Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

DOI:10.17951/h.2018.52.6.97-109

A N N A L E S
UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA
LUBLIN – POLONIA

VOL. LII, 6 SECTIO H 2018

*Siedlce University of Natural Sciences and Humanities. Faculty of Economic and Legal Sciences
**Maria Curie-Skłodowska University in Lublin. Faculty of Economics

ADAM SKRZYPEK*

ORCID ID: https://orcid.org/0000-0001-7644-0107
adam.skrzypek@uph.edu.pl

SYLWIA SAGAN**

ORCID ID: https://orcid.org/0000-0002-2146-4053
sylwia.sagan@umcs.lublin.pl

Open Innovation in Business Models

Otwarte innowacje w modelach biznesowych

Keywords: innovation; open innovation; open innovation models

Słowa kluczowe: innowacja; otwarta innowacja; modele otwartych innowacji

JEL code: L20; M10; O31

Introduction

> Enterprises involved in creating innovations in the open model should have such a network innovation strategy that would guarantee a positive impact not only on the outcome of the innovation process, but also on the result of the entire company [Scuotto et al., 2017].

Innovation can be considered as a characteristic attributed to the company or as a state determining its level of involvement in the broadly defined activity related to innovation. Innovation is the effect of contributing to new values [Stanisławski, 2017, p. 589]. A holistic approach to innovation management strategies is mani-

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

fested in: continuous search, research, use of various sources of opportunities for innovation, integration of these sources with the potential and resources of the enterprise, and the use of various channels to develop and exploit opportunities for innovation, and is referred to as open model innovation [Inauen, Schenker-Wicki, 2011, pp. 459–520].

The growing hyper-competition processes, the increasing convergence of industries, the development of Web 2.0 and 3.0 technologies and the globalization of activities force all involved to look for ways for the company to achieve and maintain competitive advantage.

The basis of its success is its innovativeness manifested in the search, implementation and dissemination of innovations [Pomykalski, 2001, p. 18]. The role of relations between stakeholders interested in continuous innovations in the area of products, processes, technologies, marketing and the development of new business models is increasing.

The relationship of open innovation to responsible business is very important due to the idea of social dialogue, seeking solutions that both enterprise and society can profit from, product responsibility and listening to the voice of stakeholders. It is notable that in many enterprises there is no correlation between R&D expenditures and successful innovations [Chesbrough, 2002].

Thus, there is a problem of how to meet the client's expectations. The role of prosumers, or involved consumers, is growing; they are the source of new concepts and ideas; they act as critics, observers, seekers and innovators.

The prosumer is an active person who accepts the initiative, has knowledge about the producer and the brand and shares the knowledge. The prosumer is a partner in business because they take part in creating a new product, as well as the logistics and quality solutions. Having access to knowledge and information as well as technological possibilities can influence production and its development [Domańska]. Open innovation activities may take various forms, for example, establishing subsidiaries, spin-off and spin-out, organizing clusters of organizations operating in the same industry, based on similar IP, infrastructure and know-how, joint ventures, and consortia, as well as the consortia of universities and enterprises.

Transfer of intellectual, legal and material assets between entities may take place through the purchase of a patent, licensing, purchase of know-how, purchase of technology companies, R&D contracts, redemption rights of university spin-off companies, and the redemption rights of venture capital funds. The aim of the article is to demonstrate the nature and importance of open innovation in the knowledge society. The research method is a critical analysis of the available literature and inference. The layout of the article is designed to achieve the goal. The analysis of research and available work proves the systematically growing role of open innovation in the process of improving management and increasing the value and competitiveness of the organization.

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

1. Closed and open innovations

Innovations, according to Schumpeter [1960], are the following:

- manufacturing of a new product or introducing new products to the market;
- introduction of a new production method;
- opening of a new market;
- acquiring of new sources of raw materials;
- introduction of a new production organization.

