–374.
- Huy, Q., & Shipilov, A. (2012). The key to social media success within organizations. *MIT Sloan Management Review*, 54(1), 73–81 (Fall 2012).
- Inkpen, A. C., & Tsang, E. W. K. (2005). Social capital, networks, and knowledge transfer. *The Academy of Management Review*, 30(1), 146–165.
- Janhonen, M., & Johanson, J. (2011). Role of knowledge conversion and social networks in team performance. *International Journal of Information Management*, 31(2011), 217–225.
- Jeppesen, L., & Frederiksen, L. (2006). Why do users contribute to firm-hosted user communities? the case of computer-controlled music instruments. *Organization Science*, 17(1), 45–63.
- Koschmann, M. (2013). The Communicative Constitution of Collective Identity in Interorganizational Collaboration. *Management Communication Quarterly*, 27(1), 61–89.
- Laursen, K., & Salter, A. (2006). Open for innovation: The role of openness in explaining innovation performance among U.K. manufacturing firms. *Strategic Management Journal*, 27, 131–150.
- Levine, S., & Prietula, M. (2012). How knowledge transfer impacts performance: A multi-level model of benefits and liabilities. *Organization Science*, 23(6), 1748–1766.
- McAfee, A. (2006). Enterprise 2.0: The dawn of emergent collaboration. MIT Sloan Management Review, 47(3), 21–28 (Spring 2006).
- Nonaka, I., & von Krogh, G. (2009). Tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory. *Organization Science*, 20(3), 635–652.
- Obstfeld, D. (2005). Social networks, the Tertius iungens orientation, and involvement in innovation. *Administrative Science Quarterly*, 50(1), 100–130.
- O'Mahony, S., & Ferraro, F. (2007). The emergence of governance in an open source community. *Academy Management Journal*, 50(5), 1079–1106.
- Orlikowski, W. J. (2002). Knowing in Practice: Enacting a Collective Capability in Distributed Organizing. *Organization Science*, *13*(3), 249–273.
- Pentland, B. T., & Feldman, M. S. (2007). Narrative networks: Patterns of technology and organization. Organization Science, 18(5), 781–795.
- Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. *MIS Quarterly*, 27(2), 237–263.
- Schneckenberg, D. (2009). Web 2.0 and the empowerment of the knowledge worker. Journal of Knowledge Management, 13(6), 509–520.
- Sutanto, J., Tan, C., Battistini, B., & Wei Phang, C. (2011). Emergent leadership in virtual collaboration settings: A social network analysis approach. *Long Range Planning*, 44, 421–439.
- Tippins, M., & Sohi, R. S. (2003). IT Competency and firm performance: Is organizational learning a missing link? *Strategic Management Journal*, 27, 131–150 (2006).
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *The Academy of Management Journal*, *41*(4), 464–476.
- Tsoukas, H. (2009). A dialogical approach to the creation of new knowledge in organizations. *Organization Science*, 20(6), 941–957.
- Wagner, C., & Majchrzak, A. (2007). Enabling customer-centricity using wikis and the wiki way. Journal of Management Information Systems/Winter 2006–7, 23(3), 17–43.

- Wang, X., Butler, B. S., & Ren, Y. (2013). The impact of membership overlap on growth: An ecological competition view of online groups. *Organization Science*, 24(2), 414–431.
- Whelan, E., Parise, S., de Valk, J., & Aalbers, R. (2011). Creating employee networks that deliver open innovation. *MIT Sloan Management Review*, 53(1), 37–44 (Fall 2011).
- Wry, T., Lounsbury, M., & Glynn, M. A. (2011). Legitimating nascent collective identities: Coordinating cultural entrepreneurship. Organization Science, 22(2), 449–463.