Prosumers' participation in business processes

Ewa Ziemba, *University of Economics in Katowice, ewa.ziemba@ue.katowice.pl*

Monika Eisenbardt, *University of Economics in Katowice, meisen@ue.katowice.pl*

Abstract

Enterprises of the twenty-first century are facing the challenge of new business models adoptions. One of them is prosumption referring to situations in which consumers collaborate with enterprises to produce things of value. The goal of this research was to identify business processes in which prosumers can participate and support enterprises. The paper consists of three parts. The first part discusses the prosumption theory, an enterprise process model and a framework of processes classification. The second part presents business processes in which prosumers can participate and identifies practical examples of prosumers participation. The third part proposes a conceptual framework of prosumers' participation in business processes. The study concludes with a discussion of the findings, limitations, implications, and avenues for further research.

Keywords: enterprise, prosumer, prosumption, business processes, prosumers' participation, ICTs.

Introduction

Consumer – enterprise relationships undergo continual transformations and changes. These, in turn, are caused by several factors, among which the most significant are: dynamic development of ICTs (Information and Communication Technologies) and generation changes.

ICTs determine the changes in consumption needs and in ways of consumption, they also affect consumers' access to information and knowledge about enterprises and their products. Thanks to ICTs consumers are more aware of the appropriateness of consumption decisions (Taherparvar, Esmaeilpour, & Dostar, 2014; Mróz, 2013), they can compare and assess enterprises, and their products, share their knowledge with enterprises and participate in various projects undertaken by enterprises.

Another essential factor of modern consumption is a generation factor. Entering the market by Generation Y, namely consumers born between 1980 and 1994 (McCrindle, 2014), is an additional reason for changes affecting consumers and consumption. These consumers use ICTs to meet their consumption needs. Moreover, they are more demanding and expect a service based on 7R principle, i.e. right product, right quantity, right condition, right place, right time, right consumer, right price (Sudalaimuthu & Raj, 2009; Ziemba, 2013). Furthermore, consumers are better educated, more sophisticated, inquisitive, critical and creative. They are characterized by social concreteness, speed, freedom, openness, innovativeness, mobility, partnership and collaboration. They perceive the world as a place of creation, not consumption. In addition, they do not wish to be passive consumers only. They want to satisfy their consumption needs through self-design, -reconfiguration or even -production and -distribution of products (Tapscott & Willimas, 2006; Tapscott, 2009).

In general, consumers are increasingly willing to share their knowledge with enterprises and cooperate with them, and impose on them requirements related to services and products. Thanks to this, they can develop their talents and fulfill ambitions simultaneously acquiring products that

meet their expectations and needs. On the other hand, enterprises face the challenge of accounting for consumers' preferences and needs, using their knowledge and pro-activeness, and engaging them in business processes, especially in design, production and promotion of products. These situations appear to blur the traditional roles of 'a producer' and 'a consumer' and are referred to as 'prosumption' (Ziemba, 2013), meaning prosumers collaboration with enterprises in business processes.

A better understanding of how prosumers may participate in business processes is one of the key issues for adopting prosumption in enterprises. Unfortunately, there is a lack of research on prosumers' participation in business processes.

Thus, this research is designed to fill this gap in studies. The goal of this study is to identify business processes in which prosumers can participate in practice and support enterprises. The paper consists of three parts. The first part discusses the prosumption theory, enterprise process model and classification of business processes. The second part presents business processes in which prosumers can participate, indicates possibilities of prosumers' involvement and identifies examples of prosumers' participation in business processes. The third part proposes a conceptual framework of prosumers' participation in business processes. The study concludes with a discussion of the findings, limitations, implications, and avenues for further research.

Theoretical Background

Prosumption

The concept of prosumption has been developing on the basis of consumption theory. It focuses on the role that can be played by pro-active and willing to cooperate consumers, referred to as prosumers, with enterprises.

The term 'prosumer' was coined out of two words: *a producer* and *a consumer,* which indicate that prosumer's characteristics and attributes refer to traits and attributes characterizing both producers (enterprises) and consumers. Indeed, prosumption and prosumers were first mentioned in 1980s (Toffler, 1980), but these concepts have evolved over the years (Dijck, 2009; Humphreys & Grayson, 2008; Izvercianu, Seran, & Buciuman, 2012; Winter, 2012). As a result, modern approach to prosumption differs greatly from Toffler's proposal. Table 1 presents the characteristics of two approaches to prosumption: Toffler's approach and modern approach.