Innovation always contains an element of originality. According to the Oslo Handbook [Podręcznik Oslo, 2008, pp. 48–52], product, process, marketing and organizational innovations are distinguished. According to the handbook, the minimum requirement for innovation is that the product, process, marketing or organizational method should be new or significantly improved for the company.

Innovations should be the result of interactions between enterprises and links with other entities in the environment in which they operate. This approach became the justification for an open approach in the management of innovations (open innovations), in which companies should use external and internal ideas in innovative processes and allow other companies to use unused ideas. A critical problem in the context of open innovation is the motives for acquiring external knowledge, which include [Lenart-Gansiniec, 2017, pp. 249–262]:

- getting new ideas;
- reducing the risk of failure of new ventures;
- developing a strategy;
- understanding the needs and expectations of customers;
- strengthening relationships with other institutions;
- access to know-how;
- implementation of new organizational solutions;
- testing new solutions;
- increasing the efficiency of created innovations.

The first models of the linear innovation process (supply models) were created in the 1950s. They assumed that products have their source in inventions and new technologies. Demand innovation models emerged in turn, based on the preferences and needs of customers. Thus, the model of "pushed innovation" had to change when the customers' needs favoured the emergence of innovation.

Closed innovation occurs when inventions, products and technologies are developed by a specific group of people in an enterprise or research institutions. These solutions are maintained as confidential know-how, protected by patents and rarely made available to business partners as a license. An example of linear models of the innovation process is the Urban–Hauser model, which includes [Urban, Hauser, 1993] identification of chances and market opportunities, designing ideas, product testing, product launch and product management.

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

In the 1980s, non-linear models appeared (they link supply and demand factors). The non-linear model of Rothwell and Zegveld assumes that it is irrelevant whether the idea for innovation results from demand or supply factors, instead it is important that they interpenetrate each other and that innovation is beneficial to the potential recipient [Rothwell, Zegveld, 1982].

The traditional approach to closed innovations was characterized by the fact that it was based in internal R&D departments and required large funds, which were usually owned by large enterprises. The company IP (Intellectual Property of the enterprise) was focused on the protection of intellectual property and trade secrets of the company.

Chesbrough, the executive director of the Open Innovation Centre at the University of Berkeley, pointed to the following principles of the logic of "closed innovations" [Hamm, 2005]:

- we should employ the best employees;
- if we want to launch new products or services on the market, we should invent and develop them ourselves;
- if we invent them ourselves, we will achieve the priority effect on the market;
- the company that first launches the product wins;
- if we are leaders in our industry in terms of R&D expenditure, we will achieve market leader positions;
- we should have control over our intellectual property so that our competitors do not profit from our ideas.

The question then arises of whether it is necessary to open the organization to the environment and stakeholders and to involve them in the innovation processes. It is worth emphasizing what differences exist between open and closed innovations (Table 1).

Table 1. Comparison of closed and open innovations

Closed innovation	Open innovation
Research initiated and financed within the company	Research conducted in consortia, results of tests in the form of patents or developed know-how, sold or licensed
A product strictly defined at the beginning of R&D works. Outliers or results, additional inventions often go to the shelf	Product evolving due to market demand, available or emerging new technologies, activities of partner organizations
R&D works only based on the company's own team of experts	Work carried out with the support of many specialists from various centres
Profits from the sale of a product based on the invention achieved only after carrying out the R&D works on the process of protection, production, product preparation and market introduction	In the case of developed and shared IP profits from the sale/licensing of the invention drawn "immediately". In the case of obtaining IP, reduction of R&D costs and protection of the invention. For the production of a new product, the creation of joint patents and solutions, win-win systems

