The impact of social media to value added in knowledge-based industries

Article *in* Kybernetes · May 2013

DOI: 10.1108/K-01-2013-0014

CITATIONS
102

READS
3,585

4 authors, including:

Mirjana Pejic Bach
Faculty of Economics & Business, Zagreb, University of Zagreb
199 PUBLICATIONS **1,744** CITATIONS

SEE PROFILE

Maja Meško
University of Primorska
134 PUBLICATIONS **1,399** CITATIONS

SEE PROFILE

Kybernetes

The impact of social media to value added in knowledge-based industries

Vasja Roblek Mirjana Peji# Bach Maja Meško Andrej Bertoncelj

The current issue and full text archive of this journal is available at
www.emeraldinsight.com/0368-492X.htm

The impact of social media to value added in knowledge-based industries

Vasja Roblek
Faculty of Management, University of Primorska, Koper, Slovenia
Mirjana Pejić Bach
Faculty of Economics & Business, University of Zagreb, Zagreb, Croatia, and
Maja Meško and Andrej Bertoncelj
Faculty of Management, University of Primorska, Koper, Slovenia

Abstract

Purpose – The purpose of this paper is to investigate the significance of Web 2.0 and social media for organizational development and adaptation to an ever-changing business environment and its successful managing. A model is proposed based on the concepts of innovative economy, knowledge management and social media for value creation in knowledge-based industries.

Design/methodology/approach – The paper examines critical factors that influence the role of social media in organizational change and value creation in knowledge-based industries.

Findings – The paper contributes to discussion about the increasingly important role of social media in the value added chain in knowledge-based industries.

Research limitations/implications – Social media are still an emerging phenomenon and further studies are required to investigate these relationships over a longer period of time.

Practical implications – The topic is relevant for designing corporate strategies in knowledge-based companies becoming a part of global networks. Better understanding of the impact of social media on value added could significantly enhance both the top and bottom lines.

Originality/value – The paper explores when and why the inexpensive, but increasingly wider, use of social media in knowledge-based industries is preferred to traditional media. This paper intends to give executives practical hands-on advice for using social media in business campaigns.

Keywords Social media, Web 2.0, Value added chain, Innovative economy, Knowledge management, Networking, Organizational change

Paper type Research paper

1. Introduction

Knowledge management is becoming an increasingly important leverage point for organizations that could be used to lift their efficiency, innovation and thus competitive abilities (Davenport and Prusak, 2000; Rowley, 1999). Organizations that implement knowledge management recognize knowledge as the basis for competitiveness and as the key to business success (Drucker, 1993; Nonaka and Takeuchi, 1995).

The fundamental purpose of knowledge management according to Handzic (2009) and Thierauf and Hoctor (2006) is to collect, organize and process knowledge into a form that is useful to all employees. An important role in knowledge management is played by applications that exist in the organization, such as intranet, enterprise resource planning systems (ERP) and customer relationship management systems (CRM). Such applications store transactions and customer data values for business decision

Kybernetes
Vol. 42 No. 4, 2013
pp. 554-568

0368-492X
DOI 10.1108/K-01-2013-0014

making (Turban and Volonino, 2011). Development of "Web 2.0" and social media create applications that also create information on transactions and customer data, but outside of the organization (Hanna *et al.*, 2011). Therefore, knowledge becomes available not only inside the organization, but also outside of the organization, and management of such knowledge becomes one of the critical factors of success.

Kietzmann *et al.* (2011) have focused their attention towards social media delivered by mobile and web-based technologies, which create interactive platforms (e.g. Facebook, LinkedIn, Ingram, Orkut, Twitter, and Quora). Social media provides and creates fresh opportunities for organizations, communities and individuals (e.g. blogs, podcasts). However, the modern wave of communication brings challenges and risks in developing new communication channels between organizations and customers. Customers want organizations to listen to their opinion, to engage and respond.

Social media is opening channels of communication among stakeholders such as businesses, universities, research institutes, suppliers, customers, users and competitors. In fact, by using social media, organizations can add value through their knowledge in the form of providing high-value public information, which could even enable organizations' clients to make better decisions (Dowson, 2005). Social media enables organizations to customize information to individual clients, both in content and delivery for a particular business purpose, such as e-commerce. The approach could yield higher margins since organizations offer relevant information about an individual's or its business partners (Weinberg and Pehlivan, 2011; Solis, 2010). Therefore, social media creates opportunities to improve the entire value chain of the knowledge-based organization, and thus create value added in terms of financial benefits, but also intangible assets such as improved networking, communication and customer service.

The goal of the paper is to achieve a better understanding of the impact of social media to the value added in knowledge-based organizations. The paper is structured as follows. After the introductory part of the paper, the second part of the paper explores the theoretical frameworks of knowledge management and knowledge-based organizations. The third part of the paper discusses social media and their role in the knowledge-based organizations. The fourth part of the paper includes creating the social media value added model and the last part concludes.

2. Theoretical frameworks of knowledge management and knowledge-based organizations

2.1 Significance of knowledge management

The theoretical idea of knowledge in this article arises from the philosophical field of epistemology, which is based on the question, whether knowledge exists? The dogmatist school of thought gives the answer "yes," agnosticism gives an answer "no" and scepticism gives the answer "maybe" (Easteby-Smith *et al.*, 2002). Epistemology is claimed on what knowledge is valid in research, how that knowledge is presented and what kind of knowledge is found in knowledge-based organizations (Tennis, 2008)? Gummesson (2000) said that the key task of the organization is acquiring institutional knowledge and knowledge of the social interaction processes.

