

Co-creation and co-operation in business models

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Abstract: The value co-creation, as a method of creating value in relations between enterprises and customers, is a reality that brings benefits for both sides. Practical business solutions presented in this research paper force to ask a question about topicality of the assumption that only the company is able to create a value to be exchanged on the market.

Abstrakt: Tworzenie wartości poprzez rozwój relacji pomiędzy przedsiębiorstwami a klientami staje się rzeczywistością i alternatywą dla tradycyjnego sposobu, opartego o system wymiany dóbr oferowanych przez przedsiębiorstwa w zamian za pieniądze ich klientów. Przykłady rozwiązań biznesowych, prezentowane w tym artykule naukowym, zmuszają do zadania pytania o aktualność założenia, że tylko przedsiębiorstwo jest w stanie tworzyć wartość, która może być przedmiotem wymiany rynkowej.

1. Introduction

The humankind, since the beginning of the world until 2003, has created 5 exabytes of data. No matter how overwhelming it is, today we are producing the same amount every two days.¹ The range of information available, the speed of its exchange, and easiness of its assimilation have created a situation that forces enterprises to act in a very turbulent and instable business environment. This discontinuity of economic events makes enterprises willing to search for solutions that will improve their competitiveness on the market.² Also, the fact that a mature

¹ E. Bendyk, *Wrózenie z danych*, „Polityka” 2012, no. 2880, p. 68.

² J. Lubomirska-Kalisz, *Czynniki determinujące konkurencyjność przedsiębiorstwa*, [in:] *Ekonomika przedsiębiorstw*, edited by J. Engelhardt, Warsaw 2011, pp. 41–63.

organization should grow between 4% and 6% annually does not make the situation easier. The best way is to introduce innovations that support enterprise competitiveness. In 20th century it was enough for companies to rely on their internal R&D departments and hire the best people available to create the best research facilities. This was the model which allowed such enterprises as Procter & Gamble to be extremely successful, but the easy days are over.³

The purpose of this scientific article is to present (in accordance with findings of the literature research and practical business solutions) a new model of creating innovative solutions that positively affect company performance and its competitiveness on the market, a new model of creating a value in an organization — co-creation and cooperation between both an enterprise and customers, as well as between companies.

2. Managing in the interest of customers

Manufacturing system produces the biggest number of products in history, which are transported and sold through various channels. Growing number of offers causes that a customer feels lost and stupefied. Their complexity, together with threats and benefits it brings, creates commotion and can be irritating to a customer who more and more often faces the problem of a proper evaluation of products and services available. Every day we ask ourselves “is this the best thing I can get right now? Are the services, provided for me, the best and most effective?” As a result a customer can choose among the biggest amount of products and services in history, but this fact causes him feeling less comfortable. The traditional system of creating value, with an enterprise in the centre, is cracking. A century ago Ford could create the T model only in one color — black and develop company organizational, hierarchical structure. Nowadays car manufacturers give customers plenty of options in their offer to choose and face the problem of satisfying a mass customer despite perfectly developed mass customization of offerings that suits their supply chains.⁴ This situation is not restricted to automotive industry only. For example, in Germany almost 40% of people who do extreme sports modify their equipment to be more suitable to their requirements. Also 22% of German doctors modify tools they need to perform a surgery. All because of the fact that they are dissatisfied with products they receive from manufacturers. The same situation happened to the T model. Despite that it was extremely successful, many farmers and entrepreneurs modified it in order to be more practical (e.g. by removing back seats — first pick-up

³ L. Huston, N. Sakkab, *Connect and Develop: Inside Procter & Gamble's New Model for Innovation*, “Harvard Business Review” 84, 2006.

⁴ C.K. Prahalad, V. Ramaswamy, *Przyszłość konkurencji. Współtworzenie wyjątkowej wartości wraz z klientami*, Warsaw 2005, pp. 13–14.

trucks were available after the World War I).⁵ Let's go back to the P&G mentioned in the introduction. Their "invent-it-ourselves" model, extremely beneficial in the 20th century was not able to support company organic growth. In 2000 only about 35% of products launched on the market were successful, and the company lost more than 50% of its stock value. Larry Huston and Nabil Sakkab, responsible for R&D in P&G started to study some products P&G had acquired by working with people outside the company. It turned out that they were very successful and highly profitable innovations. Huston and Sakkab decided to bet on external connections in order to connect capabilities of company R&D staff with sources of innovation beyond the P&G labs. The "connect-and-develop" innovation model works. By identifying profitable ideas, applying P&G own capabilities, having a clear view on customers' needs the company was able to create better and cheaper products, faster. As a result, within a couple of years the company has doubled its share price and launched over 100 products which in some aspects can be considered as "proudly found elsewhere".⁶

Enterprises in highly industrialized countries are becoming more and more aware of the value of direct contacts with customers, are trying to enlarge customer satisfaction and loyalty, together with raising innovativeness. A customer orientation — a set of actions that allows a company to solve customers' problems and out-perform its competitors by an advantage in value for customers. This means establishing a basic set of values and beliefs according to a central significance of a customer who is a guideline for an enterprise.⁷ The customer orientation means looking at a business activity from customers' point of view, listening to their wishes and helping them to obtain knowledge that will maximize effectiveness of their purchase choices. Innovative enterprises try to shape their business processes according to the general orientation on customers' needs. A research that had been conducted by Stuttgart University and Diebold Deutschland revealed that 74% of machine-building and electronic industry had significantly improved their market results thanks to focusing on customers' wishes while working on new products, 57% had reduced time needed for R&D, and 46% constantly involve customers to search for new products ideas.⁸

3. Cooperation between customers and enterprises

In order to make the cooperation between an enterprise and customers successful, they must be well-informed, active, and willing to cooperate. This is impossible without several factors⁹:

⁵ E. Bendyk, *Kliencie, pomóż*, „Polityka” 2007, no. 2613, p. 70.

