Social Networks as a Source of New Value

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Abstract	*In recent years, new business solutions have appeared based on creative ideas and the ability to use multi-channel communication with clients. Social networks are now not only a necessary complement to communication, but also a source of specific value and inspiration for new methods of obtaining market information. Commercial companies are increasingly recognizing the importance of social networking sites. These companies use these sites for marketing and promotional purposes, as well as to build the image of the organization. This paper presents select aspects of creativity in the digital economy. The purpose of this article is to indicate the sources of creativity in social networks, the social impact of these creative solutions and how they affect the functioning of the economy.*
Key words	Market information, social networks, virtual environment, knowledge

1. Introduction

The dynamic development of innovative information technologies and their impact on the changes occurring in civilization, as well as the development of an information society, confirms the important role of information and the technology and devices necessary for processing and transmitting it. The condition for effectiveness in the communication process is the transformation of knowledge, meaning its adaption to individual needs.

The increasingly competitive conditions in which market players must function require them to continuously update their knowledge and implement modern solutions in the field of communication. Today, the appropriate use of information technology can greatly reduce the cost of production or services and increase profitability (Budziewicz-Guźlecka 2013, p 106).

The prerequisite for an effective communication process is the bidirectional flow of information and the extent to which the original objectives are achieved and the sender's intentions understood. These depend on how the message was perceived and interpreted – which is not always consistent with what the sender intended – and is the result of taking certain decisions and actions. Innovative tools and applications have contributed significantly to the popularization of promotion and communication in the virtual environment. The scale of the phenomenon, as well as the number of completed transactions are proof that cyberspace has become a new interactive communication medium.

Eurostat statistics (2013) show that development of the information society in Poland is characterized as highly dynamic, but incomparable with what is occurring in other EU countries, such as those of Scandinavia. In 2012, the highest percentage of residents with IT skills were identified among residents of Norway (45%), Denmark (42%), Finland (41%) and Sweden (35%), while in Poland this number amounted to only 18%, in Estonia 32%, Hungary 30% and in Latvia 29% (EU-27 average - 26%). The numbers are different for the youngest age group, as the same survey claims that young Poles do not differ in terms of frequency or ways of using ICT tools from other young Europeans. For example, according to Eurostat in 2010, 94% of Poles in the age group 16-24 years declared using social networking sites, e-mail and chat (EU-27 average - 80%), and 36% make phone calls over the Internet (EU-27 average - 35%).

2. Research Methodology

The aim of the work is to present the importance of ICT in the virtual environment. Attention was paid to the application of social networking and the use of appropriate tools to build an online community around a business, a particular project, brand, product or service. Due to the wide spectrum of ICT tools used in cyberspace, the following analysis was restricted mainly to marketing activities within social networks. The methods used in this work include literature review, using electronic versions of source material, observation and analysis of case studies. The growing popularity of mobile devices and mobile Internet access has caused an increase in mobile services in recent years. The dynamic development of the information society and the steady growth of the digital services sector in Poland mean that there is a great need for theoretical and empirical research in this area.

Elements of virtual reality

The creation of virtual reality occurs primarily through the Internet, but also through extranet and intranet, as well as applications and hardware infrastructure that determine the functionality and usability of technology for users. The Internet is the lifeblood of the modern economy, bringing many development opportunities with it (Drab-Kurowska 2013, p 302).

In the literature, there are also other terms characterizing this multi-component system, such as a network or infomedia environment (Grandys 2000, pp. 67, Maciejewski, 2003, p 39). However, the term that best highlights the aspect of a global environment is the term cyberspace, which is the hallmark of virtual reality, understood as a possible perfect reproduction of the real world with the help of a computer technician. In turn, the concepts of "virtual world" or "virtual reality" are not clearly defined. The original interpretation of the phenomena involved immersing the user in a world that was entirely generated by computer technology, giving the impression of reality. Virtual reality provided an idealized experience created by the computer, with human actions as the determining factor in what was happening in a given environment (Filip 2013).