The main characteristic of knowledge is the possibility of upgrading. Basic knowledge is found out in the form of data that can be easily stored. Information is a

more factual data, while knowledge represents a belief which influences possible courses of action (Stenmark, 2002).

Knowledge management can be defined as the set of activities involved in discovering, capturing, sharing, and applying knowledge to enhance, in a cost-effective fashion, the impact of knowledge on the unit's goal achievement (Beccerra-Fernandez and Sabherwal, 2010). The role of knowledge management is to allow an organization to leverage its information resources and knowledge assets by remembering and applying experience (Watson, 2003). The goal is to improve managing internal knowledge processes so all information needed for corporate decisions can be available and efficiently used (Parker and Nitse, 2006).

Knowledge assets are the result of the effects of emerging knowledge activities; the knowledge is used by the others and not only by the author (Alavi and Leidner, 2001).

2.2 The knowledge-based organizations

Drucker (1998) noted a new organizational form which he named the information-oriented organization. Features of this organization include building of common social and cognitive relations between employees, who have influenced sharing information unrestrictedly across the organization. The result of those relations could be seen in creating knowledge as the added value. Nonaka (1998) highlights the importance of rapid response to customer needs, creation of new markets and innovative products. The author claims that creating knowledge is not merely a matter of processing objective information. The point is that creating new knowledge depends on exploiting tacit knowledge or tacit and often subjective knowledge of each employee within the organization. The higher rates of implementing information technology increased importance of techno-social interactions. The effect is visible in decreasing of hierarchical relations. The organizational relations become flatter (Nonaka and Takeuchi, 1995).

Sveiby (1997) and Gummesson (2000) described the knowledge-based organization as an organization which operations are based on no standardized production, service and problem solving, inspired by implementation of new approaches and solutions. The high degree of individuality, independence and integrity of professionals is highlighted. Sveiby (2001) believes that strategic factors for creating knowledge-based organization are intellectual capital and intangible assets.

Zack (2003) said that most of what organizations produce has hidden assets of the organization. He defined invisible assets as knowledge about what the organization produces, how an organization is organized, and for what reasons. The same author defines knowledge-based organizations by their process, place, purpose and perspective, which will be discussed briefly:

- *Process.* This includes application of existing knowledge and creation of knowledge. Knowledge sharing within an organization provides: benefit based on past knowledge, increase teamwork create new knowledge and emerge opportunities for experimentation and learning.
- *Place.* The knowledge-based organization, people and supporting resources are creating and applying knowledge by continued interaction. The organization is seeking for knowledge wherever and connects with anyone who can help it to learn.

- *Purpose.* The organization should establish a corporate culture that will enable sharing, exploitation and use of internal organizational knowledge in everyday business. To ensure performing of these processes an organization uses IT and web technology. The knowledge-based organization focuses on who needs to work with whom instead for whom.
- *Perspective.* The organization is holding its knowledge-oriented image regardless of the service or a product that is provided by it. Knowledge and learning are the primary criteria for evaluating work organization, location, relationships with customers. It is what, and how it learns from the customers. The cost of learning is an investment, not expensive.

Mahesh and Suresh (2009) and Gummesson (2000) identified three types of knowledge-based organizations, based on a knowledge perspective.

The first type includes manufacturing organizations, which have been involved in their structure only through some knowledge-intensive functions. Knowledge intensive work is limited to individual parts of the organization like R&D departments. A narrow group of employees is tied to creating knowledge-based decisions and create a value-added chain within this context. Cognitive and social distances are lower among the employees in departments and higher at the entire level of organization.

Consulting firms, legal firms and pure-play technology organizations belong to the group of organizations where knowledge often constitutes a major part of the output, and the value chain depends on the ability of processing specialist knowledge of employees in the company. Social and cognitive distance is smaller in all parts of the organization.

The third group consists of organizations with information and communication technology and consumer packaged goods. It refers to organizations with a diverse business network, producing and marketing a wide range of customized business and technology products and services. These organizations depend on high technology and innovation, which are leading to perceptive distance between the middle and the bottom level hierarchy of organizations. There is a stronger cognitive relationship between middle and top management. The consequences are visible in slower responses to market conditions. It is impossible to quick pass measures throughout the hierarchy of the organization. This has led to problems in achieving to set goals of management at the business process level and the transfer of responses of organizational changes from the lower level to a higher management level.

As it can be seen from the definitions of knowledge-based organization by the different authors, they define the organization according to the forms of business. On the contrary, the Eurostat defines knowledge-based organization according to the activity. Its definition includes high-tech manufacturing and communications, knowledge service sector, health services and education (Eurostat, 2011).

3. Challenges of the social media in knowledge-based organizations

Online platforms got a large push in 2004, when Facebook announced: "We give people the power to share and make the world more open and connected" (Lin *et al.*, 2011). During this period, a new form of social media has formed, Twitter, which currently has a billion registered users who generate 175 million short messages (called tweets) daily. Use of social media is growing constantly, and people and organizations use

them for self-promotion, distribution and the exchange of information. In addition, through social media, users express their opinions, criticisms and compliments and straight communication (Andre *et al.*, 2012).

Knowledge-based organizations build awareness of the importance of information and knowledge about their business performance. They achieve effectiveness through the constant search for networks and channels across they could create, store, integrate, tailor, share, and make available accurate knowledge to the exact people at the right time (Table I).

