

Enhancing Open Innovation Through Social Media Groups as a Knowledge Exchange Mechanism

Andreea Bianca CAMARĂ

National University of Political Studies and Public Administration

30 A Expoziției Blvd, 012104, Bucharest, Romania

camaraandreea@gmail.com

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Abstract

Knowledge is an essential element for the sustainability of companies. In today's context of rapid technological developments, it can facilitate the creation of new knowledge flows that support open innovation within organizations. In this way, customer knowledge helps to align products and services with consumer needs, wants, and expectations. In this context, the consumer becomes a co-creator of the products and services launched on the market. The present research is based on ten in-depth, semi-structured interviews, through which we explored thinkers' experiences, expertise, and practices in communicating with consumers on social media groups. As well as the innovative potential of the knowledge captured from consumers. The results of this research include three recommendations to facilitate knowledge transfer through social media groups. In addition, it highlights the real potential of these groups to create new knowledge flows from consumers to organizations, thus contributing to open innovation. The study demonstrates the importance of social media groups in transferring tacit knowledge. It emphasizes the need to involve Knowledge Dynamics in the communication process without, however, exploring this research dimension. Additionally, by consolidating existing research, the study offers an updated perspective on the issues examined. Social media platforms have been recognized from the beginning as important sources of consumer knowledge. However, the process must be properly managed for this knowledge transfer to generate open innovation truly.

Keywords

Knowledge; Knowledge Transfer; Social Media Groups; Customers; Communication.

Introduction

To continue adapting to market changes, organizations must innovate and reform. Only through continuous innovation can organizations maintain a competitive advantage (Del Giudice et al., 2019; Scuotto et al., 2020). The present studies demonstrate that drawing knowledge from customers within an organization plays an important role in innovating business processes, products, and services, increasing creativity (Xiong et al., 2021; Alinasab et al., 2022). Nowadays, communication through social networks has become the main form of work between the enterprise and its consumers. Previous studies have examined the impact of social networks on knowledge creation and innovation (Papa et al., 2018). Following an open innovation development perspective, De Zubielqui et al. (2019) highlighted that knowledge flows originating from social networks, attracted by actors external to the organization, have the potential to develop open innovation processes.

Social media applications, however, since their inception, have represented a resource that can generate and facilitate unlimited flows of new knowledge for organizations (Mcafee, 2006; Sun et al., 2020). Social media, first, with its variety of communication

possibilities, from messengers to small groups, public message groups, and advertisements, represents a process that transforms the traditional medium of knowledge management into continuous knowledge conversations, centered on the person (Majchrzak et al., 2013). These networks hold visible and persistent stocks of knowledge. The knowledge present in these networks is accessible to anyone interested in a topic, feedback, opinions about products or services, experience, etc. (Bratianu & Orzea, 2013; Majchrzak et al., 2013; Treem & Leonardi, 2012). Social media groups, which we focus on in today's research, however, provide contextual and controlled knowledge from customers; members included in the groups are directly interested in the issues focused in these groups and are willing to exchange knowledge, which gives the point greater accuracy and meaning to their embodied knowledge (Pérez-González, et al., 2017; Yang et al., 2001).

Although social networks provide a valuable platform for knowledge sharing, organizations must identify effective ways to integrate and leverage them commercially (Cohen & Levinthal, 1990). Knowledge cannot be replaced or imitated, and its management requires creating a favorable climate within the organization that facilitates the generation, transfer, and sharing of knowledge (Bratianu & Vasilache, 2009). The organization's access to knowledge does not automatically guarantee its effective use. The sharing of knowledge contributes to the formation of knowledge ties, which in turn support the development of those segments of the organization that are responsible for knowledge absorption (Bratianu & Orzea, 2010).

Understanding this conceptual parallel, we highlight the importance of the organization's absorptive capacity as a relevant condition for developing open innovation activities (Huizingh, 2011; Ooms et al., 2015). Through absorptive capacity, the organization is endowed with a set of practices. Routines and processes that facilitate knowledge assimilation, transformation, exploration, and exploitation, thereby enabling the attainment of competitive advantages (Zahra & George, 2002).

