

# The Impact of Digitalization on Customer Knowledge Management

Andreea Bianca CAMARĂ

<sup>1</sup> National University of Political Studies and Public Administration (SNSPA), 30A Expoziției Blvd., 012104 Bucharest, RO; camaraandreea@gmail.com

Received: September 28, 2023  
Revised: November 26, 2023  
Accepted: December 4, 2023  
Published: March 10, 2024

**Abstract:** The best way for a business to gather pertinent knowledge and apply it for the growth and sustainability of the firm is through communication with its customers. Companies must adapt to today's data, information, and knowledge-based economy. A company's ability to evolve depends on how strategically it uses its intangible resources to build its knowledge capital. Digital tools create new channels for client engagement and collaboration. The current study assesses how digital tools affect how businesses interact with their customers and how these tools help customers share knowledge with companies. This study updates knowledge management and customer knowledge management practices in a digital context and serves as an example of these practices. The study aims to address the absence of specific and valuable components in business practices that give them access to client knowledge. The study is conducted on a sample of 10 individuals, managers, and CEOs of Romanian enterprises, using the in-depth interview method. Data from the survey were analyzed and interpreted, and significant results were drawn by comparing them to prior research. The study emphasizes the value of digital tools for customer communication and the potential these platforms provide for gathering knowledge about, for, and from customers. The respondents stressed the significance of knowledge for both the growth of the company and the innovation process. Still, there needs to be more internal structures to manage this knowledge strategically and capitalize on it for the beginning of innovative business approaches. The study identifies the primary challenges to communicating via digital channels and suggests solutions to help companies acquire, share, and use customer data to its fullest potential.

**Keywords:** customer knowledge management; digital tools; social media; innovation; customers; knowledge; development.

## Introduction

Customers were and will always be the lifeblood of every company's profitability. However, communication between a company and its customers is more crucial than ever. Technological evolution and the emergence of technologies like AI and chatbots are now a constant in the business environment. Therefore, the communication process has changed over the years due to the new revolutionary and digital technologies implemented by businesses in their communication strategies. Internet, social media, mobile apps, artificial intelligence, and other digital communications technologies have become commonplace for billions of people worldwide. Now, businesses must communicate with their customers on different social media platforms.

The communication process is constantly changing, and this perspective switch is constant and raises new and more complex communication barriers. Some technologies currently in use may become less important for businesses in the coming months as consumers shift from one platform to another based on their interests and the evolution of the digital platform. In this case, the only thing businesses can do to ensure that they reach their customers is to create a genuine relationship with them to increase the customer's trust in the firm and provide an appropriate communication channel. The advantages of this relationship are tied to profit or return on investment and to pursuing the company's competence to gather customer information, data, and knowledge and apply it to innovate the company's processes, products, or services.

## How to cite

Camară, A. B. (2024). The Impact of Digitalization on Customer Knowledge Management. *Management Dynamics in the Knowledge Economy*, 12(1), 21-38. DOI 10.2478/mdke-2024-0002  
ISSN: 2392-8042 (online)

*Journal Abbreviation: Manag. Dyn. Knowl. Econ.*

<https://content.sciendo.com/view/journals/mdke/mdke-overview.xml>

Digital tools, new technologies, and social networks have significantly changed how people communicate, interact, exchange knowledge, and share content (Ahmed et al., 2014; Kannan & Li, 2017; Kaplan & Haenlein, 2010). Digitalization of business communication capabilities permits businesses to communicate with a large number of potential customers and the possibilities to convey information about their companies and products or services. Digital technologies have been identified as potential sources for developing knowledge-intensive business collaborations and gaining a competitive advantage in this context (Christofi et al., 2018). Even though digital tools are part of our daily lives, limited literature explores the role of social media and digital tools in improving customer knowledge management practices.

Recent research (Castagna et al., 2020; Shah et al., 2023; Sijabat, 2022; Usai et al., 2021) revealed that enterprises are adopting digital technologies to improve their knowledge management processes, impacting innovation, the market, and financial performance. The introduction of adequate digital infrastructures, knowledge collection, storage, and transmission processes are altering the amount of data and information to be managed. That means firms adopting digital solutions must acquire and transform different types of external knowledge compared to non-digital firms, thus requiring the opportunity to use new knowledge management systems to get the most out of the intellectual capital value (Bratianu, 2007; Castagna et al., 2020).

Butler (2000) emphasized the neglect of customer knowledge. He claims that customers know more about the companies they buy from than the companies know about their customers' wants and demands. This fact is still a reality in today's business environment. Even though all companies understand the importance of the customer as a critical factor for their business development and sustainability, they rarely fully utilize the informal customer knowledge their employees amass, avoiding the kind of close customer relationships necessary for competitive advantage. A significant flow of data and information from customers to the organization can be produced by the adapted management of digital communication tools combined with strategic communication with customers. The design of managerial strategies (Bratianu, 2002) to extract value from knowledge assets associated with customer behaviors and demands has become essential in carrying out targeted requests and obtaining a competitive advantage.

Despite the recognition of the importance of soft data in customer relationship success and innovation, we identified a gap in the literature regarding the exploration of the effective integration of rational, emotional, and spiritual elements in the customer knowledge management (CKM) process. There is limited insight into how companies systematically manage, analyze, and leverage these elements in the context of customer knowledge management. In the context of the digitalization of companies, the gap extends to understanding how the use of digital resources in the transfer of knowledge influences the development of CKM.

In this paper, we follow a line of research in the field of strategic knowledge management in which the use of digital technologies in communication processes enhances the development of customer knowledge management at the company level and increases the flow of knowledge from consumers to businesses. The primary purpose of this paper is to provide concrete responses to the following research questions:

- Q1: Does using digital communication tools in the relationship between firms and customers positively impact customer knowledge management regarding knowledge acquisition?
- Q2: Do businesses prioritizing customer knowledge management tend to be more open to innovation?

This paper is structured into four sections. The first section describes the conceptual framework and the main theories supporting the present study. The second section presents the data capture method and their analysis to obtain the results. The third section

presents the most relevant results obtained from the study, and the last section summarizes the conclusions of the work and possibilities for further study development.

### **Literature review**

Many academic papers emphasize the strategic importance of knowledge resources for a business or organization in developing a competitive business advantage, sustainability, or innovation of products or services. The most common vision regarding the importance of knowledge for an organization is that knowledge resources are stated to be a key factor for enterprises to differentiate themselves from competitors (Wilhelm et al., 2013). From a knowledge-based perspective, internal knowledge resources in personnel and business procedures are considered essential for firm success. However, they proved insufficient, especially for companies that want to keep up with the dynamic environment in which they operate. Businesses are forced to acquire new forms of knowledge to survive, and the most important source of external knowledge is customers, with a low probability of knowledge risks (Bratianu, 2018; Davenport & Prusak, 1998). Many businesses have disregarded the strategic use of external knowledge from other stakeholders, such as customers and business partners. However, they can provide the most relevant knowledge for company development, whether we are discussing product differentiation on the market, competitive advantages, feedback, etc. Without paying attention to customers' needs, behavior, and wants, businesses will slowly lose market share to competitors.