Social media provides better opportunities for knowledge-based organizations to acquire strategic priority positions, which also enhances the benefits from the usage of any other previously developed information technology (Porter, 2001). However, a crucial issue exposed is how to use the web in a way that will influence an increase in economic value. Porter exposed two factors that determine profitability: industry structure and sustainable competitive advantage; universal factors which relate to any form of technology or business. Their effectiveness varies from organization to organization and from industry to industry due to a number of factors. Social media has a significant impact on business development and also in nurturing two influential business relations: business to customer (B2C) and business to business (B2B). Thus, social media has gained an important influence in organizational performance and implicitly influence profitability, which, however, vary across different individual organizations and/or industries. The expansion of online portals and blogs is increasing the quality and quantity of communication among "Web 2.0" users, which are in many cases also potential customers. Such communication is often rich in opinions on the quality of products or services (Weinberg and Pehlivan, 2011).

Social media enables the creation of new forms of connections and contributes to the maintenance of social networks. In the last few years, social media has become an important source of knowledge and enables the creation of the content value chain. This is achieved by linking complementary organizations and respective organizations with their distributors and customers (von Krogh, 2012). Progress and development of "Web 2.0" and consequently, social media has an enormous impact on the evolutionary changes in social, economic and cultural fields (du Rausas *et al.*, 2011). A capacity to adapt is conditional with changes in organizational behaviour such as with the initiation and adaptation of technological innovations (Smit and Wandel, 2006). It has previously never been possible to share mutual information and knowledge so quickly on a global scale. Social media allows instant transfers of video and picture material,

Table I.
Differences between traditional and social media-based knowledge processes

Traditional knowledge processes	Social media-based knowledge processes
Documents based knowledge that is accessible via local intranet, CRM and it is saved in local servers that are storage in organization	Documents and information are accessed and storage via social media data centres that are in ownership of authors of social media platforms like Facebook or Google
Local, time and personal limited access	Business or private content are publicly available on any: device, place and time
An organization limited networking; information share and discussed via email or intranet	Social media allows discussions within the matter of content. Networking provides unlimited direct relations between a supplier and the demand side

as well as maintaining blogs (Mangold and Faulds, 2009). This gives rise to the joint efforts of the public, resulting in a new, often freely accessible database of information and knowledge. The design and structure of social media links the development of digital media technologies (e.g. digital signage) and the decline in prices increasingly facilitate the transfer of information on events in ways not previously possible (e.g. corporate television, video portals). In addition, social networks are growing in different environments and strongly influence the changes in society, technology and business practice (Evans, 2008).

The social media has influenced the development of relations between customers (C2C), which has a significant relationship to the creation of customer perception of the quality of the brand or organization's reputation. How relations between customers influence organization's reputations could has been seen in the case of Nestle, which in 2010 found itself in a smear campaign, which was held through social media. Through an advertisement on YouTube, Greenpeace attacked Nestle for using palm oil from Indonesian supplier Sinar Mas, which was said to operate unsustainably. This oil has been used in the products of the brand Kit Kat.

The video showed a bored worker bite off a finger of Kit Kat that turns out to be the bloody digit of an orang-utan, one of many species threatened by unsustainable forest clearing for palm oil.

In the first-phase, Nestle demanded withdrawal of the video from YouTube because of copyright violation. This action led to a viral outbreak of criticism on Facebook, where its users launched a page with Kit Kat's logo altered to read "Killer." Action against Nestle then extended to all global mainstream media. Greenpeace thereafter posted the video on Vimeo, where it had 78,500 views within hours. Nestle was forced immediately to limit the damage and for this purpose adjust its approach. They changed suppliers of palm oil and began to choose only organizations that follow the production in accordance with the policy of sustainable development. They hired another international environmental non-governmental organization for informing the public awareness of the importance of sustainable policy.

In 2011, Nestle began to change marketing and communication strategy. In early 2012, the company established a "digital acceleration team" as part of efforts to Nestle 24-hour control over the content of social media. When a problem is detected, the team immediately set up a connection between the organization and relevant parties such as suppliers, campaigners, governments and consumers. Nestle's digital acceleration centre has the goal to teach the organization's executives all over the world about managing social media communications and digital marketing (Somers-Ionescu and Enders, 2012).

Customers prefer to get information from friends, and on from other personal contacts (Susskind, 2002). Knowledge-based organizations should be aware that the customers, as users of internet tools, are becoming the new marketers with extensive opinion-leading talks about the brand (Brown, 2010), with viral marketing as an increasingly important marketing tool for the organization (Kaplan and Haenlein, 2010; Ferguson, 2008). Viral marketing develops the triadic relationship between, organization, customer and the community, as a result of customer exchange of messages, based on similar personal characteristics and needs (Palmer and Lewis-Koenig, 2009). Leskovec *et al.* (2008) consider that the development and formation of social media causes an erosion of reading of classic media. This has led

to a reduction in the effectiveness of organizations' advertisements in traditional media, which in turns increases organizations' interest in social media.

Social networking allow not only access, transfer and sharing of knowledge, but also the creation of relationships between users as new components communicate with each other. The potential added value of social communication channels is in the anticipation of the quality and safe access of knowledge for both individuals and the organization (O'Dell and Hubert, 2011).

Relationships that arise in social networks between individuals allow them to weave closer ties, while in the same time individuals discover behaviour characteristics of each other. This leads to the growth of the importance of interactions on a personal and business level. Vice versa, it is necessary to be aware of the danger posed by the communication and sharing of personal information such as sensitive business content to strangers via social media.