In every-day business practice, there are still examples of prosumption according to Toffler's approach, for example, furniture self-assembly, putting shopping to a trolley in a self-service shop, petrol self-refueling at petrol stations. However, today the knowledge and creativity of prosumers are emphasized. Modern approach to prosumption is connected with the value of prosumers' knowledge and creativity for an enterprise. An enterprise can use them while attaining business goals and, as a consequence, engage prosumers in a business process realization.

Table 1. Nature of prosumption

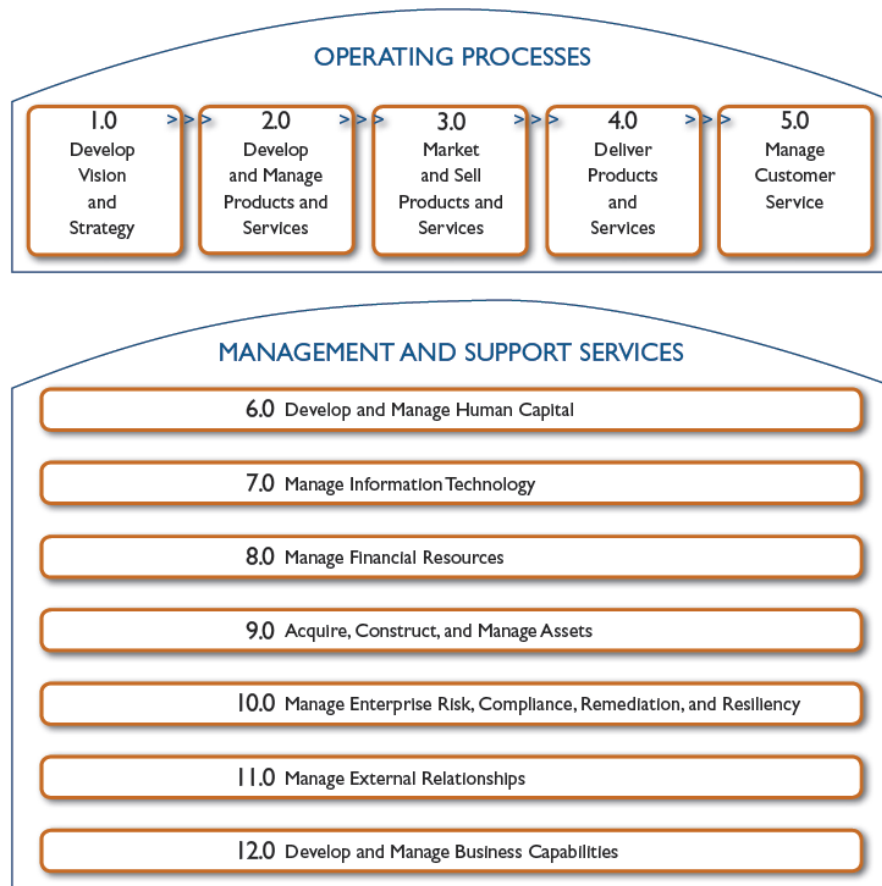| Toffler's approach	Modern approach
Prosumer's role	
Less complex tasks, previously carried out by the enterprise and its employees, are performed by prosumers and for their own use	• Sharing knowledge and experience with enterprise • Participating in enterprise business processes
Prosumer's knowledge	
Essential to such extend as to deal with a particular task – tightly connected with manual skills	Distinguishes a prosumer from other consumers and determines their value for the enterprise – mainly knowledge which is a source of innovative and creative solutions
Prosumer's relationship with enterprise	
Static, based on taking over of less important tasks from employees and performing them themselves	Active, based on collaboration, co-participation, co-design, creation of social networks around the enterprise
Communication with enterprise	
One-way, impeded, most often indirect	Two-way, multi-channel, easy and direct
Outcomes for enterprise	
Delegating simple tasks and activities to prosumers	• Using prosumers' knowledge for achieving business goals • Following prosumers' needs • Establishing relationships with prosumers and prosumer-friendly image of the enterprise • Supporting enterprise business processes by a prosumer

Source: authors' own compilation based on (Arvidsson, 2007; Bylok, 2013; Gustafsson, Kristensson, Löfgren, & Witell, 2011; Izvercianu, Seran, & Buciuman, 2012; Lebiejko, 2011; Prahalad & Krishnan, 2008; Ritzer & Jurgenson, 2010; Tsai, Tsai, Li, & Lin, 2012).