The present research seeks to answer three research questions: (1) *What types of knowledge are facilitated for transfer in social media consumer groups?* (2) *What is the innovative potential of knowledge coming from customers through these groups?* (3) *What elements facilitate knowledge transfer from consumers to the organization in these groups?*

The interviews investigated the categories of knowledge (tacit or explicit) that are most often transmitted from consumers to the organization. This allows us to understand how consumers interact with the organization. We will thus explore both the innovative potential of the knowledge entering the company and the interviewees' experience of how this knowledge has helped them in the company's innovative processes. The third question completes the research picture by exploring the practices that generate new knowledge flows through these channels.

Although studies have recognized the power and importance of social media in open innovation processes, this research brings an element of novelty by empirically exploring the results from the Romanian market, analyzing and highlighting the impact of social network groups, and identifying some useful practices for the business environment.

Literature review

The transition from an age of natural resources to an age of knowledge is more evident than ever. Societies are increasingly oriented towards capitalizing on knowledge resources based on research, development, skills, and education. (Edvardsson, et al., 2012). In this information age, where the main competition at the economic level is achieved through technological development and the digitization of organizations, the most valuable resources are no longer represented tangibly. Knowledge and expertise are considered among the most valuable assets of an organization. Knowledge and the ability to create and use knowledge are considered the key to the transformation of the global economy, and knowledge is becoming the essential means of economic growth, being the basis of innovation. (Carneiro, 2000). External knowledge is crucial in improving an organization's innovation process, as recognized by many researchers and practitioners (Chesbrough, 2006; Pedrosa et al., 2013). Innovation, with the help of external entities such as consumers, brings multiple types of value to companies and is a strength of innovation (Dahlander et al., 2008; Lee & Cole, 2003). Studies suggest that firms can integrate innovations generated by online communities into their internal processes (Dahlander & Wallin, 2006).

These online communities offer significant benefits for value co-creation in innovation (Füller et al., 2011). User-driven innovation has also increased social welfare (Henkel & Von Hippel, 2004). Business innovation communities present various advantages for consumers and the business sector. For example, new product features can be tested and improved online based on user feedback and experiences and then shared with other stakeholders. Although knowledge management is not a new field of study, the literature on the subject is extensive and often controversial, evolving to encompass various nuances and directions. However, with the advent of the information age and the growing interest in technology, the technological tools organizations use to increase efficiency have led to a greater traction and relevance for knowledge management. The Open Innovation (OI) approach in business is constantly increasing as a level of interest and necessity for companies to remain competitive in the current climate. Researchers have begun to investigate the factors and processes that facilitate the acquisition and management of knowledge to enhance competitiveness (Belso-Martínéz et al., 2016).

Innovation models suggest that firms can and should integrate internal and external knowledge in their operations, creating knowledge through internal departments and acquiring knowledge from external ecosystems (Chesbrough, 2006; Bresciani et al. Ferraris, 2016). In the current context, the impact of social networks on co-creative innovation has been a debated topic for several years, and management evidence shows that many companies have encountered difficulties in applying the concept of social product development. With the technological progress of the last few decades, new technologies should be implemented in organizational activities to acquire, store, and process information and knowledge, thereby facilitating knowledge creation (Murray et al., 2016). Social networks are considered a new form of ICT that involves the active content of users and members, through which they can create firms that can acquire practical knowledge. Social media can potentially revolutionize how organizations interact with actors inside and outside their boundaries (Kaplan & Haenlein, 2010). The impact of social networks on the innovative, customer-oriented co-creation process manifests itself in creative and proactive social collaborations between firms and consumers, facilitating the development of new products or services (Roser et al., 2009).

In the context of knowledge-based competition, this premise supports the idea that the customer is innovative firms' primary external source of knowledge (Del Giudice et al., 2015).

Although some researchers consider social networks powerful tools for knowledge sharing, there remains a lack of understanding regarding how social networks can facilitate knowledge sharing among experts, how to maximize their benefits, and how to adapt social media platforms to meet the specific needs of professionals. Therefore, to better understand the phenomenon of knowledge sharing in the social media space, this study aims to make a theoretical connection between the concepts and characteristics of social networks with the requirements of knowledge creation and sharing to determine the likely potential of social networks in facilitating knowledge sharing and open innovation.

Methodology

We decided to develop this article based on conducting 10 in-depth interviews, as we wanted to examine the perceptions of company users of social media groups in their relationship with consumers. The mode of communication guided the questions, the types of information and knowledge transmitted from the company to consumers, their expectations in dealing with the company, and the usefulness of the knowledge received from consumers for open innovation processes. This research method allowed us to get a complete picture of the interest and usefulness of social networks in communicating with consumers.