Although many companies recognize the importance of knowledge to the development of the company and strive to optimize the processes of decoding knowledge from customers so that it can be used at the operational level, the process frequently becomes stalled when using knowledge captured at the company level (Zack et al., 2009). As a result, the application of CKM enables businesses to transform customers from passive recipients of products to active partners of knowledge through communication methods. This is a critical strategic lever (Gibbert et al., 2002; Wilhelm et al., 2013).

### ***Customer knowledge management***

Customer knowledge management is a subset of Knowledge Management that focuses on a customer-oriented approach (Chua & Banerjee, 2013), which is the most critical aspect in the development and sustainability of modern businesses. The consumer is the most significant, secure, dependable source of knowledge a firm can access; customers deliver information based on their experience, what they test, and their needs and expectations. In other words, CKM refers to knowledge management strategies that manage organizational knowledge acquired through customer-firm contact.

Some scholars (Castagna et al., 2020; Gupta, 2017; Xuelian et al., 2015; Zhang, 2011) have addressed the problem of similarities and significant intersections between customer relationship management (CRM) and customer knowledge management (CKM), saying they relate to the same thing. According to Gibbert et al. (2002), CRM extracts customer information from a company's database. However, CKM is concerned with obtaining knowledge directly from customers and sharing and extending that knowledge. Gibbert et al. (2002) differentiate KM, CRM, and CKM using seven criteria: knowledge sought, motivations, objectives, measurements, benefits, customer role, and corporate role. Unlike KM and CRM managers, CKM managers have different attitudes toward their clients. While KM considers customers to be passive recipients of products and services that aim to increase the company's profit, and CRM considers customers to be consumers who must be added to the loyalty stadium through various programs, CKM considers customers to be an enhancer of innovation, concerned with how to generate new consumers through active interaction with them, who will make the company's sphere of knowledge.

Customer knowledge is defined as customer value, experience, and perception due to interactions between the firm and customers (Gebert et al., 2002). Customer knowledge management has three dimensions: knowledge about customers, knowledge of customers, and knowledge from customers (Gebert et al., 2003). Customer knowledge management emerges when businesses develop proper leverage and first-hand customer engagement (Jaziri, 2019). According to Sofianti et al. (2010), organizations that emphasize the importance of CKM will no longer regard their customers as passive recipients of the products or services they provide; instead, they will regard their customers as knowledge partners.

Therefore, in order to understand the concept of Customer Knowledge Management, we must look at the concept as an integrated part of knowledge management, which focuses on the collection and storage of data, information, and knowledge about, for, and from customers, sharing them at the organization level so that they can be used promptly in company development and innovation of processes and services. Table 1 presents the most relevant work definition and interpretation of the concept of customer knowledge management for this paper.

**Table 1. Interpretation of customer knowledge management concept**

| <b>Customer knowledge management definition and understanding</b>  | <b>References</b>  |
|--|--|
| Customer knowledge management can be seen as the systematic management of knowledge collected at the points of interaction between the company and customers, which are necessary to support business processes effectively and efficiently.   | Gebert et al. (2003)                                     |
| Customer knowledge management represents a research area between knowledge management and customer relationship management.  | Lopez-Nicolas and Molina-Castillo (2008); Rollins (2005) |
| The primary role of customer knowledge management is to bridge the divide between the external and internal environments and to transfer and share information between customers and firms. In this way, organizations can capitalize on external and internal sources of knowledge. | Chen and Huang (2009); Zhang (2011)                      |
| Customer knowledge management is a tool that can help companies better understand their customers' needs, behaviors, expectations, wants, and demands.   | Du Plessis and Boon (2004)                               |
| Customer knowledge management is a dynamic capability of customer knowledge generation, sharing, and protection by an organization for its benefit   | Fidel et al. (2015)                                      |

Source: own processing

According to those authors and their work, CKM revolves around how businesses acquire and exchange knowledge with customers, and they define CKM as a method of strategic planning that increases customer value and builds competitive advantage through utilizing knowledge resources. According to Zack, Smith, and McKeen, CKM entails managing knowledge about consumers and their demands and co-creation with customers. CKM can be used to reconfigure business value propositions and, as a result, can improve product performance (Wang, 2006). As a result, customer knowledge serves as a resource or building block for creating dynamic capabilities to achieve a competitive edge and superior financial performance.

### ***Customer knowledge management and digital communication***

Thus, Customer Knowledge Management (CKM) aims to profitably capitalize on the knowledge exchange between a firm and its customers to integrate shopping, procurement, and consumer knowledge (Rowley, 2002a; Taghizadeh et al., 2018). Developing the consumer knowledge management system encourages open innovation and the dynamic capabilities necessary to obtain a sustainable competitive advantage, increasing the company's profitability (Cui & Wu, 2018; Fidel et al., 2015). Thus, CKM

involves a collaborative process based on mutual trust, in which clients are encouraged and stimulated through content strategies, digital technologies, and collaboration tools to develop new product and service ideas or development initiatives to implement together with the company's staff and managers. CKM thus transforms customers from passive consumers into co-creators of products and services that fully meet their expectations and needs.

Consumer behavior's widespread use of portable devices directly impacts how businesses connect and communicate through social media and how consumers make purchasing decisions. Organizations use a variety of tools to analyze and capture social media data, as well as manage cross-channel communication. However, businesses must be aware that the capacity to transform information and data obtained through social media into valuable knowledge from the customer, about the customer, and for the customers gives a chance to gain a competitive advantage.

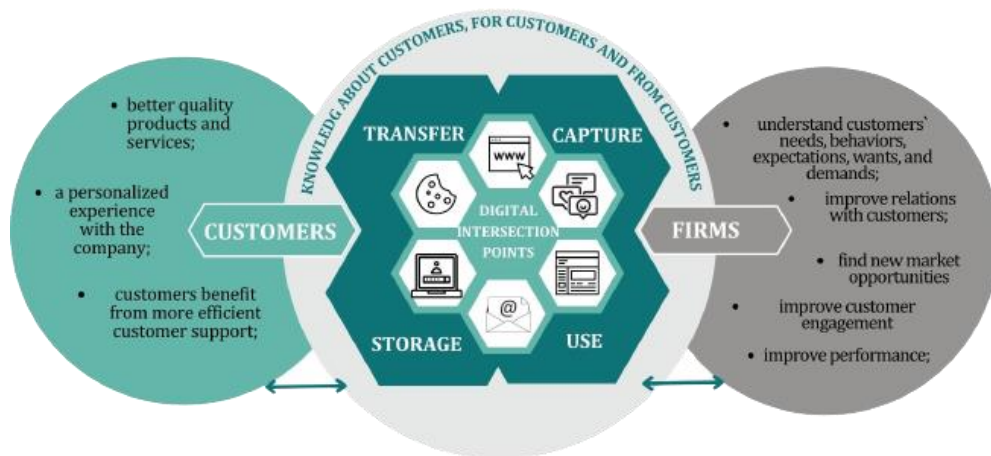
Under these circumstances, the need to track customer data provided on social media platforms, capturing, and analyzing it so that it may subsequently be used to improve the efficiency of the company's processes, becomes increasingly apparent. Customers' knowledge enables businesses to gain strategic insights for developing innovative product and service offerings and a more dynamic and personalized strategy. As a result, businesses must identify the most appropriate methods and tools for themselves and their customers in order to build a customer relationship system while also keeping in mind that interactions in such virtual environments contribute to the development of forms of collective intelligence and participatory value co-creation processes (Faase et al., 2011; Irani et al., 2017).