Business processes

Many modern enterprises accomplish business goals by defining and then implementing a business process management model (Durlik, 1998). Enterprises are structuring themselves around their business processes in order to improve their responsiveness to business opportunities and threats, and to adopt integrated software solutions that support the needs of their core business processes (Hammer & Champy, 1993). Davenport & Short (1990), and Armisted & Rowland (1996, p. 35) to define business processes as a set of logically related tasks performed to achieve a defined business outcomes. Business processes are also defined as elements integrating employees of an enterprise, its resources and individuals collaborating with it (e.g. prosumers). The scope of a business process can vary, it can be restricted to a specific department in an enterprise, it may spread over various divisions within an enterprise, or it may trigger internal collaborations within an enterprise. (Leymann, Roller, & Schmidt, 2002). The actual functioning of an enterprise can be defined by focusing on business processes and relationships occurring among them (Ziemba & Obłąk, 2012). Nowadays business processes are a fundamental and critical part of business success (Harmon, 2010; Jetson & Nelis, 2014).

Defining business processes occurring in an enterprise and then creating their classification sets the basis for business process management in an enterprise (Ossowski, 2012). There are many

models and classifications of business processes in the literature, for example: Porter's classification (Porter, 1985), Kaplan's and Cooper's classification (Kaplan & Cooper, 2001), Grajewski's classification (Grajewski, 2012) and congeneric APQC (American Productivity and Quality Center) Process Classification Framework (APQC, 2014). In this study, APQC Process Classification Framework (PCF) was adopted, which is presented in Figure 1.

Figure 1. APQC's Process Classification Framework (APQC, 2014).

The choice of PCF is justified by the fact that this framework is a taxonomy of cross-functional business processes intended to allow for the objective comparison of organizational performance within and among organizations. The PCF sets an open standard to encourage improvement through process management and benchmarking, irrespective of industry, its size, or location (APQC, 2014). The PCF specifies two main categories of business processes: (1) operating (operational) processes and (2) management and support processes, each of which includes process groups, processes and associated activities.

Research Methodology

This study focuses on addressing the following research questions:

RQ1: Which business processes can prosumers participate in?

RQ2: Which business processes do prosumers actually participate in?

Research methods included a critical review of literature, on-line observations, case studies and logical deduction. The following steps were taken:

1. The first step – the literature was reviewed in-depth to explore the concepts of: consumption and consumer, prosumption and prosumer, business processes and business processes classification.

2. The second step – a review of the literature and logical deduction were used to identify business processes in which prosumers can participate.

3. The third step – the actual prosumers' participation in business processes in enterprises was identified, based on on-line observations and case studies. Case studies included: *Bank of Ideas*, *Shoes of Prey, Script Fiesta, Heroes of Might & Magic, University of Arts, PKP Intercity, Streetcom, Wizaz.pl.*

4. The fourth step – based on the results from previous steps and logical deduction a conceptual framework of prosumers' participation in business processes was proposed.

5. The fifth step – based on logical deduction conclusions and recommendations regarding application of prosumption in business processes were formulated.

Research Findings

Business processes in which prosumers can participate

In order to answer the first research question about business processes in which prosumers can participate, the literature review was conducted. According to the literature research findings, prosumption may be adopted (the scope can vary) in the following business processes:

- 1.0 Develop Vision and Strategy;

- 2.0 Develop and Manage Products and Services;

- 3.0 Market and Sell Products and Services;

- 4.0 Deliver Products and Services; and

- 5.0 Manage Customer Service.

In these processes prosumers can mainly participate in (Chao, 2013; Izvercianu, Seran, & Buciuman, 2012; Ritzer & Jurgenson, 2010; Ziemba & Eisenbardt, 2014a):

- Process 2.0 – design and reconfiguration of products;

- Process 3.0 – promotion and marketing campaigns;

- Process 4.0 – improvement and reconfiguration of ordering and order processing; and

- Process 5.0 – design and improvement of customer services.