Heeks focused his research on the analysis of so-called *gold farming*, a new separate industry where massively multiplayer online game (MMOG) players are induced to purchase in-game currency in exchange for money existing in the real world[1]. In turn, Barnes studied the aspect of effectiveness in the use of the virtual environment as a new medium for advertising and using real brands[2]. In addition, a significant contribution to the theory of consumer behavior, purchasing intentions and virtual consumerism in relation to behavioral theory was given by Lehdonvirta (Lehtiniemi et al. 2013).

The impact of the virtual environment on the functioning of the economy and social relations must be considered in the context of the entities and persons benefiting from its potential, because it is they who give cyberspace a specific value and meaning. Choosing components of the virtual environment from the point of view of their performance, usability, functionality and smooth application determines its penetration and popularity among users, which are, broadly defined, market participants (Malachowski 2005, pp. 34-35) .

Mutual relations between members of the virtual environment are characterized by multitasking and interdependence. The speed of the relationship, interactivity and media convergence were among the key features studied. The speed and interactivity of communication in a virtual environment, as well as the details and timeliness of the information communicated, often determines the success of established relationships and transactions. Speed is a competitive advantage, which has undeniable value in virtual space, and allows for an immediate response to customer queries (Dobiegała-Korona, Doligalski 2004, p 18).

Convergence of multi-channel media reaching the receiver, so that particular content be complementary and mutually promoted - has become the hallmark of the fundamental changes that have occurred in the search, collection, processing and transmission of information (Badzińska 2012, p. 84). Technological infrastructure used in a virtual environment allows for the transfer of multimedia information and undoubtedly increases the attractiveness of the environment for many audiences and expands its functionality and usability.

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[1] (accessed: January 20, 2014), [available at http://staffprofiles.humanities.manchester.ac.uk/Profile.aspx?Id=richard.heeks].
[2] (accessed: January 20, 2014), [available at http://business.uea.ac.uk/prof-stuart-barnes].

Aspects of Creativity in Business

In modern economics, the concept of creativity refers to four (interrelated) fields: scientific, cultural, economic and technological. Initially, the concept of information society recognized information, and then knowledge, as the key resources in the economy. In recent years, the most important growth factor is believed to be creativity. Based on this idea, the concept of the economics of creativity was created. It argues that the idea and its skillful implementation is the best source of professional success.

Florida, who has identified the so-called creative class within the economy (Florida 2010, pp. 338-339), argues that there is a positive relationship between the level of creativity and of GDP per capita. Cunningham was convinced that it was necessary to understand the creative economy, not only in the context of culture and its contribution to economic growth, but also extending this idea to how the impact of concentrated knowledge supports innovation and development (Cunningham 2008, p 80).

New technologies and innovations are created in an environment where there is a great diversity of talented and creative professionals (engineers, managers, artists and visionaries). A favorable climate to the flowering of talent and innovation creates a growing creative class, which is characterized by increased tolerance in relation to the environment and other social classes. It is also receptive to new ideas, becoming the accelerator of social, cultural and economic change.

In the earlier stages of the development of information technology, there was no direct access to information or access was very difficult. In the phase of open networks, the sender and the recipient receive tools to enable interactive communication. The opinion of other users plays an important role in the transmission of information in virtual communities. Internet users are often interested in viewing other network users and their experiences.

The findings of a survey conducted among 500 companies in 2010 are quite interesting (Report, 2010). They show that the customer experience gained through a multi-channel relationship with companies is important or very important for 91% of companies surveyed. The main barriers to improving customer experience in multi-channel communication with companies are: the structure of the company (41%), the complexity of the customer experience (38%), problems with customer data integration (34%), lack of resources (33%), lack of financial means (31%) and overall strategy (30%).

It should be added that customers (recipients) often look for information about a particular product on the Internet, and then make a purchase in a traditional distribution channel. According to a 2009 study by Forrester Research, the ability to search for information about products on the Internet increased sales by 42%, both online and traditionally (eMarketer, 2010). A study of customers of popular retail chains offering home electronics / appliances in Poland claim that 64% of respondents sought information on the internet before buying a product (Report, 2008). Other studies conducted among Polish Internet users show that this medium is the main source of information about products for 78% of internet users (Gazeta, 2008).