In a time of high competition, organizations are just waiting for an occasion when they can get useful information about the individuals who work for competing companies or information on the development of new products and services. A well known case happened to Apple in 2010, when a development engineer lost a prototype of an iPhone. The finder of the prototype sold it to the technological blog Gizmodo, which then posted on the blog a record of the forthcoming model. The record of the upcoming model and its photo was in one hour visited by more than a million visitors (Helft and Bilton, 2010).

von Krogh (2012) points out that the social media leads is not necessarily discussed within the context of the knowledge management, but within the context of enabling access to knowledge. Social media does not require expensive and complex technical implementations, but it impacts organizational culture changes and adaptation of knowledge processes (Figure 1) (Chui *et al.*, 2009).

Sustainable development and increased uncertainty in the business environment are forcing companies to inflict a constant reconstruction of a comprehensive infrastructure, as a strategic goal. This renewal is based on a more flexible organizational structure (internal environment) including the introduction of modern technologies for the implementation of relationship marketing and renovation of the technological innovations (Antonelli, 2003; Kaplan and Mikes, 2012).

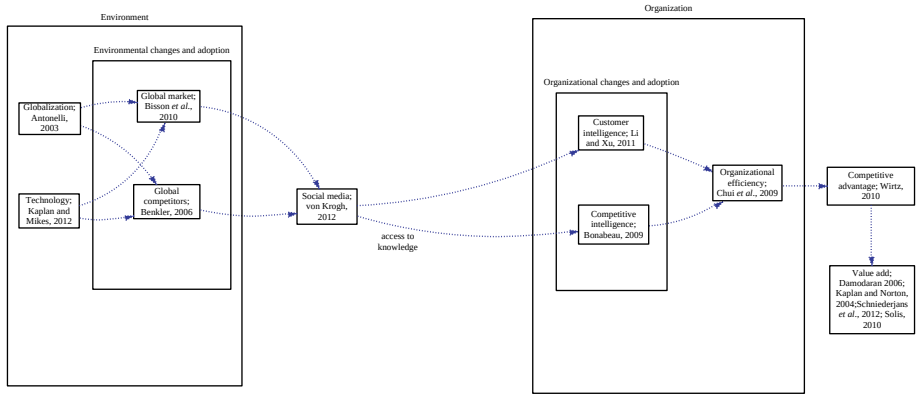

Figure 1.
Social media and its environment

The organization has to take into account external processes that have an influence on knowledge management processes and creation of know-how. An organization has to establish a policy for customer intelligence and suppliers and develop a marketing strategy that provides market positioning and design of brand loyalty (Li *et al.*, 2011). These resources constitute social capital, which occurs in two forms: as an internal adhesive to create the organizational culture or as external agent relationships (Bonabeau, 2009). The financial result is shown to increase the return on investment (ROI) of social media compared to classic media. Consequently, the increase of the financial and non-financial performance is leading to higher added value in knowledge-based companies (Wirtz *et al.*, 2010). Schniederjans *et al.* (2012) found in their study that ingratiation, intimidation, organizational promotion and supplication are social media impression management strategies that are significantly related to financial performance, while exemplification is not.

Conventional concepts and methods of measuring business performance are not appropriate for the assessment and measurement of intellectual capital as it relates to the intangible or difficult measurable property of the organization. As opposed to the traditional method of measuring past performance of the organization, intellectual capital presents the future value of an organization measured by the increase in market value in the future (Damodaran, 2006). Kaplan and Norton (2004) stress the importance of indicators that measure human, information and organizational capital within the concept of a balanced system. They point to the strategic importance of the measurement of intangible assets, which should get the right place within the overall business strategy. Based on such measurement, organizations receive a response or evaluation of the level of success of its operations.

Knowledge-based organizations have to be aware that successful social interaction in which information is exchanged between unknown people should be based on trust. Each social media user as a member of online communities is sharing information, and has the responsibility to evaluate the quality of content before transfer it (Kim and Ahmad, 2012). The authors proposed use of trust models that takes on the role of distinguishing among the users. The model presumes that customers are informed and so, known to which provider of information they can trust. Organizations can only publish a retaliatory explanation later and try to decrease potential damage to their image.

Knowledge-based organizations can invest in developing their own social media platform, which could be the way of informing the customers about organization's strategy and getting ideas for product or service development from them (Fuchs and Schreier, 2011).

4. Social media value added model

Construction of a model depends on the content and purpose of using the primary and support activities. Figure 2 represents a social media value added model including social media and its processes as the system that allows organization access to the knowledge.

Social media enable an organization to manage knowledge and to embed external knowledge inside its internal processes by sharing and exchanging knowledge with the external environment, by using specific information based on customer behaviour on the web (e.g. usage of specific information in the form of file hosting and delivery),