Prosumers participating in the above processes can satisfy their consumption needs through self-design, -reconfiguration or even -production and -distribution of products. At the same time,

prosumers participate in Process 1.0 and influence enterprise's strategy by sharing knowledge and ideas in the above processes as an enterprise can use their knowledge, ideas in order to plan development and create appropriate image. It is worth to notice that the indicated processes are exclusively operational ones. They are, as Skrzypek & Hofman (2010) assert, the source of value creation for consumers.

Processes in which prosumption is implemented marginally are the following:

- 6.0 Develop and Manage Human Capital;

- 7.0 Manage Information Technology;

- 8.0 Manage Financial Resources;

- 9.0 Acquire, Construct, and Manage Assets;

- 10.0 Manage Enterprise Risk, Compliance, Remediation, and Resiliency;

- 11.0 Manage External Relationships; and

- 12.0 Develop and Manage Business Capabilities.

The marginal implementation of prosumption in these processes comes from the fact that these are managerial processes, in which decisions are made at the board level or by owners of an enterprise. Moreover, an indispensable knowledge in these processes is an internal knowledge of an enterprise, most often confidential and strictly guarded by any enterprise.

Business processes in which prosumers participate in practice

In order to answer the second research question, referring to business processes in which prosumers actually participate, on-line observations were used and case studies on prosumption were identified. The presented case studies indicate ways and ranges of prosumers' participation in business processes, and ways in which prosumers' knowledge is used by enterprises.

Table 2 presents selected examples of prosumers' participation in two operational business processes, i.e. 2.0 *Develop and Manage Products and Services* and 3.0 *Market and Sell Products and Services*.

The examples, presented in Table 2, show different forms of prosumers' participation in two business processes: 2.0 *Develop and Manage Products and Services* and 3.0 *Market and Sell Products and Services*. In each case, prosumers' involvement, knowledge, creativity and ideas contribute to the development of products, and to the promotion of products and of an enterprise. It is worth mentioning that enterprises attempt to involve prosumers in other operational processes, i.e. 1.0 Develop Vision and Strategy, 4.0 Deliver Products and Services and 5.0 Manage Customer Service.

Online Journal of Applied Knowledge Management
A Publication of the International Institute for Applied Knowledge Management

Volume 3, issue 1, 2015

Table 2. Prosumers participation in business processes

Business process	Prosumers participation	Description of prosumers participation in business processes
2.0 Develop and Manage Products and Services	Improvement of bank products on *Bank of Ideas (Bank Pomysłów)* website of Bank Zachodni WBK	On *Bank of Ideas* website bank customers can post their opinions on the products of the bank and submit proposals (projects) of their improvement. So, prosumers: • improve the existing functionalities of bank products; • design new functionalities of current bank products; • improve the quality of bank products; and • adjust the bank products to own expectations and preferences. Prosumers' proposals and projects are evaluated by the employees of the Bank Marketing Department. The best ones are implemented and prosumers receive rewards. Since 2009, 4.890 proposals and projects have been submitted, out of which 634 were implemented, and 19 were at the stage of internal consultations or implementation (as of 2015-01-13).
	Designing shoes in *Shoes of Prey* Shop	On *Shoes of Prey* website it is possible to make own design of shoes, and choose materials and decorative elements from which shoes will be made. So prosumers: • design new shoes according to own ideas and tastes. Subsequently, they can purchase the shoes designed by themselves.
	Designing a concept for a film script of television series – *Script Fiesta* initiative	Warsaw Film School, under the sponsorship of Polish Television Channel Polsat, announced a competition for a concept for a television series. It lasted from December 2014 to February 2015 and consisted of two stages. At the first stage – qualification, concepts for television series were submitted. At the final stage, the winners of the qualification stage presented a screenplay of a series pilot episode. In this case, prosumers: • designed a concept for a television series. Thanks to this prosumers – authors of the series concept could become known in the world of movies.
	Improvement and development of *Heroes of Might & Magic* computer game	The producers of a strategic computer game *Heroes of Might & Magic* provided players with a function of creating own maps. Thanks to this, prosumers-players can: • adjust the game to own expectations and preferences; • improve the game and design its new functionalities through designing new maps; and • create social networks of the game fans. On *Jaskinia Behemota* website, which brings together fans of this game, one can find maps for each of six editions of the game, varying by the level of complexity and size. Prosumers' involvement in map creation is so extensive that the maps available on the website are very often better in terms of quality than those attached to the game by the producer.
	Testing and evaluating products on *Streetcom* portal	Prosumers participate in testing and giving opinions on products. Participation in testing requires registration on the portal website, and then filling in a series of surveys and questionnaires in order to create a tester's profile. Thanks to this, product testing campaigns are more adequately allocated to testers. Their task is to test and try a product and to pass over their opinion on a product in a short report. Prosumers – testers: • test and try products; • propose new functionalities of tested products;