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

Closed innovation	Open innovation
A company introducing innovations to the market ensures its leading position. In order to maintain it, it must pass the phase of "crossing the abyss"	The company with the best and the most efficient business model flexibly responding to the market response is more easily able to deal with product modification and "crossing the abyss"
The necessary continuous monitoring of competition activities does not benefit from not using their solution	The benefits of commercialization of intellectual property draws more than one entity and more companies protect joint solutions "why expose yourself to courts and costs when IP can be licensed?"
The risk of project failure is focused and only the company bears it	The risk is diminished and dispersed between the entities involved. There is even greater risk reduction by taking over a proven solution, e.g. by purchasing an IP
Strict time frame, often dictated by the directions and speed of competition	In the case of open innovation, the product creation process is associated with its continuous modification and development, and the directions of changes are flexible and dependent on "market conditions", demand and access to technology, and the direction of partners' policies

Source: *Otwarta versus zamknięta...*

Chesbrough pointed to the principles of creating innovations in a closed and open model (Table 2).

Table 2. The rules for creating innovations in a closed and open model

The principles of closed innovation	The principles of open innovation
The company employs outstanding specialists in a given field	The company both employs and cooperates with external specialists; not all outstanding specialists in a given field work for the enterprise
To achieve the benefits of the research, an enterprise must discover, implement and exploit it themselves	Research and development works are carried out outside the enterprise. They can create value for it (be a source of measurable benefits); internal research works are important in the process of capturing it
If the company makes a discovery, it will enter the market with it first	An enterprise does not have to be the creator of the discovery in order to benefit from it
Market success is achieved by the company that will first introduce innovations to the market	Creating a good business model is more important than market priority
Market success is achieved by this company, which will bring the largest number of the best innovations to the market	Market success is achieved by the company that makes the best use of internal and external ideas
The company should protect intellectual property so that competitors cannot benefit	The company should benefit from sharing other intellectual properties and use foreign knowledge if it supports the business model

Source: Authors' own study based on Chesbrough [2003, p. 26].

In the world of the Internet and globalization, enterprises cannot rely only on their research, they must open themselves to cooperation with external research units. It is necessary to know the best solutions in the authors' areas of interest. The new dimension of the social network era has a parallel impact on the innovative activity of enterprises and forces us to move beyond rigid, closed and hierarchical

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

organizational structures in search of a new culture of innovation, partnership and global cooperation.

Chesbrough distinguishes the traditional innovation process from the one that is based on internal and external resources. The concept of open innovation is a paradigm stating that enterprises can and should, through innovation processes, apply ideas and ways to introduce innovations on the market based on internal and external resources [Chesbrough, 2003, p. 20]. This concept finds application in high technology sectors and those that are in the phase of birth and development [Herzog, 2011, p. 27].

The degree of openness of innovative processes became the basis for distinguishing closed (source of internal knowledge), hybrid (external knowledge as complementary to internal) and open (at least one external source is more important than internal ones) innovators [Barge-Gil, 2010, p. 586].

2. Models of open innovations

In a knowledge-based network society, the mentality changes from "do-it-yourself" to "let's do it together". The innovative process according to Janasz is the generation of an innovative idea, design and implementation [Janasz, 1997]. The innovative process is often presented in a model approach. The innovation model is an accepted scheme of activities undertaken in the enterprise in order to introduce innovations. Table 3 presents the generations of innovative process models.

Table 3. Generations of innovative process models

Generations	Basic features
First/Second	Simple linear model – supply and demand model
Third	A related model, assuming the interaction of various elements and feedback of information
Fourth	Parallel model, internal integration of the company and cooperation with suppliers and recipients, emphasis on connections and alliances
Fifth	Integrated system based on network connections: flexible, system-based response related to the consumer, continuous innovation
Sixth	Open innovation model, self-learning system

Source: Janasz, Kozioł-Nadolna [2011, p. 106].

Most of the models of innovation processes included in the table apply to closed models, i.e. those that run inside the company and are subject to protection by the company in which such a process takes place [Sieniewska, 2011, pp. 448–455]. The first, second and third generation models are included in linear models, and the fourth, fifth and sixth generation models are included in non-linear models [Janasz, Kozioł-Nadolna, 2011, p. 106].