Customers are the ones who understand their wants and how they evolve. They know best how to articulate such demands by incorporating rational, emotional, and spiritual knowledge into their contact with organizations (Bratianu & Bejinaru, 2023; Chua & Banerjee, 2013). Customers' involvement on social networks involves cognitive, emotional, and social reactions that begin with user connection with social media platforms and can be expanded through activities such as "like," "sharing," and "commenting" (Pino et al., 2018). In this form, how a company interacts with its customers through social media communication is essential in gathering and acquiring new data that enables businesses to gain strategic insights for designing an innovative offering of products and services and a more dynamic and personalized approach. Knowledge integrates rational, emotional, and spiritual fields (Bratianu et al., 2021) and constitutes a resource that becomes a driving force in creating successful business and knowledge strategies for sustainable development. Businesses must be able and able to decode data to capture relevant knowledge and identify rational, spiritual, and emotional knowledge. However, some components of the innovation process are likewise not disclosed to customers. Engaging customers in discussions with enterprises allows decision-makers to gain a deeper understanding of the dynamics of the external business environment and its trends. Therefore, businesses must extend their strategic conversations to customers and learn from them.

Controlling and designing the material provided to clients via digitalized communication systems must be tailored and designed specifically for their needs. The flow of knowledge from the business to the customer aims to raise customers' awareness of the company's new products and services and assist them in purchasing decisions (Garcia-Murilo & Annabi, 2002). At the same time, what a company posts on social media is the first step in interacting with its customers. This knowledge can also be precious during the purchasing cycle, particularly during the phase of successful usage of the purchased products. When we talk about customer knowledge, we imply knowledge about consumer preferences that have emerged from previous interactions and transactions with the brand (Chua & Banerjee, 2013).

This type of knowledge encompasses a wide range of topics, ranging from their current and future demands to their views of the products and services acquired to their level of pleasure, as indicated by the knowledge dynamics between rational, emotional, and spiritual knowledge (Bratianu & Bejinaru, 2023; Liu, 2012). The knowledge from customers can generate innovative processes in the company. It can represent impressions about the quality of products or services, the ability of the product to meet their needs, the benefits or drawbacks of working with the company, and so on. As previously stated, managing knowledge dynamics necessitates a collaborative approach that converts the customer into a business co-creator (Garcia-Murilo & Annabi, 2002). Each type of knowledge has unique traits and needs particular instruments to be accomplished. Rowley (2002b) stipulated that digital instruments enable knowledge transfer, acquisition, and elaboration. Each form of knowledge, from clients, about clients, and for clients, has a different strategic importance for the business. Because they are operational, knowledge from customers has less strategic potential than knowledge about customers and knowledge of customers.

For CKM to be effective, the concept must be viewed and understood as an ecosystem of interactions between consumers and businesses. Figure 1 explains the interaction between companies and clients, the relationship that generates knowledge transfer, and the benefits of exchanging knowledge between the company and clients. In this way, new foundations for sustainable product innovation and organizational performance can be established, and the data, information, and knowledge gathered from customers and the external business environment can be successfully incorporated. Digital technologies employed in communication represent the places of junction between clients and business, the bridge where knowledge from customers is generated and may be acquired. To be able to generate benefits through CKM, more is needed to understand how to capture knowledge about consumers, from consumers, and for consumers. A certain degree of development of knowledge management at the company level is necessary, which involves a rooted culture of knowledge sharing and use. The benefits of CKM extend beyond business. Customers can gain from better products, services tailored to their unique needs, and better customer service operations by creating systems for acquiring customer knowledge and implicitly by capitalizing on such practices.



**Figure 1. The visual representation of the intersection between companies and consumers in the digital environment and knowledge exchange**  
 Source: own processing

Gibbert et al. (2002) explained that what constitutes CKM is the knowledge that resides in customers as rational, spiritual, or emotional (Bratianu & Bejinaru, 2023; Gibbert et al., 2002). Through communication, businesses can access and collect this customer knowledge, building a strategic junction between their operations and customer base. Digital technologies play a vital role in this ecosystem by encouraging the flow of

knowledge from consumers to enterprises and vice versa, as well as by supporting and facilitating the gathering of knowledge globally, its sharing, expansion, and usage. Therefore, CKM entails developing new knowledge-sharing platforms and procedures between businesses and their clients.

According to Lin (2007), many consumer behaviors, including tacit or explicit, declarative or factual, and procedural or process, can be used to identify this physical approach (Lin, 2007). Businesses are still at the beginning of this process, even though research in the field has advanced, and more and more quantitative studies are emerging that demonstrate the significance of CKM for innovation. Although there is a greater level of awareness in the corporate world regarding the value of customers for innovation, there need to be clear strategies to encourage using knowledge amassed from digital environments for the company's advantage.

In their study on CKM in Enterprise Software development companies, Khosravi, Hussin, and Nilashi (2018) found that customer knowledge absorption and application rate still need to be improved in their early stages. However, when companies focus on customers' capacities for product enhancement and outgoing coordination, a marketing approach known as external knowledge absorption emerges (Dimitrova et al., 2009). Every organization must, therefore, accumulate client expertise and mix it with the team's aptitude for learning new things in the intensely competitive business climate.

### Research methodology

To explore how digital technologies can influence the development of CKM and to provide answers to the research questions, we conducted a series of 10 in-depth interviews with managers and CEOs of companies operating in Romania. Thus, the interviews allowed the in-depth exploration of their experience using digital technologies to capture knowledge about customers, from customers, and for the customer. Understanding how CKM is situated from an applicative point of view opens new research horizons and interpretations.

In order to ensure the quality and timeliness of the data obtained from the interviews, we created a profile of the interviewed person. So, in Table 2, you can see the eligibility criteria for the respondents of this study.

**Table 2. Eligibility criteria of the interviewed persons criteria**

|                                      |  |
|--------------------------------------|--|
| <b>Gender</b>                        | Male/female  |
| <b>Age</b>                           | Not less than 28 years old   |
| <b>Studies</b>                       | Higher education   |
| <b>Professional status</b>           | Is currently employed or has worked for at least three years at the last job   |
| <b>Job title or type of activity</b> | Sales manager, Marketing manager, Communication specialist, Customer care specialist, Client relations specialist, Social media specialist |
| <b>Seniority in the company</b>      | At least three years   |

Source: own processing

The interviews took place over the phone, Zoom platform, or face-to-face, lasting from 30 minutes to one hour and fifteen minutes. The conversation was recorded and later decrypted, with the consent of the interview participants. Open-ended questions were used in semi-structured, topic-driven, conversational interviews to allow participants to share their experiences openly.