An important tool to increase involvement in online shopping are recommendation systems. They provide suggestions of products that may interest a customer who has purchased or is reviewing another product. They are created on the basis of available data on the behavior of customers (e.g. transactions), usually using advanced algorithms. The companies that most often use this technology are Amazon.com and Netflix. On the basis of customer behavior, Amazon.com shows other products that customers may be interested in or products bought by other customers who had bought the viewed product. Netflix, an online movie rental service, presents recommendations of films similar to ones that had been rented or viewed by the customer. The effectiveness of these measures is difficult to estimate. There are opinions that this recommendation system generates 20-30% of total sales of the company (Marshall, 2006).

Another important issue is the co-creation of value by customers. This is based on the activities of customers (users) themselves. Perhaps the most famous of this type of initiative is the open source software movement, whose main goal is to open the source code of software; as a consequence, software can be improved by anyone and tailored to individual requirements. Popular solutions belonging to mainstream open source software include the Linux operating system and Open Office spreadsheets.

Co-creation of value goes well beyond the realm of software. An example would be the service Threadless.com, where users can submit projects to be printed on T-shirts. Projects are evaluated by the users of the site. In the case of positive ratings, a design may be used in production, and the author of the project may receive financial compensation.

Social Platforms in the context of creating new value

On the Internet, even small business ventures sometimes gain global recognition as the multitude of potential customers in the virtual environment increases beyond the local market audience. However, social networks cause both parties to be recognizable (this comes from the necessity to possess a personalized account within a social network).

Especially in the case of niche markets, the existence of a local business in a social network specializing in the topic can enlarge the scale of its activities to the size of industries on the global market. This especially applies to luxury goods, for which the recommendation system from other members of the community is very important (peer recommendations). The social network model of e-business combines the multitude of transactions with customer identification, leading to the customization of orders on a mass scale. A space for creative business solutions exists here, covering not only trade in material goods and services, but also in virtual resources. Virtual goods for exchange are offered by producers of social games that imitate the rules and relationships drawn from the real world. The virtual space created within them has a very real and measurable value. Social computer games are an important part of consumption in the virtual world (Seo 2013, p 1542).

Social networks are an environment for the integration of people around certain spheres of activity (for example, ecological, cultural or political), social projects and organizations. Over time, the popularity and importance of social networking sites has been recognized by commercial companies. They use social networking for marketing and promotional purposes, as well as to build the image of the organization (Stopczyńska 2013). Social networks are also a source of information about views and trends in society.

Social networking has created a welcoming space for communication, which is used successfully for various forms of customer interaction. The most important form is the ability to mobilize the community around a created event with the aim of promoting a brand or a specific product. Observation of behavior and preferences of potential consumers and manipulation of consciousness or needs is extremely easy in social networks. Special accounts set up on social networking sites devoted to a brand or product, serve this purpose. The specific brand may be artists, politicians, or socio-cultural projects. Within the framework of social contacts with customers, multimedia forms of communication are applied and the audience is encouraged to develop content. The objective can be either to create a good image in the eyes of consumers, or to use their creative potential to combine awareness of the needs of the individual and environmental trends. The latter seems to change the existing determinants of well-being of the consumer, exchanging quality for quantity (from aspiring to own luxury goods to aspiring to increase the volume of purchases). There remains only one more step for the use of word-of mouth marketing, which within social networking takes the form of a reference network, which causes the unification of purchasing choices.

Social networks are a rich source of new methods of community mobilization and personalization of media messages addressed to individual members (Emmanouilidis, Koutsiamanis, Tasidou 2013). Skillful exploitation of the potential of the creative community can result in a more rapid impact on the customer and his participation in the development of a new product (or service), in a new method of distribution, and possibly, in new forms of services.

Marketing research of a brand or product is extremely comfortable on a social network, and can be directed to the appropriate research group. However, it is important to remember the simple principle that social media are primarily used to communicate with customers, and are not suitable for the role of well-defined leverage funds to be spent on them. This means that it is not possible to determine the size of the impact of the resources invested in social media on financial performance expressed in revenue growth, increased profit or any other indicator of this type. Although the value of economically creative capital in social networks is difficult to measure, it has clear impact on:
- expanding business contacts
- creating good relationships with customers,
- acquiring new customers,
- increasing the credibility of the company / entrepreneur
- better promotion of the brand, product or service (Polańska 2012, p 105).