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

The model of closed innovations in the 21st century, which is characterized by the flow of information and knowledge as well as growing technological progress, is losing its popularity. The rising costs of own research and development, the scattering of knowledge resources and the occurring need to combine technology in order to carry out the intended ventures results in the development of a model of open innovations [Kozarkiewicz, 2010, pp. 20–21]. On the other hand, models of open innovations are characterized by the fact that they "maximize the value coming from various ideas appearing both in the company and outside it" [Janasz, Kozioł-Nadolna, 2011, p. 115].

The criteria for the division of open innovation models include [Pellegrini, 2010, pp. 11–23]:

- number of partners participating in the innovation process;
- type of partners;
- structure of relationships between participants in the innovation process;
- intensity of using external knowledge;
- the location of the innovative process;
- the method of selecting external partners;
- the direction of knowledge flow between the subject and the environment;
- the intensity of cooperation.

Innovation models based on the supply and demand theory as linear models of the process of creating innovation are treated today as traditional. Linear models include the following phases: basic research, applied research, development work, first applications and diffusion [Janasz et al., 2001, p. 195]. The linear supply model includes basic research, applied research, implementation and marketing. The linear demand model, i.e. the innovation model drawn by the market, is the effect of modifying the linear supply model, including market needs, development works, implementation and sales [Rothwell, Gardiner, 1983, p. 47].

At the end of the 1990s, non-linear models based on network connections were proposed [Rothwell, 1994, pp. 7–31]. It was considered that most innovations do not follow these models because they are too simplistic and do not cover many important aspects. The goal of non-linear models is to combine supply and demand factors in such a way that they can bring benefits to the recipients of a given innovation.

Dynamic interactive models include the following aspects: interactions and feedback during the creation of innovations. They include [Janasz, Kozioł-Nadolna, 2011, p. 106]:

- coupled model – this combines research and development, production, marketing and sales as well as their connections in the organization and outside, and it covers new needs, new ideas, new technical possibilities; and takes into account social needs, development works, implementation, marketing, sales, market and the state of the art and production technology [after Romanowski, 2000, p. 66];
- interactive model – this is based on the purpose of the product, planning, designing, linking the effects of the up and down phases and numerous in-

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

teractions between science, technology and phases of innovation production [www.ptin.org];

- connected chain model – this consists of many phases in which knowledge and research are the main aspects; they link together all phases of the innovation process. What distinguishes this model is that the decisive role is played by knowledge and not research; while scientific research must be included in this model, the potential market demand is also very important [Janasz, Kozioł-Nadolna, 2011, p. 112].

Models of open innovations include incoming, outgoing and mixed models:

- open innovations coming to the company have their source in improving the company's discoveries and solutions that have been made by others. The very important role here is gaining ideas, technologies and solutions located in the organization's surroundings, which flow as a result of connections and interaction with other entities. Incoming innovation is referred to as inbound innovation [Chesbrough, Crowther, 2006, pp. 229–236];
- open innovations stemming from the organization, referred to as outbound innovation, relate to activities and undertakings aimed at finding such organizations on the market whose business models create opportunities for the commercialization of a given technology; solutions in a more perfect manner than a company that possesses these solutions, which is why they sell their inventions and licenses or create spin-out companies;
- mixed model – together with the development of the concept of open innovation, a mixed (coupled) process appears, which assumes the creation of network connections by the company and cooperation with external entities at various stages of the innovation process [Gassmann, Enkel, 2005, pp. 289–308].

Research shows that the market is more often characterised by centripetal open innovation than the centrifugal kind. The sources of this phenomenon can be traced to the fact that most companies have the abilities and skills to use already existing knowledge, but cannot create new knowledge [Huizingh, 2011].

Juchniewicz presents the evolution of innovation models in the years 1950–2010. The author indicates the following models: supply, demand, coupled, parallel, network and open [Juchniewicz]. Changes in the approach to the innovation model are compounded by institutions that deal with the marketing of ideas and the emergence of an increasing number of advanced technologies enabling remote cooperation [Dahlander, Gann, 2010]. Openness is even greater as the number of external sources of innovative activity of the company increases [Laursen, Salter, 2004, pp. 1201–1215].