Also, supporting questions were used to generate the most complex answer and concrete explanation of the company's situation. The topic guide ensured that similar subjects were



covered in several interviews and was influenced by research on the obstacles and enablers to clinicians' adoption of clinical guidelines.

This paper intends to investigate the precise perception of those working in the field who had to adopt new communication strategies with clients during COVID-19 and the COVID-19 post. The in-depth interview analysis approach was chosen. With the help of this technique, it was possible to extract in-depth information regarding the experiences, attitudes, and understanding of the value of CKM for business and activity. As a result, the present study summarizes how digital technologies have altered and continue to change how businesses see CKM and interact with their consumers. Table 3 includes the primary data of the interviewed experts. We can observe both compliance with the qualification criteria for the interview and their experience in communicating with consumers. Thus, the present study offers us a complex vision with perspectives from several fields of activity.

**Table 3. Primary data about the experts**

| Expert | Domain of activity     | Job title                   | Years of experience | Age | Duration of interview |
|--------|------------------------|-----------------------------|---------------------|-----|-----------------------|
| I1     | Events                 | Marketing Manager           | 3                   | 29  | 45 min                |
| I2     | Marketing              | Communication Specialist    | 5                   | 34  | 52 min                |
| I3     | Software development   | Sales Manager               | 3                   | 29  | 38 min                |
| I4     | e-Learning             | Customer care Specialist    | 3                   | 30  | 40 min                |
| I5     | Social Media Marketing | Social media Specialist     | 4                   | 32  | 51 min                |
| I6     | Advertising            | Content Marketing Manager   | 3                   | 30  | 46 min                |
| I7     | Social Media Marketing | Sales Specialist            | 3                   | 29  | 43min                 |
| I8     | Business Consultancy   | Customer care specialist    | 4                   | 31  | 32 min                |
| I9     | Retail                 | General Manager             | 6                   | 36  | 62 min                |
| I10    | eCommerce              | Client relations Specialist | 4                   | 33  | 38 min                |

Source: own processing

The diversity of work fields of the interviewed experts and their position in the company allows the development of the present research to position the companies' interest in the CKM systems. We thus see what the business environment understands by CKM and what the usefulness felt by them of these systems.

### ***Interview structure and analysis method***

The method is based on semi-structured interviews. The interviews were structured into four categories of questions to facilitate the subsequent analysis of the results and to reach all the relevant points for validating the initial hypotheses. As you can see in Table 4, the categories are establishing the digitalization possibilities about customers; relations with customers based using digital tools; data storage, sharing, and use at the company level; the importance of customer data, information, and knowledge for innovation; the interview contains also control questions such as age, job title, and industry, that validated the eligibility of the interviewee, presented in Table 2.

The first category of questions, establishing the possibilities of digitization about customers, allows me to interpret the current communication between the business and its customers. How to analyze the interviewee's first impression on the importance and usefulness of digital technologies for capturing customer knowledge. The second category, relations with customers established using digital tools, offers a detailed perspective on the tools used by the company to communicate with customers, at the same time offering a vision of the interviewee's personal experience regarding the usefulness of those technologies but also highlighting the possible communication barriers that they



encounter. The interviewees' significance in gathering data, information, and customer knowledge is highlighted in the third category while assessing how this knowledge is shared and used at the company level. Based on this, we can infer how businesses use customer knowledge. The final set of inquiries focuses on the interviewee using client data gathered at the corporate level to improve his job procedures (Table 4).

**Table 4. Question, categories, and literature relevance**

| Question   | Question category   | Literature relevance   |
|--|---|--|
| Establishing the digitalization possibilities for customers                | What can you tell us about the digital development of the company you are a part of?  | Alegre et al. (2013); Castagna et al. (2020)   |
|  | Do you think that digitization has facilitated the relationship with your customers?  |  |
|  | How important are customer information and data for your activity?  |  |
| Relations with customers are established using digital tools               | Which tools do you consider critical elements for communication with your clients?  | Gold et al. (2001); Panesar et al. (2008)  |
|  | How responsive and engaged are your customers in their relationship with your company?  |  |
|  | What are the barriers you have in communication with your clients? How do you think you can overcome these barriers?  |  |
|  | What tools and communication strategies do you recommend, and think would improve the relationship with your clients? Please justify your response.                             |  |
| Data storage, sharing, and use at the company level                        | Do you use tools to capture and store data, information, and knowledge about, for, and from the client?   | Pauget and Dammak (2019); Tsai and Lu (2018)   |
|  | Which department handles customer relations?  |  |
|  | Who uses the data captured? For what purpose is this data used?   |  |
|  | Is there a relationship between the company's departments for capturing and sharing customer information to be used?  |  |
| The importance of customer data, information, and knowledge for innovation | What kind of information, data, and knowledge are you interested in receiving from your customers? And why?   | Alegre et al. (2013); Fidel et al. (2015); Desouza and Awazu (2005); Goodhue et al. (2002); Narver et al. (2004) |
|  | Were there situations where information about a customer was beneficial within the company for the development, improvement, or innovation of processes, products, or services? |  |
|  | What information, data, or knowledge would you like to receive constantly, or more often, from your customers?  |  |
|  | What kind of information, knowledge, or data do you share about yourself or the company you work for with external parties?   |  |

Source: own processing

CKM implies a combination of a perfectly functional ecosystem of several knowledge processes. These processes start from acquiring customer knowledge about the quality of services and products delivered, their experience with the business, with employees and partners, or the degree of satisfaction of needs. Another process is knowledge application, which involves associating customer habits and requirements with knowledge transfer. The process of knowledge exchange is an essential action for both businesses and customers, which allows the customization of the customers' experience with the brand and the development of creative innovation solutions to provide customers with the expected response.

## **Results and discussion**

The business environment contains various interrelated actors engaging in competitive and cooperative interactions. Customers, suppliers, potential partners, government organizations, regional business incubators, investors, and research institutions are just a few examples of these actors (Moore, 1996). The study results are centered on the idea that consumers' contribution as knowledge partners for Businesses is typical behavior in shared value creation. Therefore, in this sense, customers as knowledge partners can be considered agents of the central economy and innovation enablers. Using digital technologies in the communication processes builds the ideal foundation for developing trusting relationships between businesses and clients that potentiate the capitalization of attracting and capturing the knowledge of clients. The presentation of the results is divided into four categories of questions, which allows us to analyze each aspect of the study.