Business process	Prosumers participation	Description of prosumers participation in business processes
		• improve existing functionalities of tested products; • evaluate quality of products; • improve reliability and durability of products; and • improve ease and intuitiveness of product use. A material benefit for a prosumer-tester is receiving free products for testing for oneself and for one's friends.
3.0 Market and Sell Products and Services	Pendolino train promotion campaign run by PKP *Intercity* (Polish rail operator)	From December 2014 to January 2015 prosumers could participate in a promotion campaign of Pendolino trains in Poland. Prosumers were able to: • design and make a promotional gadget of Pendolino train; • participate in the Pendolino's promotional campaign; • create an advertising spot; and • create a social network of PKP Intercity. Prosumers created variety of things, ranging from photographs, short films to songs advertising Pendolino train. Next they posted them on Facebook, on PKP *Intercity* fanpage. The authors of the most interesting ideas received vouchers for a ride on new Pendolino/Express InterCity Premium trains.
	Design of a promotional gift and gadget *University of Arts in Poznań*	The initiative of the Faculty of Sculpture and Space Activities of *University of Arts in Poznań* was aimed at the students and alumni of the university. It lasted from November 2014 to February 2015. The task was to: • design and make a prototype of a promotional gift of the university – to be used as an award or university decoration for exceptional achievements; and • design and make a promotional gadget of the university. The authors of the winning projects received financial rewards.
	Participation in marketing campaigns on *Wizaz.pl* website	*Wizaz.pl* gathers a community (women mainly) interested in the newest fashion and beauty care trends. It is possible to comment on and evaluate beauty products, and vote for the best ones. An interesting initiative of the website is *Kosmetyk Wszechczasów* (Beauty Product of All Times) that allows consumers to choose the best beauty products annually. On Wizaz.pl website prosumers can: • participate in promotional campaigns of beauty products; • evaluate prices of beauty products, mainly price-quality relationship; and • create a social network focusing on beauty care.
	Participation in promotional campaigns on *Streetcom* website	Prosumers' participation in product testing and evaluation, apart from their improvement and development, is also a promotion and marketing activity. Within the framework of product sales and marketing activities, prosumers-testers: • participate in product promotion and marketing campaigns; • create new advertising channels; and • create active social networks of customers.

Source: authors' own compilation based on (http://bankpomyslow.bzwbk.pl; https://www.shoesofprey.com; http://scriptfiesta.pl; http://heroes.net.pl; http://streetcom.pl; https://www.facebook.com/PKP.Intercity; http://wizaz.pl).

Conceptual framework of prosumers' participation in business processes

Based on the above research findings, and findings and recommendations from previous studies (Ziemba & Eisenbardt, 2013; Ziemba & Eisenbardt, 2014; Ziemba & Eisenbardt, 2014a), the conceptual framework of prosumers' participation in business processes was proposed. This framework, presented in Table 3, includes operational business processes and types of prosumers' participation in particular business processes.

Table 3. The conceptual framework of prosumers' participation in business processes

Operational business process	Types of prosumers participation
2.0 Develop and Manage Products and Services	• designing new products • designing new functionalities to existing products • adjusting products to own expectations and preferences • testing (checking) products • improving quality of products • improving existing functionalities of products • improving reliability and durability of products • improving ease and intuitiveness of product use.
3.0 Market and Sell Products and Services	• participation in promotion and marketing campaigns • creating advertising spots • establishing new marketing channels • establishing new product distribution channels • establishing customer community of an enterprise • influencing product prices • designing promotional gifts and gadgets • designing promotions and discounts
4.0 Deliver Products and Services	• improving ordering process • establishing new ways of ordering products and their delivery
5.0 Manage Customer Service	• improving quality and lead time of customer service • improving handling complaints and warranty services • defining success factors of effective and professional customer service

Source: authors' own compilation.