The phenomenon of openness is becoming a key force for building competitive advantage in the network economy. In the model of open innovations, the role of external partners is growing; this is happening at all stages, i.e. generating, selecting ideas, transforming them into innovative solutions, commercialization and diffusion of innovations.

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

The concept of open innovation is an opportunity to increase innovation, understood as the ability to constantly search, implement and disseminate innovations [Pomykalski, 2001, p. 18]. It is an interactive model of innovation management, taking into account the diversity of inflow and outflow of knowledge. Thanks to the new cooperation strategy, it will be possible to better use human skills, ingenuity and intelligence, and implement solutions that are impossible to achieve independently [Tapscott, Williams, 2008].

Most of the research on open innovations concerns high technology industries [Henkel, 2006, pp. 953–969] as well as computer games [Lecocq, Demil, 2006, pp. 891–898]. Internationally, Lichtenthaler studied a large research sample (Germany, Switzerland, Austria). His research demonstrates the positive correlation between open innovations flowing out and enterprise results [Lichtenthaler, 2008, pp. 148–157]. The results of the statistical surveys of the Central Statistical Office, published in 2013, concerned cooperation in the field of innovative activity as part of the open innovation model.

The surveyed enterprises cooperated with suppliers of equipment, computers, software, universities, scientific and research institutions, clients, consulting companies, competitors, PAN (Polish Academy of Sciences) units, and foreign and public research institutions. The increase in cooperation within clusters was emphasized, and it was pointed out that the most popular form of technology transfer was the purchase of licenses [Rojek, 2014, pp. 207–218].

The opening of innovative processes in an enterprise can take the form of three schemes:

- innovation flow from the environment to the enterprise – centripetal;
- innovation flow from the company to the environment – centrifugal;
- the flow takes place through the cooperation of the company within business networks or strategic alliances (mixed).

The choice of the model of open innovation depends on the business model of the company [Sopińska, 2017]. The business model describes how and to what extent the company uses cooperation with external entities to generate value for customers and determines how to convert the technical parameters of a product or service into economic value.

Modelling strategies for cooperation in open innovations, taking into account the origin of partners and the form of cooperation, were presented by Sopińska and Dziurski as follows [Sopińska, Dziurski, 2018, pp. 42–43]:

- conservative strategy – formalized cooperation with partners from the economic path;
- limited trust strategy – formalized cooperation with partners from outside the economic path;
- a strategy of full trust – informal cooperation with partners from the economic path;

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

- innovative strategy – informal cooperation with partners from outside the economic path.

The open innovation model is treated as a complex, comprehensive and holistic approach to the innovation management strategy, which is based on [Inauen, Schenker-Wicki, 2011, pp. 496–520]:

- simultaneous, systematic, continuous search, research and use of external sources of innovation, which involves the transfer of knowledge;
- conscious, thoughtful integration of external sources of innovation with the company's resources and its development potential;
- applying various possibilities of commercialization of the innovations created.

Open innovation involves cooperation with many partners, including sharing knowledge. The literature recognizes market, scientific and technological partners. Enterprises acquire knowledge through participation in exhibitions, fairs, seminars, conferences, use of publications, patents and databases. Enterprises creating new innovations can buy or create them through cooperation with partners. Cooperation can be formal and informal, and its scope, width and depth can also vary.

Sopińska and Dziurski propose four potential cooperation strategies applied by enterprises in the process of creating innovations in the open model [Sopińska, Dziurski, 2018, pp. 54–55]:

- a strategy of superficial cooperation with a small number of partners;
- a strategy of superficial cooperation with a large number of partners;
- a close cooperation strategy with a small number of partners;
- a strategy of close cooperation with a large number of partners.