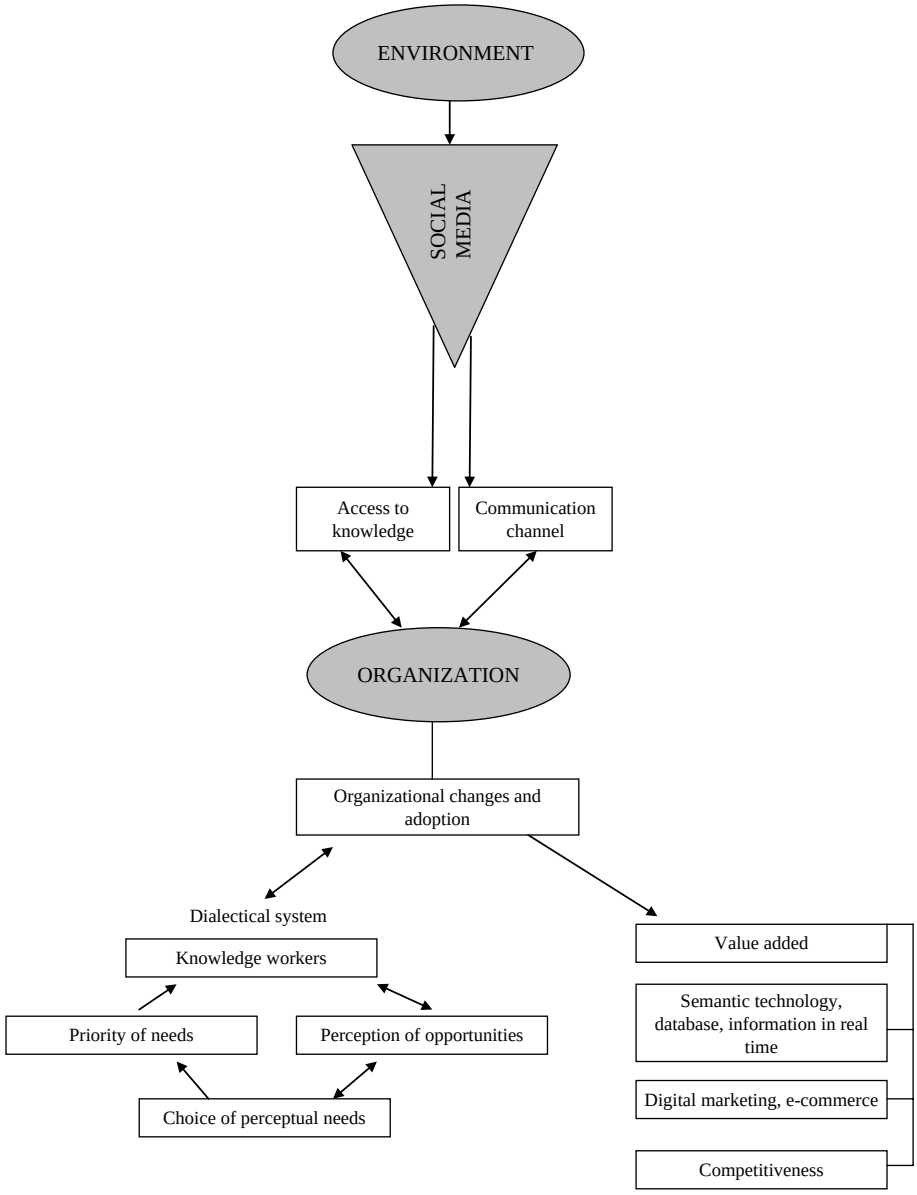

Figure 2.
Model of the impact of social media to the value added of the knowledge-based organization's

discussion on different types of Web 2.0 services. All the information gathered through social media channels can be additionally explored by using data mining (von Krogh, 2012). This framework of knowledge management processes in an organization is managed by the knowledge workers based on the dialectical model. Mulej *et al.* (2006) indicate that an individual with his usual insufficient and at the same time inevitable specialization is not sufficient to transition the necessary integrity. To achieve effective

decision-making, successful actions are required with the goal to increase cooperation of organizations with its environment. Integrity of exceptional circumstances is only achievable in an interdisciplinary collaboration between individuals, which are complementary through their peer differences.

The present authors have applied the dialectical systems theory proposed by Božičnik and Mulej (2011) and Mulej and Potocan (2007) to the context of knowledge management processes. If applied in organizations, dialectical systems theory allows knowledge workers, assuming adequate breadth and depth of observation, perception, thinking, emotional and spiritual life, to decide and implement action. The law of entropy points the importance of knowledge workers who strive for continuous innovation. The law of hierarchy of sequence and interdependence points out, that it is necessary to define the meaning of defining business objectives. Knowledge, skills and values are subjective parts of the platform of goal's realization. All these specifications are expressed in the form of information that should be provided as a universal, meaningful and useful.

The implementation of social media has an impact on increasing added value. These theses are explained below on the knowledge value chain theory.

4.1 Role of the knowledge value chain in knowledge-based organization

A value chain represents a key source of competitive advantage. Porter (1985) highlighted that cost advantages, and successful differentiations are tracked more effectively by considering the chain of activities that organization performs with the goal to deliver value to its customers.

The weakness of Porter's value chain model is that it is unsuitable for use in all types of organizations. Ching and Yang (2000) developed a knowledge value chain model based on the Porter's value. Ching and Yang's value chain divides the knowledge management activities into knowledge management process and knowledge management infrastructure. The knowledge management process involves the identification of needed skills, sharing knowledge, creating new knowledge, and cataloguing current organizational knowledge (Mellor, 2001). Such a process should also be able to provide constant opportunities to refresh existing knowledge in order to be up-to-date on a day-to-day basis.

Knowledge is already seen as the key factor of a sustainable competitive advantage in the new economy. An organization needs to develop an organizational culture to raise the level of awareness of employees to create and share knowledge as the basic concept of business, allowing further growth of the organization. An organizational culture based on sharing knowledge, providing opportunities for developing knowledge management processes, which are closely associated with creating added value, is essential (Garwin, 1998; Othman and Sheehan, 2011).