In terms of social networking, creative capital manifests itself in greater tolerance towards other members of the community (the image constructed in the network is important, not reality) the diversity of

talent (the ease of presenting even the strangest ideas or skills) and mass participation in projects located in the area of the *gift economy*. The idea of a gift is to share ideas for free for the development of culture, science, and social relations (Wassilew 2012, pp. 844-852). The *gift economy* operates where community members voluntarily and without remuneration contribute to the intellectual development of the community, but also hope for similar use of gifts brought by others.

In social networks, the creative class can potentially be all active users (regardless of the nature of the profession practiced) because they all have the ability to create content and comments, participate in the development of ideas and thoughts presented for debate, publish photos, videos, etc.. In practice, social networks have their leaders. Their activeness, involvement in the project, their skills in mobilizing the community, and the amount of prestige they hold in the network determine whether something new, creative and valuable to society will be created by the community.

Institutionalized forms of stimulating creative activity rely on the activation of micro-social network users grouped around public profiles (so-called fan pages) of companies, people or socio-cultural projects. These activities may involve recruiting fans to collaborate on a new product or its testing (crowd sourcing) or on organizing competitions, the point of which are to provide the company with advertising argumentation (word of mouth, viral), as well as recruiting the community to support decisions in the elective process of the business (analysis of trends and buying behavior based on analysis of the electoral campaign preceding the selection, for example, of the color of the product, service options available, the type of packaging used).

The creativity of individual users of a social network relies on the invention of their own virtual identity for the purpose of existing in virtual space, which is then used as a passport all over the Internet. It does not matter whether the basic personal data is real or only an environmental differentiator (nickname, alias). Behind every network personality there is always a concrete person, recognized among their circle of closest friends, who are also its authentication in the community (Polańska 2013, p 20).

The use of specific knowledge of customers is also the essence of *social shopping* sites, which are a combination of social networking and information broker. There are many types of such servers, but the most common functions performed by them are aggregating reviews and ratings of products created by members, matching products on the basis of information from users, and facilitating purchases by displaying a list of stores offering the product. It is worth noting that although the concept of social shopping has become popular in recent years, this idea has been used for much longer. An example might be the online store Amazon.com, which has used the subjective knowledge of their customers in the form of reviews and comments since 1995 (Ante, 2009).

There are also more advanced models that use subjective knowledge of clients. These include market forecasting, with the transaction being the likelihood of a future event. In other words, market participants bet on the result of a specific event in the future. Events subject to the transaction may fall into the category of economic (e.g., the value of the stock index), political (e.g. winning party in the election), science (e.g., inventing a cure for cancer within five years). Users are rewarded for accurate answers in a manner dependent on the specifics of the service (e.g. receiving a greater number of points), while in the case of incorrect predictions, they suffer the consequences (e.g., lose points). The end result of market forecasting is a prediction of a future event, and often its probability. The effectiveness of this type of market, namely its ability to predict accurately, is the subject of many studies, often using complex econometric models (Wolfers, Zitzewitz, 2013).

3. Conclusions

Social media on the Internet play an increasingly important role, not only in building relationships between users, but also in business. Access to new technology allows more and better communication and rapid flow of information. As a result of these processes, a new attitude has appeared among consumers. They are more active, more willing to cooperate in the production process and the creation and distribution of content, becoming prosumers.

Social media are currently the most effective channel of communication between the company and the environment. Furthermore consumers have the opportunity to participate in the process of creating new ideas, solutions and designing innovative products, and above all sharing their knowledge.

The importance of social networks is evident in the case of creative marketing solutions and innovative business ideas. Networks are also absolutely perfect environments for showing generosity to the community, both in the form of expended labor (e.g. the wiki project) and transferring funds (e.g., the financing of social networking).

Social media, with its dynamic development and the involvement of Internet users in the life of virtual communities, has created a huge potential for social enterprises providing collective knowledge to the online community. Thanks to social media, companies gain a tremendous opportunity to reach their customers through interactions occurring within the virtual community, which has been created as a new platform to build relationships with consumers and share information.

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