### ***Establishing the digitalization possibilities for customers***

Given the answers obtained to the respondents' first question, we deduce that most companies in the last three years have adopted new ways of working based on digital tools, both internally and externally. This fact was expected given the changes in the business environment in the last three years. The companies not only digitalize their activities but are also constantly in a digital transformation mentality, both at the level of daily job tools (such as usage of CRMs, communication, data storage, and processing, etc.) but also at the level of organizing and managing the people and their jobs.

Technology makes acquiring, storing, transferring, and analyzing knowledge easier. A necessary prerequisite for efficient knowledge management, adequate infrastructure also entails building a knowledge architecture (Gold et al., 2001). The interview responses pointed out that even if digitization has generated a more communication-oriented company climate, with well-organized communication processes, the tolls involved in these processes can be challenging to manage and quite tiring for employees, being a new form of task that must be completed. I3 mentioned that although he works in an environment where he is constantly in contact with technology and the latest software technologies, the pandemic and post-pandemic period have generated a load of workflows with various collaboration or communication tools that are difficult to use. Thus, adapting all these technologies to daily activities made it difficult. There is a digital tool for almost every need that can facilitate productivity.

However, at the same time, implementing more and more digital tools, the risk occurs to workflow becomes full of tools overlapping in scope. However, most digital tools offer incredibly better performance in delivering what needs to be delivered. For these reasons, the company is always in a constant digital transformation, aiming for more and better digital work.

### ***Relations with customers are established using digital tools***

Customers provide organizations with more than just an organizational or operational value-creation function. All respondents view their customers as knowledge partners and an early warning system for upcoming occurrences. This is because these customers are frequently more in tune with the market and the end user than a company ever could be. Customers can, therefore, help businesses to identify potential future trends. Information about the market reduces uncertainty for businesses while increasing their flexibility of movement. Direct customer interaction enables better feedback on already-offered goods and services and knowledge of particular customer needs.

The relationship and interactions with clients have improved due to the adoption of digital means. We notice an expansion of customer relations tools from the classic ones to the

adaptation of artificial intelligence tools. The feedback format has been digitized, its importance has increased, and organizations have become increasingly interested in obtaining it. Given the many digital tools, I noticed the tendency to digitize feedback among the respondents. They prefer to send questionnaires that involve the transmission of specific data, are easier to manage, and are addressed directly to the company's points of interest.

Digital instruments and social media have facilitated value co-creation by enabling interactions and sharing information, interests, and opinions between customers and businesses as well as among peers (Harrison & Barthel, 2009). Companies can now work directly and continuously with customers to learn from them thanks to the social media ecosystem (Byukusenge & Munene, 2017). We are applying digital tools to generate better customer communication, especially for companies with well-managed relationships. Moreover, these remote work tools allowed more active contact, with a higher frequency, more detail, and more oriented towards sincerity. These elements increase the trust between the company and the client and allow the company to offer services oriented to the client's needs. This also reflects an increase in the flexibility of companies that provide services. Even if the rise in the degree of digitization of companies generates significant benefits in customer relationships, customer interactions will never be utterly digital because of the benefits of face-to-face meetings in business. However, it does include all sorts of tools like digital mail, teleconferences, and feedback questionnaires.

The barriers that my respondents find in the communication with customers are the need for more information given by the new customers, the lack of transparency of clients, and the complex decision-making process. However, at the same time, it specifies the importance of developing a trust-based relationship that facilitates the relationship with new clients and allows more accessible communication. It also sets the importance of the method and system of communication with clients, which must be adapted and oriented to the client's needs and requirements. Even if digital tools facilitate the relationship with customers and how they interact. The respondents highlighted the importance of creating a mix between face-to-face meetings and communication through technological means. Following the answers obtained, we notice a division of the tools into communication, customer relationship, and content tools. The main ones specified by the respondents are presented in Table 5.

**Table 5. Respondents' classification of digital tools used in their companies**

|                                    |  |
|------------------------------------|--|
| <b>Communication tools</b>         | Email, Social Media, Outlook, Teams, Zoom, Sharepoint, HelpDocs, Document360, Helpjuice, Help, Scout, Zendesk; |
| <b>Customer relationship tools</b> | Salesforce, Siebel, Monday, Salesflare, HubSpot, Pipedrive, Freshsales   |
| <b>Content tools</b>               | BuzzSumo, Buffer, Constant Contact, Surfer SEO, Hootsuite, KeywordsFX  |

Source: own processing

The proper management of digital communication instruments combined with strategic communication with customers can generate a substantial flow of data and information from customers to the company. Managing these massive data flows captured through social media and designing managerial strategies to extract value from knowledge assets connected to customer behaviors and demands have become necessary to conduct focused actions. (Huang & Rust, 2017). The importance of analyzing data captured from the digital platforms used to communicate with customers is an increasing interest for each business. The real problem occurs in transforming data and information into knowledge. Nevertheless, businesses are increasingly interested in developing informatics tools and frameworks for collecting, monitoring, analyzing, summarizing, and visualizing social media data to generate valuable knowledge for company competitiveness (Holsapple et al., 2018).

### ***Data storage, sharing, and use at the company level***

According to Gibbert et al. (2002), one strategy for encouraging CKM is to foster interaction between businesses and their clients by using interactive multimedia technology, such as websites. Respondents stipulated that customer data can be obtained through customer feedback, transactions, cookies, and web server logs. There is no scarcity of data in business at the moment, but it is required to clarify and elaborate on these data to gain the necessary knowledge. Communication tools (e.g., email, blog, content management system) and collaboration tools (e.g., social media) are utilized to share knowledge and maintain customer interactions. Banner advertising, mobile advertising, and direct email marketing are examples of marketing strategies used in CKM to exchange knowledge and manage the passive role of customers susceptible to communication.

All respondents mentioned using CRM tools to capture relevant customer data, especially sales or pre-sale-oriented data. Moreover, they highlighted the need to supplement these data with emotional and spiritual elements, specifying that more is needed to know the technical data about a client to establish a real relationship with them. The primary department dealing with the storage of customer data is the sales department. Therefore, the stored information and knowledge are still oriented toward the sales role. The respondents stated that when engaging with customers through social media platforms, they mainly concentrate on producing material that elicits as many customer responses as possible, whether emojis, likes, shares, or comments. Businesses currently need help to focus on analyzing social media comments to store knowledge. While many responses are disregarded or considered unnecessary, the most significant ones are considered.

The answers given by the interview participants highlight the need for strategic use, at the internal level of the business, of knowledge management systems to combine the knowledge captured by different departments in a single source accessible to every person in the company. Employees rely on techniques such as corporate digital assets, email, locally saved files, or customer service tools as their go-to location for shared information and collaborative activities (Pauget & Dammak, 2019; Tsai, & Lu, 2018). Increased business performance can result from developing internal knowledge management systems that facilitate knowledge transfers between departments. Only one respondent specified that there is a close relationship between the sales, marketing, and development departments to share the knowledge and information collected internally. This is achieved through internal collaboration tools and monthly meetings to discuss new directions and prepare communication strategies. Even if the others highlight that information about a client received on time can make a difference in the implementation, product development, and innovation processes. I6 and I4 mentioned that they do not have implemented systems to filter the collected data and select those relevant to their activity, but they are aware of its importance. In contrast, I1 mentioned that communication with customers is essential for his activity, and complex systems are implemented to collect and filter data so that the departments have access to knowledge relevant to the company's activity.