Among the innovation implementation barriers, the following should be indicated: inflexibility, vertical management structures, lack of a bottom-up innovation culture, rigid requirements arising from existing legislation, skills shortages, insufficient knowledge and financial resources, interruption of information flow, and lack of openness to various types of initiatives. Barriers to open innovations concern excessive bureaucracy, insufficient use of customer opinions, lack of correlation of employee remuneration with their innovative activity, and insufficient intellectual property protection [Lenart-Gansiniec, 2017, pp. 249–262].

Conclusions

The goal of open innovations is to cooperate in order to gain access to the knowledge resources of partners that enables the increase of effectiveness of their own innovative activity and search for ways to reduce costs and protect their own intellectual capital. The literature analysis proves that more companies have the ability to use knowledge than to create it, which is why enterprises are much more likely to engage in centripetal than centrifugal open innovations [Huizingh, 2011]. In the process of implementing open innovations, it is very important to match the

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

composition of the business model so that it is characterized by high flexibility in the process of transforming technology or knowledge into commercial success. The creation of an optimal business model is conditioned by the need to select the external participants of the innovative process in order to achieve a reduction of costs and risks of R&D activity or to achieve economies of scale [Zajkowska, 2017, pp. 200–211]. Open innovation is the organization's openness to knowledge that is found in the environment, in order to maximize profits for all cooperating entities, capture value, use external resources, build competitive advantage, use ideas coming from the interior and business environment.

References

Barge-Gil, A., *Open semi-open and closed innovation. Towards an explanation of degree of openness*, "Industry and Innovation" 2010, Vol. 17(6). **DOI: 10.1080/13662716.2010.530839**.

Chesbrough, H., Crowther, A.K., *Beyond high tech: early adopters of open innovation in other industries*, "R&D Management" 2006, Vol. 36(3). **DOI: 10.1111/j.1467-9310.2006.00428.x**.

Chesbrough, H.W., *Graceful exits and foregone opportunities: Xerox's management of its technology spin-off companies*, "Business History Review" 2002, Vol. 4.

Chesbrough, H.W., *Open Innovation. The New Imperative for Creating and Profiting from Technology*, Harvard Business School Press, Boston, MA 2003.

Dahlander, L., Gann, D.M., *How open is innovation?*, "Research Policy" 2010, Vol. 39(6). **DOI: 10.1016/j.respol.2010.01.013**.

Domańska, K., *Kim jest prosument*, http://www.marketingnews.pl/theme.php?art=856 [access: 19.07.2018].

Gassmann, O., Enkel, E., *Open innovation Forschung*, [in:] M. Weissenberger-Eib (ed.), *Gestaltung von Innovationssystemen*, Castus Group Verlag, Kassel 2005.

Hamm, S., *Linux Inc.*,"Business Week" 2005, January 31.

Henkel, J., *Selective revealing in open innovation process: The case of embedded linux*, "Research Policy" 2006, Vol. 35(7). **DOI: 10.1016/j.respol.2006.04.010**.

Herzog, Ph., *Open and Closed Innovation. Different Cultures for Different Strategies*, 2nd ed., Springer, Wiesbaden 2011.

Huizingh, E.K.R.E., *Open innovation: State of the art and future perspectives*, "Technovation" 2011, Vol. 31(1). **DOI: 10.1016/j.technovation.2010.10.002**.

Inauen, M., Schenker-Wicki, A., *The impact of outside-in open innovation on innovation performance*, "European Journal of Innovation Management" 2011, Vol. 14(4). **DOI: 10.1108/14601061111174934**.

Janasz, W., Janasz, K., Świadek, A., Wiśniewski, J., *Strategie innowacyjne przedsiębiorstw*, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2001.

Janasz, W., Kozioł-Nadolna, K., *Innowacje w organizacji*, PWE, Warszawa 2011.

Janasz, W., *Podstawy ekonomiki przemysłu*, PWN, Warszawa 1997.

Juchniewicz, J., *Innowacje otwarte w polskim przemyśle spożywczym*, www.ierigz.waw.pl [access: 10.09.2018].