The organization has to establish a policy to customer relationship management (CRM) and suppliers develop a marketing strategy that provides market positioning and design of brand loyalty. These resources influence social capital, which occurs in two forms: as an internal adhesive to create the organizational culture or as an external agent relationship. Keeping these two forms of social capital requires different approaches (Nahapiet and Sumantra, 1998).

Social media has become an important source of knowledge and enable the creation of the value chain content. This is achieved by linking complementary organizations and respective organizations with their distributors and customers (Nahapiet and Sumantra, 1998; von Krogh, 2012).

The purpose of networking between organizations is the tendency to develop and implement technology solutions and processes that will increase the organizational added value and bring added value to the customer in the form of utility value. Linked organizations that set up the value chain had to reach decisions on strategies to increase the added value (e.g. takeover, accumulation and divestment) with a consensus with partners. For successful participation to occur in the value chain, organizations have to identify common goals, be complementary and trust each other (Moeller, 2010).

Knowledge that is transmitted through social media favourably will impact the added value provided by the information delivered to the customer, that should be at any moment of sound quality, accuracy and up-to-date. The increase in the effective implementation of spreading information via the social media (Facebook, Twitter, YouTube, proprietary platforms), increase disseminating information on the advertised products and services.

Organizations must ensure that the flow of information through social media is properly secured, and that they will not lose their knowledge (von Krogh, 2012). With such policy, the use of social media in marketing communication in knowledge-based industry will increase the reliability of the information and the general perception of loyalty to the brand and the organization's good name. This will increase the ROI of social media compared with classical media (Hoffman and Fodor, 2011). Thus, this will lead to higher added value in knowledge-based organizations.

Cost-effectiveness and successful differentiation are important components of the chain in performing organizations that bring value to customers. In the internet age, the value chain has become a basic tool for understanding the impact of information technology on business. The companies start to integrate the value chain and entire value, which includes suppliers, distribution channels and consumers. This leads to the value network that represents a composite set of social and technical resources (Turban and Volonino, 2011). Development of new technologies to further product development or integration services and exchange of complex models among partners and consumers, which build on the exchange of information through social media. The show began after the onset of the need for identifying the impact of social software solutions for knowledge management and finding out the value of knowledge in companies (intangible or financial value) (Baird and Parasnis, 2011).

The organization must be able to transform the intangible assets to increase sales, increase margins and free reorganization of personnel resources, so they are properly and fully used.

5. Conclusions

In the new economy the social media emerging have a strong influence on the development of modern communication and socializing forms. With expanded social media during the innovative economy there have been qualitative leaps in the communication and transmission of information.

Social media has changed the focus on knowledge management from managing the knowledge to providing the access to knowledge (von Krogh, 2012).

An inexpensive media campaign using social media reaches a relatively large volume of potential consumers, at any time of day, and has a higher ROI than with traditional media. So, it created a higher value added to organizations.

Organizations should be aware of the risks that they are exposed because of social media technology features. Social media allows access to data and video information to a broad range of potential consumers. The proper marketing communication strategy using social media allows both a permanent presence in the IT ecosystem and quick responses to any negative responses to the public.

Organizations have begun to recognize the added value and a threat of social media and have begun to set up departments for policy making, management and supervision of social media.

References

Alavi, M. and Leidner, E.D. (2001), "Review knowledge management and knowledge management systems: conceptual foundations and research issues", *MIS Quaterly*, Vol. 25 No. 1, pp. 107-136.

Andre, P., Bernstein, M. and Luther, K. (2012), "What makes a great tweet?", *Harvard Business Review*, Vol. 90 No. 5, pp. 36-37.

Antonelli, C. (2003), *The Economics of Innovation, New Technologies, and Structural Change*, Routledge, London.

Baird, H.C. and Parasnis, G. (2011), "From social media to social customer relationship management", *Strategy and Leadership*, Vol. 30 No. 5, pp. 30-37.

Beccerra-Fernandez, I. and Sabherwal, R. (2010), *Knowledge Management: Systems and Processes*, M.E. Sharpe, Cop., London.

Bonabeau, E. (2009), "Decisions 2.0.: the power of collective intelligence", *MIT Sloan Management Review*, Vol. 50 No. 2, pp. 45-52.

Božičnik, S. and Mulej, M. (2011), "A new – 4th order cybernetics and sustainable future", *Kybernetes*, Vol. 40 Nos 5/6, pp. 670-684.

Brown, E. (2010), *Working the Crowd: Social Media Marketing for Business*, British Informatics Society Limited, Swindon.

Ching, C.L. and Yang, J. (2000), "Knowledge value chain", *Journal of Management development*, Vol. 19 No. 9, pp. 783-793.

Chui, M., Miller, A. and Roberts, P.R. (2009), "Six ways to make Web 2.0. work", *The McKinsey Quaterly*, February.

Damodaran, A. (2006), "Damodaran on valuation: security analysis for investment and corporate finance", available at: Http://pages.stern.nyu.edu/~adamodar

Davenport, T.H. and Prusak, L. (2000), *Working Knowledge: How Organisations Manage What They Know*, Harvard Business School Press, Boston, MA.

Dowson, R. (2005), *Developing Knowledge-Based Client Relationships*, 2nd ed., Elsevier, Burlington, VT.

Drucker, P. (1993), *Post-Capitalist Society*, Butterworth-Heinemann, Oxford.