Therefore, the answers obtained in this category of questions reinforce the idea that several factors influence CKM in an organization. Despite the generally acknowledged advantages of CKM, top management commitment, effective communication, a company-supported culture, and customer management skills are necessary for CKM to be applied successfully (Attafar et al., 2013). It is easier for a digitalized company to obtain customer information and data, but managing it takes work. At the same time, five (I1, I3, I5, I7, I10) out of ten respondents specified the relevance of the data. Only some of the data obtained can be relevant to the company's activity. These data require an adjacent filter to identify their importance at the company level. The digitalization of companies facilitates the implementation of customer knowledge management and influences the performance of the customer knowledge process. However, I think there are still some gaps in the company's managerial system that can negatively affect the performance of the process.

### ***The importance of customer data, information, and knowledge for innovation***

The literature on the resource-based view of the firm confirms the argument that organizations with knowledge management capability will use resources more efficiently and, as a result, will be more innovative and perform better (Belkahl & Triki, 2011). CKM is a set of behaviors and skills that organizations must possess in order to create, retain, and share knowledge about their customers (Alegre et al., 2013). Businesses that make knowledge management investments will endure and maintain their competitive advantage even in times of crisis. Most businesses are compelled to use external information while maximizing internal knowledge due to a need for more human resources and funding (Desouza & Awazu, 2005; Fidel et al., 2015). Additionally, they suggested that CKM strategies, including employing customer databases and software, scheduling customer meetings, and conducting consumer interviews, may help CKM.

Companies are mainly oriented toward collecting customer data when discussing essential data for companies. However, seven respondents specified that soft data, such as perceptions, emotions, and reactions, are at the heart of the success of their relationship with customers and are the core of their development possibilities. A firm's customer relationship affects its ability to develop high-quality, innovative products and services (Panesar et al., 2008). All the respondents mentioned that at some point, the knowledge received from the clients with whom they worked directly with the company to improve the processes, especially those that involve customer service and communication. I1 mentioned that for him, the objective feedback of consumers is essential. However, he is interested in the emotions, feelings, sensations, and reactions of his clients both during and after participating in an event organized by him and the company he is a part of. However, not all of the company's customers have essential knowledge that can contribute to the company's value chain. I9 Mentioned that much data received from customers is irrelevant to improving its processes or services. Integrating data and knowledge from all of them is neither desirable nor practicable.

Clients must, therefore, be recognized as knowledge partners. Digital technologies offer a wide range of possibilities and assistance in this regard. CRM systems provide substantial knowledge about consumers by precisely recording information about them, external market conditions, and internal offerings (Goodhue et al., 2002). CRM systems also offer sophisticated capabilities for making strategic decisions (Sundaram et al., 2007).

At the same time, the respondents specified that the company they work for avoids sharing information about them at the level of working environments or the relationship with employees. The information they bring is more oriented to their products and services, distribution and servicing, and the advantages and benefits their products or services have had. When combined with the right competencies, market-oriented activities can help companies gain an advantage in developing new products and processes. Additionally, businesses can increase their capacity for innovation and better meet the requirements of their customers by creating new concepts or goods due to the information they gather from social media (Narver et al., 2004).

### **Conclusions and future directions**

Managing client relationships with digital tools can help you gain knowledge; conversing and interacting with customers can give you unique knowledge and insights that may not be found elsewhere. Social media's role in digitalizing commercial relationships is more important than ever. The current pace of business requires immediate access to necessary information; most of us (notably younger people) are used to receiving speedy responses and could be more patient. Not only do customers expect prompt responses from providers, but suppliers also value prompt customer feedback, according to respondents. Social media has the potential to significantly impact business because it makes it simple

to access the knowledge required to support and facilitate digital supply chain operations and maintain cross-firm ties in an affordable, real-time, and interactive way.

The study demonstrates the high availability of organizations that strategically integrate technology and digital tools to obtain more knowledge with innovation potential for their business, as we can infer from the responses given in the interviews. However, using digital tools raises questions about the relevance of the information received and the need to filter and analyze it before it is recorded and added to the company's knowledge capital. Additionally, the study concludes that an internal knowledge management system is required to maximize the information acquired, making it easier for knowledge to be transferred and used. As a consequence of the study, we can map out a plan for the application and identify three crucial components for the growth of customer knowledge management: 1) a communication system based on knowledge transfer, 2) a combination of digital technologies that enable the capture and decoding of consumer knowledge, and 3) an internal knowledge management system that makes it easier to transfer and use knowledge for the company's advantage are all examples of knowledge transfer systems.

Customer knowledge management is portrayed as a strategic tool in specialized literature that aids businesses in enhancing performance, discovering new market opportunities, and enhancing relationships with consumers. The study presents customer knowledge management as a tool that can assist businesses in better comprehending the needs, behaviors, expectations, wants, and demands of their clients. Customer knowledge management is a dynamic capability of an organization for creating, sharing, and protecting customer knowledge for its advantage. However, to generate and start innovation processes using customer knowledge management, the organization must have an appropriate organizational culture that facilitates the exchange of information and a knowledge-oriented leadership that promotes the use of knowledge acquired through digital instruments. Without an internal strategy for using knowledge from the customer, for customers, and about customers, customer knowledge management will not generate innovation in the company.

The effects of developing a content strategy from a knowledge management viewpoint and studying the flow of knowledge it generates from customers to the organization must be examined explicitly in future studies. Exploring additional strategies and techniques tailored to various social media platforms and settings should be the foundation of future study. According to the results of the interviews, professionals frequently feel overloaded by the volume of information on social media, much of which may be of little use to businesses. Finding the most effective and efficient ways to identify and sort through valuable and pertinent information from social media is, therefore, essential. Additionally, how a firm communicates with its customers and the knowledge shared with them may hold the key to raising customer engagement levels and promoting easy access to customer knowledge.

A primary constraint of this study is the utilization of a relatively small sample comprising 10 managers and CEOs from Romanian companies. This diminutive sample size raises concerns regarding the generalizability of the findings to a wider population. Moreover, the industry distribution within the sample might not comprehensively represent the diversity of businesses, potentially diminishing the broader applicability of the study's conclusions. Another noteworthy limitation is associated with the data collection methodology, which relies on self-reported information garnered through interviews. There exists the possibility that participants may provide responses that align with social desirability or inaccurately recall certain details. The inherent subjectivity of this data introduces the potential for biases, thereby influencing the reliability of the study's findings. Another limitation is the fact that while the study acknowledges the importance of emotional and spiritual elements in customer knowledge management, it does not deeply explore how these elements are managed, processed, or leveraged by companies. This leaves a gap in understanding the nuanced aspects of incorporating emotional and spiritual dimensions in the digital CKM process.