The proposed framework presents the way in which prosumers share their knowledge and have pro-active approach to business processes, and thanks to that they contribute to the development of products and enterprises.

Discussion

The conducted research points out to the fact that prosumers can participate in every operational process of an enterprise. In particular, the scope of their activity is broader in two processes, i.e. *2.0 Develop and Manage Products and Services*, and 3.0 *Market and Sell Products and Services*. In case of these two processes, enterprises are mostly interested in prosumers' knowledge and ideas, and prosumers share their knowledge and ideas. This is proven by the fact that all sorts of

Online Journal of Applied Knowledge Management
A Publication of the International Institute for Applied Knowledge Management

Volume 3, issue 1, 2015

initiatives are undertaken by enterprises and a significant number of prosumers participate in them.

The involvement of prosumers in the operational processes of an enterprise brings benefits to both parties. Thanks to this collaboration enterprises improve their products and marketing activities, strengthen their image, lower outsourcing expenses connected with advisory, developmental services and promotion. On the other hand, prosumers expressing their opinions about products, improving or testing them – adjust them to their needs. Moreover, various types of financial, material or social network rewards are beneficial for prosumers. The involvement of prosumers may result in promoting oneself in a particular environment or reaching a particular status or position.

The study results indicate that most of projects, in which prosumers get involved, are initiated by enterprises. It is the enterprises which decide in which business processes and to what extent get prosumers involved. In other words – it is the enterprises which decide what knowledge they want to pass to and gain from prosumers. Their goal is to get prosumers involved in these business processes and to such an extend that prosumers' knowledge and ideas will create back-up for effective and accurate business activities and decisions.

It is obvious, that nowadays knowledge and ideas sharing with enterprises is facilitated by ICTs. Prosumers participate in business processes by using ICTs. This way of using ICTs by prosumers causes that ICTs stop being just a communication and information exchange medium. They become a product that is a subject to the same criteria as standardized products offered by an enterprise.

The proposed framework indicates in what way prosumers can participate in business operational processes. It can help enterprises make decisions connected with identification and utilization of prosumers' pro-activeness in the field of business operations, and product improvement and its development. It is justified then to offer enterprises the developed framework as a *modus operandi* for increasing prosumers' participation in operational business processes.

Conclusions

The authors of studies on prosumption most often concentrate on an evolving role of consumers and their pro-active attitude. However, there is a lack of studies on practical possibilities of prosumers' involvement in business processes of an enterprise. This study attempts to set prosumption in practice – in enterprise operations. It indicates business processes in which prosumers can participate and prosumption can generate profits.

This work contributes to extant research by suggesting the framework of prosumers' participation in business processes. Researchers and scholars who develop studies on prosumption could find reliable guidelines in this paper. For practitioners, the results of this study can be used to undertake empirical activities aimed at prosumption adoption, ultimately helping them reap more benefits from their activities. The results may be helpful for businesses when taking initiatives to acquire knowledge and ideas from prosumers, and intending to get prosumers involved in the process of innovation. Moreover, this research attempts to provide a new line of thinking and further scope for research in areas of prosumption and its employing in enterprises.

The results of the study are not exhaustive. Prosumption is a phenomenon that thrives and evolves continuously. This creates opportunities for conducting further interesting research and setting research challenges for the future.

The limitation of this study was a case study analysis of just two business processes. It was caused by pragmatic reasons, as in these business processes prosumers participate most often. However, the proposed framework indicates that prosumers can participate in all business operational processes. An in-depth study to prosumers' involvement in the remaining operational processes will be a challenge and goal of authors' further research. In addition, the proposed framework will be developed and will account for the following elements:

- ICTs used in knowledge sharing between prosumers and enterprises, and prosumers' participation in business processes;

- prosumers' willingness to knowledge sharing with enterprises and prosumers' participation in business processes;

- prosumers' rewards for knowledge sharing and business processes participation.

Furthermore, the presented framework relates exclusively to enterprise – prosumers relationships. In future, it would be advisable to broaden research into public sector – prosumers relationships. As a result of such studies, it would be possible to indicate in which processes, occurring in public organizations, prosumers can participate. This would allow for carrying out comparative studies between a business and public sector.

The important step of our study will be an empirical examination of the proposed framework.