Drucker, P. (1998), "The coming of the new organization", in Drucker, P. (Ed.), *Harvard Business Review on Knowledge Management*, Harvard Business School Press, Boston, MA, pp. 1-19.

du Rausas, P.M., Manyika, J., Hazan, E., Bughin, J., Chui, M. and Said, R. (2011), *Internet Matters: The Net's Smpact on Growth, Jobs, and Prosperity*, McKinsey Global Institute, available at: www. Mckinsey.com/mgi (accessed 28 January 2013).

Easteby-Smith, M., Thorpe, R. and Lowe, A. (2002), *Management Research*, Sage, London.

Eurostat (2011), *Science, Technology and Innovation in Europe*, Publications Office of the European Union, Luxembourg.

Evans, D. (2008), *Social Media Marketing: An Hour a Day*, Wiley, Indianapolis, IN.

Ferguson, R. (2008), "Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing", *Journal of Consumer Marketing*, Vol. 25 No. 3, pp. 179-182.

Fuchs, C. and Schreier, M. (2011), "Customer empowerment in new product development", *Journal of Product Innovation Management*, Vol. 28 No. 1, pp. 17-32.

Garwin, C. (1998), "Building a learning organisation", in Drucker, P. (Ed.), *Harvard Business Review on Knowledge Management*, Harvard Business School, Boston, MA, pp. 47-80.

Gummesson, E. (2000), *Qualitattive Methods in Management Research*, 2nd ed., Sage, Thousand Oaks, CA.

Handzic, M. (2009), "Evaluating knowledge management's effectiveness for decision support: preliminary results", in King, R.W. (Ed.), *Knowledge Management and Organizational Learning*, Springer, New York, NY, pp. 237-252.

Hanna, R., Rohm, A. and Crittenden, L.V. (2011), "We are all connected: the power of the social media ecosystem", *Business Horizons*, No. 54, pp. 265-273.

Helft, M. and Bilton, N. (2010), "For Apple, lost iPhone is a big deal", *New York Times*, April 10.

Hoffman, L.D. and Fodor, M. (2011), "Can you measure the ROI of your social media Trenje?", *MIT Sloan Managament Review*, Vol. 52 No. 1, pp. 41-49.

Kaplan, M.A. and Haenlein, M. (2010), "Users of the world, unite! The challenges and opportunities of social media", *Business Horizons*, Vol. 53, pp. 59-68.

Kaplan, R.S. and Norton, P.D. (2004), "Measuring the strategic readiness of intangible assets", *Harvard Business Review*, Vol. 82 No. 2, pp. 52-63.

Kaplan, S.R. and Mikes, A. (2012), "Managing risks: a new framework", *Harvard Business Review*, Vol. 90 No. 6, pp. 49-60.

Kietzmann, H.J., Hermkens, K., McCarthy, P.I. and Silvestre, S.B. (2011), "Social media? Get serious! Understanding the functional building blocks of social media", *Business Horizons*, Vol. 54 No. 54, pp. 241-251.

Kim, A.Y. and Ahmad, A.M. (2012), "Trust, distrust and lack of confidence of users in online social media-sharing communities", *Knowledge-Based Systems*, available at: http://dx.doi.org/10.1016/j.knosys.2012.09.002

Leskovec, J., Adamic, L.A. and Huberman, B.A. (2008), *The Dynamics of Viral Marketing*, available at: http://arxiv.org/pdf/physics/0509039.pdf (accessed 5 December 2012).

Li, M.B., Xie, S.Q. and Xu, X. (2011), "Recent development of knowledge-based systems, methods and tools for one-of-a-kind production", *Knowledge-Based Systems*, Vol. 24 No. 7, pp. 1108-1119.

Lin, D., Greissler, P., Ehrlich, S. and Shoop, E. (2011), "IDEA: a framework for a knowledge-based enterprise 2.0.", *Journal of Universal Computer Science*, Vol. 17 No. 4, pp. 515-531.

Mahesh, K. and Suresh, K.J. (2009), "Knowledge criteria for organization design", *Journal of Knowledge Management*, Vol. 13 No. 4, pp. 41-51.

Mangold, G.W. and Faulds, J.D. (2009), "Social media: the new hybrid element of the promotion mix", *Business Horizons*, Vol. 52, p. 357.

Mellor, R.B. (2001), *Knowledge Management and Information Systems: Strategies for Growing Organizations*, Palgrave Macmillan, New York, NY.

Moeller, K. (2010), "Partner selection, partner behavior, and business network performance: an empirical study of German business networks", *Journal of Accounting and Organizational Change*, Vol. 6 No. 1, pp. 27-51.

Mulej, M. and Potocan, V. (2007), "Requisite holism – precondition of reliable business information", *Kybernetes*, Vol. 36 Nos 3/4, pp. 319-332.

Mulej, M., Kajzer, S., Potocan, V., Rosi, B. and Riedl-Knez, J. (2006), "Interdependence of systems theories – potential innovation supporting inovation", *Kybernetes*, Vol. 35 Nos 7/8, pp. 942-954.

Nahapiet, J. and Sumantra, G. (1998), "Social capital, intellectual capital and the organizational advantage", *Academy of Management Review*, Vol. 23 No. 2, pp. 242-266.

Nonaka, I. (1998), "The knowledge-creating company", *Harvard Business Review on Knowledge Management*, Harvard Business School Press, Boston, MA, pp. 21-46.

Nonaka, I. and Takeuchi, H. (1995), *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, Oxford University Press, Oxford.

O'Dell, C. and Hubert, C. (2011), *The New Edge in Knowledge: How Knowledge Management is Changing the Way We Do Business*, Wiley, Hoboken, NJ.