The present research method gave us the advantage of collecting a significant amount of data on the debated research topic. Limitations of the present method can be considered the limited number of interviews conducted, which may affect the clarity of the data as well as the translatability of the findings to a larger sample. However, I believe that a larger number of interviews would have generated similar but more detailed results. Overcoming this limitation can be achieved by developing the study with a questionnaire to validate and complement the data obtained. A second limitation of the present method can be considered the subjective interpretation of the results. A third limitation may be the respondents' understanding of the working terms in the interview. However, we consider that this last limitation has been covered, given the fact that in the pre-interview discussions, the respondents were given an introduction to the topic and a clarification of the working concepts.

The interviews were conducted by telephone or teleconference and lasted a maximum of one and a half hours. A series of 10 main, open-ended questions were asked, with guidance or helpful questions offered where necessary to supplement the information needed for the research. The interviews were transcribed using Happyscribe software and decoded using Nvivo software. Interviews were conducted following a protocol briefly introducing the research objectives and topic. Respondents were assured that their identity would remain confidential and that no internal or confidential data of the company they represent would be published. All ethical elements necessary for the conduct of the interview were analyzed and discussed before the interviews.

The respondents agreed to the transcription of the interview, which was conducted using digital means. Before the interview started, the respondents were selected based on simple profiling. Table 1 illustrates the profile of the respondents and the companies they represent. Note that a key feature in the selection for this interview was the use of social networks and communities in their communication with consumers.

Table 1. Respondent profiling (Source: author's research)

| Index | Age | Function | Years of experience | Company Industry |
|-------|-----|---------------------------|---------------------|----------------------|
| R1 | 30 | Content Manager | 6+ | Marketing Agency |
| R2 | 29 | CEO | 4+ | Events |
| R3 | 34 | Marketing Manager | 3+ | Retail |
| R4 | 41 | Marketing Consultant | 3 | Events |
| R5 | 35 | Communication expert | 2 | Retail |
| R6 | 39 | Content Marketing Manager | 4 | Consultancy |
| R7 | 34 | Manager | 10 | Courses and training |
| R8 | 42 | Community Manager | 7+ | Publishing |
| R9 | 32 | Content Manager | 4+ | IT courses |
| R20 | 29 | Marketing Manager | 6+ | Online Events |

Results and discussion

Based on the interview responses, we observe an accelerated growth in the last two years of groups on social networks and communication platforms created by companies for users and consumers of products and services. All respondents mentioned that they currently communicate with consumers through WhatsApp, Facebook, Telegram, and Facebook Messenger groups, owning on average between three and five such groups.

The main purpose of these groups is to promote products and services and collect related feedback. Three of the respondents (R1, R4, and R10) emphasized that these groups facilitate the transfer of knowledge from the company to consumers and vice versa in terms of the use and usefulness of the products or services purchased. They noted that communicating via WhatsApp has enabled them to improve the way they present their promoted services and optimize the user experience for better performance.

Six respondents from different industries - R2 and R4 from online and offline events, R7 from specialized courses and training, R3 and R5 from retail, and R6 from consultancy for accessing European funds - highlighted that the use of groups not only facilitated the collection of feedback from customers, thus allowing for product and service improvement but also increased consumer confidence in the products purchased and generated customer loyalty. We observe that the interactions in the groups are focused on the personal interests of the consumers and on their desire to be helpful to other people who share the same interests, problems, and concerns. These groups enable consumers to have controlled exposure to a limited audience, facilitating free and honest consumer expression (Banghart et al., 2018; Sun et al., 2019).

These groups have become essential in supporting the use and participation in the products and services offered, with consumers acting as ambassadors for the company, helping other consumers reap the full benefits of their purchases. The constant exchange of views, impressions, opinions, and observations has created an environment of trust,

facilitating new flows of tacit and explicit external knowledge from consumers to the company.

In terms of the type of information conveyed by the company through these groups, half of the respondents claim that about 30% of the information relates to new products or purchase promotions, while the remaining 70% is relevant, educational, and informative content such as statistics, stories from their own and other consumers' experiences and problems they have encountered. On the other hand, the knowledge conveyed by consumers in these groups consists of opinions, views, experiences, feedback, reviews, and recommendations. Respondents mentioned that they constantly instigate consumers' involvement in discussions and exchange of experience. Sharing personal experience is a key source in transmitting tacit knowledge (Nonaka). This highlights the importance of social media groups in knowledge transfer between consumers and the organization. This process of communication with consumers, which generates the transfer of tacit knowledge, can fit into the process of "socialization," proposed by Nonaka (1994) in the dynamic model of knowledge creation.