Acknowledgement

References

APQC. (2014). *Process Classification Framework*. 6.1.1. Houston: American Productivity and Quality Center. Retrieved November 05, 2014 from http://www.apqc.org/pcf.

Armisted, C. & Rowland, P. (1996). *Managing Business Processes*. Chichester: Wiley and Sons.

Arvidsson, A. (2007). Creative class or administrative class? On advertising and the "underground". *Theory & Politics in Organization, 7*(1), 8-23.

Bylok, F. (2005). *Konsumpcja w Polsce i jej przemiany w okresie transformacji* [Consumption in Poland and its transformation in transition period]. Częstochowa: Wydawnictwo Politechniki Częstochowskiej.

Chao, S. (2013). The re-institutionalisation of popular fiction – the Internet and a new model of popular fiction prosumption in China. *Journal of the British Association for Chinese Studies, 3,* 1-38.

Davenport, T.H. (1993). *Process innovation: reengineering work through information technology*. Boston: Harvard Business School Press.

Davenport, T.H. & Short, J.E. (1990). The new industrial engineering: information technology and business process redesign, *MITSloan Management Review*. Retrieved December 17, 2014 from http://sloanreview.mit.edu/article/the-new-industrial-engineering-information-technology-and-business-process-redesign.

Dijck, J. van (2009). Users like you? Therizing agency in user-generated content. *Media, Culture and Society, 1*(31), 41-58.

Durlik, I. (1998). *Restrukturyzacja procesów gospodarczych* [The restructuring of business processes]. Warszawa: Placet.

Grajewski, P. (2012). *Procesowe zarządzanie organizacją* [Process management of the organization]. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Gustafsson, A., Kristensson, P., Löfgren, M., & Witell, L. (2011). Idea generation: customer co-creation versus traditional market research techniques. *Journal of Service Management, 22*(2), 140-159.

Harmon, P. (2010). *Business process change*. Burlington: Morgan Kaufmann. Retrieved January 05, 2015 from http://www.google.pl/books.

Hammer, M. & Champy, J. (1993). *Reengineering the corporation*. New York: HarperCollins.

Humphreys, A. & Grayson, K. (2008). The intersecting roles of consumer and producer: a critical perspective on co-production, co-creation and prosumption. *Sociology Compass, 2*(3), 963–980. Retrieved March 20, 2013 from http://www.kentgrayson.com.

Izvercianu, M., Seran, S., & Buciuman, C.F. (2012). Changing marketing tools and principles in prosumer innovation management. *European Conference on Management, Leadership & Governance*, Academic Conferences, Kidmore End: International Limited, 246-255. Retrieved March 20, 2013 from http://search.proquest.com/docview.

Jeston, J. & Nelis, J. (2014). *Business process management*. Oxford: Routledge Press.

Kaplan, R.S. & Cooper, R. (2000). *Zarządzanie kosztami i efektywnością* [Cost and efficiency management]. Kraków: Dom Wydawniczy ABC.

Lebiejko, A. (2011). Prosumer – a new trend of active consumption on the example of banking services. *Journal of Interdisciplinary Research, 1*(2), 65-69.

Leymann, F., Roller, D., Schmidt, M.T. (2002). Web services and business process management. *IBM Systems Journal, 41*(2), 198-211.

McCrindle, M. (2014). *The ABC of XYZ. Understanding of global generations*. Bella Vista: McCrindle Research.

Mróz, B. (2013). *Konsument w globalnej gospodarce. Trzy perspektywy* [The consumer in the global economy. Three perspectives]. Warszawa: Oficyna Wydawnicza Szkoła Główna Handlowa.

Ossowski, M. (2012). Identyfikacja i klasyfikacja procesów w przedsiębiorstwie [Identification and classification of business processes]. *Journal of Management and Finance, 4*(3). Gdańsk: Prace i materiały Wydziału Zarządzania Uniwersytetu Gdańskiego, 297-312.

Porter, M. (1985). *Competitive advantage*. New York: Free Press.

Prahalad, C.K. & Krishnan, M.S. (2008). *The new age of innovation: driving cocreated value through global networks*. McGraw Hill Education.

Ritzer, G. & Jurgenson, N. (2010). Production, consumption, prosumption: the nature of capitalism in the age of the digital 'prosumer'. *Journal of Consumer Culture, 10*(1), 13-36.

Sudalaimuthu, S. & Raj, S.A. (2009). *Logistics management for international business*. New Delphi: PHI Learning.