Othman, R. and Sheehan, T.N. (2011), "Value cration logics and resource management: a review", *Journal of Strategy and Management*, Vol. 4 No. 1, pp. 5-24.

Palmer, A. and Lewis-Koenig, N. (2009), "An experiential, social network-based approach to direct marketing", *Direct Marketing*, Vol. 3 No. 3, pp. 162-176.

Parker, R.K. and Nitse, S.P. (2006), "Competitive inteligence gathering", in Schwartz, D.G. (Ed.), *Encyclopedia of Knowledge Management*, Idea Group, London, pp. 44-50.

Porter, E.M. (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, The Free Press, New York, NY.

Porter, E.M. (2001), "Strategy and the internet", *Harvard Business Review*, Vol. 79 No. 3, pp. 62-78.

Rowley, J. (1999), "What is knowledge management?", *Library Management*, Vol. 20 No. 8, pp. 416-419.

Schniederjans, D., Cao, S.E. and Schniederjans, M. (2012), "Enhancing financial performance with social media: an impression management perspective", *Decision Support Systems*, available at: doi: 10.1016/j.dss.2012.12.027 (accessed 14 January 2013).

Smit, B. and Wandel, J. (2006), "Adaptation, adaptive capacity and vulnerability", *Global Environmental Change*, Vol. 16, pp. 282-292.

Solis, B. (2010), *Engage! The Complete Guide for Brands and Businesses to Build, Cultivate, and Measure Success in the New Web*, Wiley, Hoboken, NJ.

Somers-Ionescu, A. and Enders, A. (2012), "How Nestle dealt with a social campaign against it", *Financial Time*, available at: www.ft.com/cms/s/0/90dbff8a-3aea-11e2-b3f0-00144feabdc0.html (accessed 7 December 2012).

Stenmark, D. (2002), "Information vs knowledge: the role of intranets in knowledge management", *System Sciences*, pp. 928-937, IEEE, Wailuku.

Susskind, A.M. (2002), "I told you so! Restaurants's customers word-of-mouth communication patterns", *Cornell Hospitality Quarterly*, Vol. 43 No. 2, pp. 75-85.

Sveiby, E.K. (1997), *New Organizational Wealth: Managing and Measuring Knowledge Based Assets*, Berrett-Koehler, San Francisco, CA.

Sveiby, E.K. (2001), "A knowledge based theory of the firm to guide in strategy formulation", *Journal of Intellectual Capital*, Vol. 2 No. 4, pp. 344-358.

Tennis, J.T. (2008), "Epistemology, theory and methodology in knowledge organization: toward a classification, metatheory, and research framework", *Knowledge Organization*, Vol. 35 Nos 2/3, pp. 102-112.

Thierauf, R.J. and Hoctor, J.J. (2006), *Optimal Knowledge Management: Wisdom Management Systems Concepts and Applications*, Idea Group, London.

Turban, E. and Volonino, L. (2011), *Information Technology for Management: Improving Strategic and Operational Performance*, 8th ed., Wiley, Hoboken, NJ.

von Krogh, G. (2012), "How does social software change knowledge management? Toward a strategic research agenda", *Journal of Strategy Information Systems*, Vol. 21 No. 2, pp. 154-164.

Watson, I. (2003), *Applying Knowledge Management: Techniques for Building Corporate Memories*, Elsevier Science, San Francisco, CA.

Weinberg, D.B. and Pehlivan, E. (2011), "Social spending: managing the social media mix", *Business Horizons*, No. 54, pp. 275-282.

Wirtz, W.B., Schilke, O. and Ullrich, S. (2010), "Implications of the Web 2.0. for creating value on the internet", *Longe Range Planning*, Vol. 43, pp. 272-290.

Zack, H.M. (2003), "Rethinking the knowledge-based organization", *MIT Sloan Management Review*, Vol. 44 No. 4, pp. 67-71.

About the authors

Vasja Roblek, MSc, is a PhD student and Teaching/Research Assistant at the Faculty of Management, University of Primorska, Koper, Slovenia. He completed his Bachelor's studies in Banking at the Faculty of Economics, University of Ljubljana and finished his Master of Science study at the Faculty of Management, University of Primorska. His main research includes business networking, qualitative methodology, strategic management and social media. Vasja Roblek is the corresponding author and can be contacted at: vasja.roblek@gmail.com

Mirjana Pejič Bach, PhD, is a Full Professor of System Dynamics, Managerial Simulation Games and Data Mining in the Department of Informatics, Faculty of Economics and Business, University of Zagreb. Her current research areas are simulation modelling, data mining and web content research. She is the (co) author of number of articles in international and national journals. She is actively engaged in number of scientific projects (FP7, Grundtvig, bilateral cooperations, national projects) and also collaborates in several applied projects in the field of data mining, simulation modelling and informatization.

Maja Meško, PhD, is an Assistant Professor at the Faculty of Management, University of Primorska, Koper, Slovenia. She completed her Bachelor's studies in Psychology at the Faculty of Arts in Ljubljana and finished her Doctoral study of Kinesiology at the Faculty of Sports, University of Ljubljana. Her main teaching and research areas include human resource management, psychology in management, organizational culture, aviation, health and sport psychology, where she authored or co-authored various scientific papers.

Andrej Bertoncelj, PhD, is a Full Research Professor and Associate Dean at the Faculty of Management, University of Primorska, Koper, Slovenia. His current interests include business models, corporate alliances and globalization trends. He has published several scientific papers in international journals and his book on corporate alliances is translated in four languages.