Kozarkiewicz, A., *Współczesne trendy w innowacyjności – w kierunku otwartych innowacji*, „Przegląd Organizacji" 2010, nr 5.

Laursen, K., Salter, A., *Searching high and low: What types of firms use universities as a source of innovation?*, "Research Policy" 2004, Vol. 33(8). **DOI: 10.1016/j.respol.2004.07.004**.

Lecocq, X., Demil, B., *Strategizing industry structure: The case of open systems in low-tech industry*, "Strategic Management Journal" 2006, Vol. 27. **DOI: 10.1002/smj.544**.

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

Lenart-Gansiniec, R., *Orientacja strategiczna na otwarte innowacje jednostek samorządu terytorialnego*, „Zarządzanie Publiczne" 2017, Vol. 3(39). **DOI: 10.4467/20843968ZP.16.020.7235**.

Lichtenthaler, U., *Outbound open innovation in practice an analysis of strategic approaches to technology transactions*, "IEEE Transactions on Engineering Management" 2008, Vol. 55(1), **DOI: 10.1109/TEM.2007.912932**.

Otwarta versus zamknięta innowacja, http://openin.pl/index.php?option=com_content&view=article&id=11:otwarta-vs-zamknieta-innowacja [access: 20.05.2018].

Pellegrini, L., *Open innovation models adopted in practice: An extensive study in Italy*, "Measuring Business Excellence" 2010, Vol. 14(4). **DOI: 10.1108/13683041011093721**.

Podręcznik Oslo, *Zasady gromadzenia i interpretacji danych dotyczących innowacji*, Wyd. III, OECD, Eurostat, Warszawa 2008.

Pomykalski, A., *Zarządzanie innowacjami*, PWN, Warszawa–Łódź 2001.

Rojek, D., *Otwarte innowacje jako model interaktywnego zarządzania innowacjami*, „Zeszyty Naukowe UPH, Seria Administracja i Zarządzanie" 2014, nr 101.

Rothwell, R., Gardiner, P., *The role of design on product and process change*, "Design Studies" 1983, Vol. 4(3). **DOI: 10.1016/0142-694X(83)90025-X**.

Rothwell, R., *Towards the fifth-generation innovation process*, "International Marketing Review" 1994, Vol. 11(1). **DOI: 10.1108/02651339410057491**.

Rothwell, R., Zegveld, W., *Reindustralization and technology*, after: R. Romanowski, *Innowacje jako determinanta działań strategicznych*, Zeszyty Naukowe AE w Poznaniu, Poznań 2000.

Schumpeter, J.A., *Theorie der wirtschaftlichen Entwicklung 1912 (Teoria rozwoju gospodarczego)*, PWN, Warszawa 1960.

Scuotto, V., Del Giudice, M., Bresciani, S., Meissner, D., *Knowledge-driven preferences in informal inbound open innovation models. An explorative view small to medium enterprises*, "Journal of Knowledge Management" 2017, Vol. 21(3). **DOI: 10.1108/JKM-10-2016-0465**.

Sieniewska, B., *Otwarty model innowacji – nowe podejście do działalności badawczo-rozwojowej*, Wydawnictwo Uniwersytetu Śląskiego, Sosnowiec 2011.

Sopińska, A., Dziurski, P., *Otwarte innowacje. Perspektywa współpracy i zarządzania wiedzą*, Oficyna Wydawnicza SGH, Warszawa 2018.

Sopińska, A., *Paradygmat otwartych innowacji w polskich realiach*, [in:] R. Bartkowiak, M. Matusiewicz (red.), *Paradygmaty w naukach ekonomicznych. Wyzwania XXI wieku*, Oficyna Wydawnicza SGH, Warszawa 2017.

Stanisławski, R., *Open innovation a rozwój innowacyjny mikro, małych i średnich przedsiębiorstw*, Wydawnictwo Politechniki Łódzkiej, Łódź 2017.