## References

- Ahmed, U. M., Kristal, M. M., & Pagell, M. (2014). Impact of operational and marketing capabilities on firm performance: Evidence from economic growth and downturns. *International Journal of Production Economics*, 154, 59-71. <https://doi.org/10.1016/j.ijpe.2014.03.025>
- Alegre, J., Kishor, S., & Lapiedra, R. (2013). Knowledge management and innovation performance in a high-tech SMEs industry. *International Small Business Journal*, 31(4), 454-470. <https://doi.org/10.1177/0266242611417472>
- Attafar, A., Sadidi, M., Attafar, H., & Shahin, A. (2013). The role of customer knowledge management (CKM) in improving organization-customer relationships. *Middle-East Journal of Scientific Research*, 13(6), 829-835. <https://doi.org/10.5829/idosi.mejsr.2013.13.6.2533>
- Belkahla, W., & Triki, A. (2011). Customer knowledge enabled innovation capability: proposing a measurement scale. *Journal of Knowledge Management*, 15(4), 648-674. <https://doi.org/10.1108/13673271111152009>
- Bertrand, P., & Dammak A. (2017). The implementation of the Internet of Things: What impact on organizations? *Technological Forecasting and Social Change*, 140, 140-146. <https://doi.org/10.1016/j.techfore.2018.03.012>
- Bratianu, C. (2002). *Management strategic*. Universitaria.
- Bratianu, C. (2007). An integrated perspective on the organizational intellectual capital. *Review of Management and Economical Engineering*, 6(5), 107-112.
- Bratianu, C. (2018). A holistic approach to knowledge risk. *Management Dynamics in the Knowledge Economy*, 6(4), 593-607. <https://doi.org/10.25019/MDKE/6.4.06>
- Bratianu, C. (2022). *Knowledge strategies*. Cambridge University Press.
- Bratianu, C., & Bejinaru, R. (2023). From knowledge to wisdom: Looking beyond the knowledge hierarchy. *Knowledge*, 3(2), 196-214. <https://doi.org/10.3390/knowledge3020014>
- Bratianu, C., Stanescu, D. F., & Mocanu, F. (2021). Exploring the knowledge management impact on business education. *Sustainability*, 13(4), 2313, 1-16. <https://doi.org/10.3390/su13042313>
- Butler, Y. (2000). Knowledge management - If only you knew what you knew. *The Australian Library Journal* Volume, 49(1), 31-43. <https://doi.org/10.1080/00049670.2000.10755905>
- Byukusenge, E., & Munene, J. C. (2017). Knowledge management and business performance: Does innovation matter? *Cogent Business & Management*, 4(1), 1368434. <https://doi.org/10.1080/23311975.2017.1368434>
- Castagna, F., Centobelli, P., Cerchione, R., Esposito, E., Oropallo, E., & Passaro, R. (2020). Customer knowledge management in SMEs facing digital transformation. *Sustainability*, 12(9), 3899. <https://doi.org/10.3390/su12093899>
- Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance: the mediating role of knowledge management capacity. *Journal of Business Research*, 62(1), 104-114. <https://doi.org/10.1016/j.jbusres.2007.11>
- Christofi, M., Vrontis, D., Leonidou, E., & Thrassou, A. (2018). Customer engagement through choice in cause-related marketing: a potential for global competitiveness. *International Marketing Review*, 37(4), 621-650. <https://doi.org/10.1108/IMR-04-2018-0133>
- Chua, A. Y. K., & Banerjee, S. (2013). Customer knowledge management via social media: the case of Starbucks. *Journal of Knowledge Management*, 17(2), 237-249. <https://doi.org/10.1108/13673271311315196>
- Cui, A. S., & Wu, F. (2018). Utilizing customer knowledge in innovation: Antecedents and impact of customer involvement on new product performance. *Journal of the Academy of Marketing Science*, 44(4), 516-538. <https://doi.org/10.1007/s11747-015-0433-x>
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business School Press. <https://doi.org/10.1145/348772.348775>
- Desouza, K. C., & Awazu, Y. (2005). *Engaging with customer knowledge management*.



- Engaged Knowledge Management*. Palgrave Macmillan. [https://doi.org/10.1057/9780230006072\\_7](https://doi.org/10.1057/9780230006072_7)
- Dimitrova, V., Kaneva, M., & Gallucci, T. (2009). Customer knowledge management in the natural cosmetics industry. *Industrial Management & Data Systems*, 109(9), 1155-1165. <https://doi.org/10.1108/02635570911002243>
- Du Plessis, M., & Boon, J. (2004). Knowledge management in eBusiness and customer relationship management: South African case study findings. *International Journal of Information Management*, 24(1), 73-86. <https://doi.org/10.1016/j.ijinfor.2003.10.002>
- Faase, R., Helms, R., & Spruit, M. (2011). Web 2.0 in the CRM domain: defining social CRM. *International Journal of Electronic Customer Relationship Management*, 5(1), 1-22. <https://doi.org/10.1504/IJECRM.2011.039797>
- Fidel, P., Schlesinger, W., & Cervera, A. (2015). Collaborating to innovate: Effects on customer knowledge management and performance. *Journal of Business Research*, 68(7), 1426-1428. <https://doi.org/10.1016/j.jbusres.2015.01.026>
- Garcia-Murilo, M., & Annabi, H. (2002). Customer knowledge management. *Journal of the Operational Research Society*, 53(8), 875-884. <https://doi.org/10.1057/palgrave.jors.2601365>
- Gebert, H., Geib, M., Kolbe, L., & Brenner, W. (2003). Knowledge-enabled customer relationship management: integrating customer relationship management and knowledge management concepts. *Journal Of Knowledge Management*, 7(5), 107-123. <https://doi.org/10.1108/13673270310505421>
- Gebert, H., Geib, M., Kolbe, L., & Riempp, G. (2002, December 10-13). *Towards customer knowledge management: integrating customer relationship management and knowledge management concepts* [Paper presentation]. 2nd International Conference on Electronic Business „ICEB”, Taipei, Taiwan.
- Gibbert, M., Leibold, M., & Gilbert, P. (2002). Five styles of customer knowledge management, and how smart companies use them to create value. *European Management Journal*, Elsevier, 20(5), 459-469.
- Gold, A., Malhotra, A., & Segars, A. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214. <https://www.jstor.org/stable/40398521>
- Goodhue, D., Wixom, B., & Watson, H. J. (2002). Realizing business benefits through CRM: Hitting the right target in the right way. *MIS Quarterly Executive*, 1(2), 79-90.
- Gupta, A. (2017). Enhancing organizational competitive advantage through integration of customer relationship management and knowledge management. *Journal in Management & Social Science*, 5(6), 178-186.
- Harrison, T. M., & Barthel, B. (2009). Wielding new media in Web 2.0: Exploring the history of engagement with the collaborative construction of media products. *New Media & Society*, 11(1-2), 155-178. <https://doi.org/10.1177/1461444808099580>
- Holsapple, C. W., Shih-Hui Hsiao, S. H., & Pakath, R., (2018). Business social media analytics: Characterization and conceptual framework. *Decision Support Systems*, 110, 32-45. <https://doi.org/10.1016/j.dss.2018.03.004>
- Huang, M. H., & Rust, R. T. (2017). Technology-driven service strategy. *Journal of the Academy of Marketing Science*, 45(6), 906-924. <https://doi.org/10.1007/s11747-017-0545-6>
- Irani, Z., Sharif, A. M., Papadopoulos, T., & Love, P. E. (2017). Social media and web 2.0 for knowledge sharing in product design. *Production Planning & Control*, 28(13), 1047-1065. <https://doi.org/10.1080/09537287.2017.1329955>
- Jaziri, D. (2019). The advent of customer experiential knowledge management approach (CEKM): The integration of offline & online experiential knowledge. *Journal of Business Research*, 94, 241-256. <https://doi.org/10.1016/j.jbusres.2018.05.029>
- Kannan, P. K., & Li, H. A. (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing*, 34(1), 22-45. <https://doi.org/10.1016/j.ijresmar.2016.11.006>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>