Knowledge transfer does not automatically occur (Argote & Miron-Spektor, 2011). On average, knowledge transfer from consumers to the organization was initiated by consumers in only two out of five messages. T5 mentions that "the participants in the group are mostly passive; many of them are more interested in reading the comments and receiving the loyalty promotions, but they react most of the time when they are instigated to give their opinion or critical opinion, to test the new products we want to launch and give us details to improve them." While R10 noted, that after three and a half years, its most active group, "a pandemic support group for entrepreneurs," has spurred major innovations based on members' experiences, impressions, and feedback, generating a total shift of its consulting business to a fully digitized dimension.

Regarding how these groups are helping to drive development and innovation in the company, T2 noted that WhatsApp groups have proven more useful for examining how services can be improved because they include a loyal group of consumers willing to share constructive information and genuine feedback. In this way, these consumers become co-creators of newly launched or improved services.

Moreover, 90% of respondents said that Facebook groups have a higher level of engagement, measured by the number of posts from administrators and members, reactions, or comments, while WhatsApp groups have a lower level of engagement. However, 95% of respondents emphasized that, despite the lower engagement, the knowledge shared through WhatsApp groups proved to be more useful in open innovation processes. Nine out of ten respondents said that regarding knowledge sharing between organizations and consumers, Facebook and WhatsApp platforms are more useful than LinkedIn. However, LinkedIn catches up in the context of collecting opinions from competitors or when launching various surveys or rankings.

Conclusions

The study's findings highlight an increase in companies' interest in attracting, obtaining, and utilizing customer knowledge. While before the pandemic, few companies were actively creating groups with consumers through which to communicate, today, most

companies use this procedure and have several types of groups with loyal customers, first-time customers, partners, or collaborators. At the company level, these groups are communication hubs that facilitate knowledge transfer between the organization and consumers and vice versa. This denotes an increased importance given to consumer opinion and their willingness to be co-creators of products and services in the market. The fact that 80% of the interviewees consider the knowledge received from consumers in the clusters useful for improving processes in the company clearly highlights the usefulness and importance of this means of knowledge exchange and transfer in open innovation processes.

Another essential element that can be extracted from the present research is the importance of managing co-knowledge and generating a degree of positive engagement in these groups to facilitate the transfer of tacit knowledge. The knowledge transfer process must be seen as a two-way process. Knowledge transferred from the company to the customer generates new feedback from consumers, generating their willingness to transfer new knowledge to the organization that improves processes in the company. All interviewees admit this. Knowledge dynamics, which sees knowledge as a spectrum composed of three fundamental fields: rational knowledge, emotional knowledge and spiritual knowledge. Knowledge from each domain can be transformed into knowledge from another domain in an iterative and interactive way, like the transformation of energy from one form to another (Bratianu & Bejinaru, 2020). However, the present research has not touched on these elements but represents a future direction of development.

Customer and consumer social media groups are thus an important source facilitating knowledge transfer between consumers and the company. But the optimization of the process has to take into account certain elements such as (1) The constant exchange of knowledge with customers from the company to the consumers influences the backward knowledge transfer; (2) The messages transmitted to consumers through the intermediary of these groups must be constructed based on the principles of knowledge dynamics, namely to include emotional, spiritual and rational knowledge; (3) These social media groups must constitute trustworthy environments to facilitate the transfer of knowledge from consumers to customers; (4) the knowledge transferred to these groups from the organization should be of interest to the participants to generate discussion and debate.

The present article complements studies in the field by introducing the involvement of social media groups in knowledge transfer and the usefulness of this knowledge for open innovation processes. The research also presents three limitations. The number of interviews conducted represents the first limitation; it can be considered an insufficient sample to draw general guidelines for knowledge transfer through social networks. However, this limitation can be overcome by completing the research with a questionnaire. A second limitation can be considered the non-inclusion of knowledge dynamics and customer knowledge management principles in the research. We consider necessary in completing the research a full exposition of how the two theories influence the fluxes of knowledge transfer in social networks. The third limitation is the high degree of subjectivity that underlies the realization of this research, we have to take into account the fact that the answers of the interviewees represent a subjective vision of the way the communication processes work on these social channels of the communities they represent.

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