Tapscott, D., Williams, A.D., *Wikinomia. O globalnej współpracy, która zmienia wszystko*, Wydawnictwa Akademickie i Profesjonalne, Warszawa 2008.

Urban, G.L., Hauser, J.R., *Design and Marketing of New Products*, Prentice Hall, Englewood 1993.

www.ptin.org [access: 14.09.2018].

Zajkowska, M., *Otwarte innowacje w małych i średnich przedsiębiorstwach*, „Polityki Europejskie, Finanse i Marketing" 2017, nr 17. **DOI: 10.22630/PEFIM.2017.17.66.17**.

Pobrane z czasopisma Annales H - Oeconomia **http://oeconomia.annales.umcs.pl**
Data: 17/10/2026 04:27:07

Otwarte innowacje w modelach biznesowych

Koncepcja otwartych innowacji często bywa utożsamiana z procesem systematycznej zewnętrznej eksploracji i eksploatacji wiedzy. W procesie tym przedsiębiorstwa podejmują decyzje dotyczące włączania albo ograniczania aktywności i zaangażowania różnych podmiotów w procesy bieżącego rozwoju innowacji oraz aktywności w obszarze komercjalizacji. Otwarta innowacja wydaje się naturalnym kierunkiem zmian w ewolucji modeli biznesowych, tworzy bowiem odpowiednie miejsce dla działań badawczych i rozwojowych oraz takich, które przywiązują wagę do współpracy i wspólnego wytwarzania wartości. Relacje otwartych innowacji z odpowiedzialnym biznesem są bardzo ważne ze względu na idee dialogu społecznego, poszukiwanie rozwiązań generujących zysk dla przedsiębiorstwa i społeczeństwa, odpowiedzialność za produkt oraz słuchanie głosu interesariuszy. Wybór modelu otwartych innowacji zależy od modelu biznesowego przedsiębiorstwa [Sopińska, 2017]. Model biznesowy opisuje, w jaki sposób i w jakim stopniu firma wykorzystuje współpracę z zewnętrznymi podmiotami w celu generowania wartości dla klientów, a także określa sposób zamiany technicznych parametrów produktu lub usługi na wartość ekonomiczną. Otwarte innowacje to otwartość organizacji na wiedzę, która znajduje się w otoczeniu, w celu maksymalizacji zysków dla wszystkich podmiotów współpracujących, przechwytywania wartości, korzystania z zasobów zewnętrznych, budowania przewagi konkurencyjnej, wykorzystywania pomysłów pochodzących z wnętrza i otoczenia przedsiębiorstwa. Celem artykułu było: wskazanie na istotę otwartej innowacyjności; określenie zależności, jakie zachodzą pomiędzy innowacjami otwartymi i zamkniętymi; przybliżenie modeli otwartych innowacji. Przyjęta metoda badawcza to analiza dostępnej literatury i wnioskowanie.

Open Innovation in Business Models

The concept of open innovation is often identified with the process of systematic, external exploration and the exploitation of knowledge. In this process, enterprises make decisions to include or limit the involvement of other businesses in the development and commercialization of the innovation processes. Open innovation seems to be the natural direction of evolution of business models. It provides much needed room for research and development for businesses that value cooperation and joint value creation. The relationship of open innovation to CSR is very important due to the idea of social dialogue, searching for profit generating solutions for businesses and society, product responsibility and listening to the voice of stakeholders. The choice of the open innovation model depends on the business model of the company [Sopińska, 2017]. The business model describes how and to what extent the company uses cooperation with external entities to generate value for customers and determines how to convert the technical parameters of a product or service into economic value. Open innovation is the organization's openness to knowledge in order to maximize profits for all cooperating entities, capture value, use external resources, build competitive advantage, and use ideas coming from within the organization and business environment. The aim of the article was to highlight the essence of open innovation, to indicate the relationships that take place between open and closed innovations and to make models of open innovations more familiar. The adopted research method was the analysis of the available literature and its conclusions.