- Khosravi, A., Hussin, A. R., & Nilashi, M. (2018). Toward software quality enhancement by Customer Knowledge Management in software companies. *Telematics Informatics*, 35(1), 18-37. <https://doi.org/10.1016/j.tele.2017.09.007>
- Lin, H. F. (2007). Knowledge sharing and firm innovation capability: An empirical study. *International Journal of Manpower*, 28(3/4), 315-332. <https://doi.org/10.1108/01437720710755272>
- Liu, B. (2012). *Sentiment analysis and opinion mining, Synthesis Lectures on Human Language Technologies (SLHLT)*. Springer International Publishing. <https://link.springer.com/book/10.1007/978-3-031-02145-9>
- Lopez-Nicolas, C., & Molina-Castillo, F. J. (2008). Customer Knowledge Management and E-commerce: The role of customer perceived risk, *International Journal of Information Management*, 28(2), 102-113. <https://doi.org/10.1016/j.ijinfomgt.2007.09.001>
- Moore, J. F. (1996). *The death of competition: Leadership and strategy in the age of business ecosystem*. John Wiley & Sons.
- Narver, J. C., Slater, S. F., & MacLachlan, D. L. (2004). Responsive and proactive market orientation and new-product success. *Journal of Product Innovation Management*, 21(5), 334-347. <https://doi.org/10.1111/j.0737-6782.2004.00086.x>
- Panesar, S., Singh, L., & Markeset, T. (2008). Development of a framework for industrial service innovation management and coordination. *Journal of Quality in Maintenance Engineering*, 14(2), 177-193. <https://doi.org/10.1108/13552510810877674>
- Pauget, B., & Dammak, A., (2019). The implementation of the Internet of Things: What impact on organizations? *Technological Forecasting and Social Change*, 140, 140-146. <https://doi.org/10.1016/j.techfore.2018.03.012>
- Pino, G., Peluso, A. M., Del Vecchio, P., Ndou, V., Passiante, G., & Guido, G. (2018). A methodological framework to assess social media strategies of event and destination management organizations. *Journal of Hospitality Marketing & Management*, 28(2), 189-216. <https://doi.org/10.1080/19368623.2018.151659>
- Rollins, M., & Halinen, A. (2005, January 6). *Customer knowledge management competence: Towards a theoretical framework* [Paper presentation]. 38th Hawaii International Conference on System Sciences "HICSS", Big Island, USA.
- Rowley, J. (2002a). Eight questions for customer knowledge management in e-business. *Journal of Knowledge Management*, 6(5), 500-511. <https://doi.org/10.1108/13673270210450441>
- Rowley, J. (2002b). Information marketing in a digital world. *Library Hi Tech*, 20(3), 352-358. <https://doi.org/10.1108/07378830210444540>
- Shah, N., Zehri, A. W., Saraih, U. N., Abdelwahed, N. A. A., & Soomro, B. A. (2023). The role of digital technology and digital innovation towards firm performance in a digital economy. *Kybernetes*. <https://doi.org/10.1108/K-01-2023-0124>
- Sijabat, R., (2022). The effects of business digitalization and knowledge management practices on business performance: Findings from Indonesian micro, small, and medium enterprises, *BISNIS & BIROKRASI: Jurnal Ilmu Administrasi dan Organisasi*, 29(2), 191-116. <https://doi.org/10.20476/jbb.v29i2.1350>
- Sofianti, T. D., Suryadi, K., Govindaraju, R., & Prihartono, B. (2010, June 30 - July 2). *Customer knowledge co-creation process in new product development* [Paper presentation]. World Congress on Engineering, London, U.K.
- Sundaram, S., Schwarz, A., Jones, E., & Chin, W. W. (2007). Technology use on the front line: how information technology enhances individual performance. *Journal of the Academy of Marketing Science*, 35, 101-112. <https://doi.org/10.1007/S11747-006-0010-4>
- Taghizadeh, S. K., Rahman, S. A., & Hossain, M. M. (2017). Knowledge from the customer, for the customer, or about the customer: Which triggers innovation capability the most? *Journal of Knowledge Management*, 22(1), 162-182. <https://doi.org/10.1108/JKM-12-2016-0548>
- Tsai, W., & Lu, Q. (2018). Culture, emotion suppression and disclosure, and health. *Social and Personality Psychology Compass*, 12(3), e12373. <https://doi.org/10.1111/spc3.12373>

- Usai, F., Fiano, A., Messeni Petruzzelli, P., Paoloni, M., Farina Briamonte, B., & Orlando, B. (2021). Unveiling the impact of the adoption of digital technologies on firms' innovation performance. *Journal of Business Research*, 133, 327-336. <https://doi.org/10.1016/j.jbusres.2021.04.035>
- Wang, H., & Yu, Z. (2010, May 3). *The research of customer knowledge management in CRM* [Paper presentation]. International Conference on Intelligent Computation Technology and Automation, Vol. 3, Massachusetts, USA.
- Wilhelm, S., Gueldenberg, S., & Güttel, W. (2013). Do you know your valuable customers? *Journal of Knowledge Management*, 17(5), 661–676. <https://doi.org/10.1108/JKM-12-2012-0385>
- Xuelian, L., Chakpitak, N., & Yodmongkol, P. (2015). A Novel two-dimension' customer knowledge analysis model. *Asian Social Science*, 11(16), 257-266. <http://dx.doi.org/10.5539/ass.v11n16p257>
- Zack, M., McKeen, J., & Singh, S. (2009). Knowledge management and organizational performance: An exploratory analysis. *Journal of Knowledge Management*, 13(6), 392–409. <https://doi.org/10.1108/13673270910997088>
- Zhang, Z. J. (2011). Customer knowledge management and the strategies of social software. *Business Process Management Journal*, 17(1), 82-106. <https://doi.org/10.1108/14637151111105599>