Skrzypek, E. & Hofman M. (2010). *Zarządzanie procesami w przedsiębiorstwie* [Business processes management]. Warszawa: Wolters Kluwer Polska.

Taherparvar, N., Esmaeilpour, R., & Dostar, M. (2014). Customer knowledge management, innovation capability, and business performance: a case study of the banking industry. *Journal of Knowledge Management, 3*(18), Retrieved May 12, 2014 from http://www.emeraldinsight.com/journals.htm?issn=1367-3270&volume=18&issue=3.

Tapscott, D. & Williams, A.D. (2006). *Wikinomics: how mass collaboration changes everything.* New York: Penguin Group.

Tapscott, D. (2009). *Grown up digital: how the net generation is changing your word*. New York: McGraw Hill.

Toffler, A. (1980). *The Third Wave*. New York: Bantam Books.

Tsai, W., Tsai, M., Li, S., & Lin, C. (2012). Harmonizing firms' knowledge and strategies with organizational capabilities. *Journal of Computer Information Systems, 53*(1), 23-32.

Winter, C. (2012). How media prosumers contribute to social innovation in today's new networked music culture and economy. *International Journal of Music Business Research, 1*(2), 46-73.

Ziemba, E. & Obłąk, I. (2012). Systemy informatyczne w organizacjach zorientowanych procesowo [Computer systems in process-oriented organizations]. *Problemy Zarządzania*, *3*(38), Warszawa: Wydział Zarządzania Uniwersytetu Warszawskiego, 8-24.

Ziemba, E. (2013). Conceptual model of information technology support for prosumption. In V. Ribiere & L. Worasinchai (Eds.), *Proceedings of the International Conference on Management, Leadership and Governance*, Bangkok: Bangkok University, 355-363.

Ziemba, E. & Eisenbardt, M. (2013). Prosumption awareness among young consumers. *Studia Ekonomiczne, Creativity Support System, Methods, and Applications, 153*. Katowice: University of Economics, 163-177.

Ziemba, E. & Eisenbardt, M. (2014). Prosumers'eagerness for knowledge sharing with enterprises – a Polish study, *Online Journal of Applied Knowledge Management, 2*(1), 40-58.

Ziemba, E. & Eisenbardt, M. (2014a). Komplementarność Web 2.0 i prosumpcji w kontekście wsparcia współczesnego biznesu [Business supported by Web 2.0 and prosumption]. In W. Chmielarz, J. Kisielnicki, & T. Parys (Eds.), *Informatyka & przyszłość*, Warszawa: Wydział Zarządzania Uniwersytetu Warszawskiego, 233-249.

Webpages

http://bankpomyslow.bzwbk.pl.
https://www.shoesofprey.com.
http://scriptfiesta.pl.
http://heroes.net.pl.
http://streetcom.pl.
https://www.facebook.com/PKP.Intercity.
http://wizaz.pl.

Authors' Biographies

Ewa Ziemba completed her Ph.D. and Post Ph.D. in management, especially management information systems. She has vast experience in different areas of management information systems for business and public administration. She has published over 140 original papers in Polish and international peer-reviewed journals, and 11 books. Ewa Ziemba has played an instrumental role in different prestigious polish and international research projects. She is the member of several international scientific organizations, e.g. Informing Science Institute, International Association for Computer Information Systems, International Institute for Applied Knowledge Management, Association for Information Systems. She serves on the editorial board for several international journals. She is the editor-in-chief of The Online Journal of Applied Knowledge Management. In recognition in her outstanding teaching and research, Ewa Ziemba has been the recipient of numerous awards. She has received 14 awards of excellence from the Rector of University of Economics in Katowice, 'The Silver Cross of Merit' from President of Poland, 'The Medal of the National Education Commission' from Ministry of National Education in Poland, 'The Award for Fellow & Distinguished Scholar' from the International Institute for Applied Knowledge Management. Additionally, she has received three awards for the best papers at the international conferences.

Monika Eisenbardt, MSc, University of Economics in Katowice, Poland, Institute of Business Information Systems. Her principal research areas are focused on the knowledge-based economy, especially the ICTs influence on business, consumers and their approach to knowledge sharing. She is currently working on the PhD thesis on contemporary prosumption. Last year she received the award for the best paper at the KM Conference.