⁶ L. Huston, N. Sakkab, *op. cit.*

⁷ M.D. Hutt, Th.W. Spech, *Zarządzanie marketingiem*, Warsaw 1997, p. 29.

⁸ J. Penc, *Sztuka skutecznego zarządzania, kierowanie firmą z myślą o jurze i procesach integracji z Unią Europejską*, Kraków 2005, pp.165–166.

⁹ Classification and description based on: C.K. Prahalad, V. Ramaswamy, *op. cit.*, pp. 14–16.

Access to information — millions of people connected to the global network have a possibility to search among the biggest number of information in history, are able to make decisions based on more complete knowledge, and are willing not only to find information about products they are interested in, but also about companies that produce and sell them. This situation is especially noticeable e.g. in healthcare. Patients are looking for opinions about doctors, their results, hospitals and clinics performance. They gather knowledge about the newest procedures and clinical research, they want to share their experiences with other patients, as well as doctors, to fully participate in a treatment process.

— Global point of view — thanks to wider access to worldwide information about companies, products, technologies, prices, and opinions of other people customers are able to evaluate available goods not only in their neighborhood, but on the local, interregional, and even international level.

— Building a network of customers — easy communication (there are over 6 billion of active SIM cards all over the world and over 2 billion of people connected to the Internet¹⁰), together with our natural tendency to gather in large groups, have created various network communities where people share their ideas and feelings, regardless to geographical and social barriers, transforming existing markets and revolutionizing those which have been only just created.

— Experimenting — customer networks, and the exchange of information that occurs inside them, cause that every idea and a will to experiment meets with a favorable response. Variety of customers all over the world, who know what's what, create a database with a wide set of skills and competences that is able to be accessed by anyone.

Activism — enterprises cannot work separately when designing products, manufacturing processes, supply and distribution chains, marketing campaigns. They also cannot leave no space for customers to be involved. As people learn, they are able to distinguish more details when they need to make a choice. They are even able to influent the enterprise itself. Take Sony as an example. The company Aibo robotic pet did not meet customer requirements and some people started to develop their own, additional commands to implement into the toy software (they widened the amount of its features and started to share their ideas at numerous websites). Sony considered it as “hacking” and prohibited using and sharing such a software. After a couple of months and a huge negative response from customers Sony eventually changed its policy in this scope.¹¹

No doubt, the factors presented above have occurred and we can see that cooperation between enterprises and customers is able to exist. A great example of such cooperation is activity of British mobile network — giffgaff. It sends SIM cards

¹⁰ E. Bendyk, *Wrózenie...*, p. 68.

¹¹ P. Torrone, *Sony's War on Makers, Hackers, and Innovators*, [in:] *Make Magazine Blog*, <http://blog.makezine.com/2011/02/24/sonys-war-on-makers-hackers-and-innovators> (access: 14.11.2012).

to people and runs on the o2 network to provide its services. But what is really exciting is the fact that giffgaff was able to create a community of customers who are ready to answer questions asked by other users. Moreover, the company website includes a “Community” feature which consist of forums, blogs, and the “Ideas board” — a place where community members can suggest improvements. The company workers take them under consideration as well as implement them into company business activity (for last two years the company has received more than 8500 suggestions!¹²).

4. Co-creation of value

A new approach to creating value, based on value co-creation by customers and enterprises is being developed around us. The only thing we need to do is to see it and change the traditional beliefs of managers, as well as their logic of creating value. The traditional way of thinking starts with an initial premise that the creation of value occurs inside the company through its activities. Customers only have a role of consuming company offer. As a consequence it needs some kind of cooperation mode — an exchange process — in order to sell its products. The exchange process is an area where company acquire economic value from customers and does it in many ways (by enlarging the variety of products in its offer, by efficient delivery and after-sales service, etc.). Here, it is all about value exchange and extraction, not creation. Managers of such companies focus on the flow of products that can be controlled or influenced by a company. The flow makes up the company chain of value. Employees concentrate on quality of products and business processes, try to develop innovations in the scope of technology, products and processes. A company creates value and exchange it with customers, efficiently adjusting company supply to customers demand (this balance is crucial for traditional process of creating value)¹³. The market is the place where value is being exchanged and extracted, and the only direction of communication is from a company to customers. The figure 1 presents traditional frame of reference for value creation.

However, there are changes in the way people behave and think. As it was mentioned before, customers are stupefied and dissatisfied by the variety of available products. Thanks to new ways of communication and exchange of information, they want to co-create value not only with one enterprise, but with other service providers, professionals, and customers. Also an enterprise finds it difficult to create anything valuable without involving individual customers.

¹² See: <http://giffgaff.com/> and http://community.giffgaff.com/t5/ideas/v2/ideaexchange/page/blog-id/ideas_01/page/1, http://community.giffgaff.com/t5/ideas/v2/ideaexchange/page/blog-id/ideas_01/page/2 (access: 14.11.2012).

¹³ C.K. Prahalad, V. Ramaswamy, *op. cit.*, p. 24.

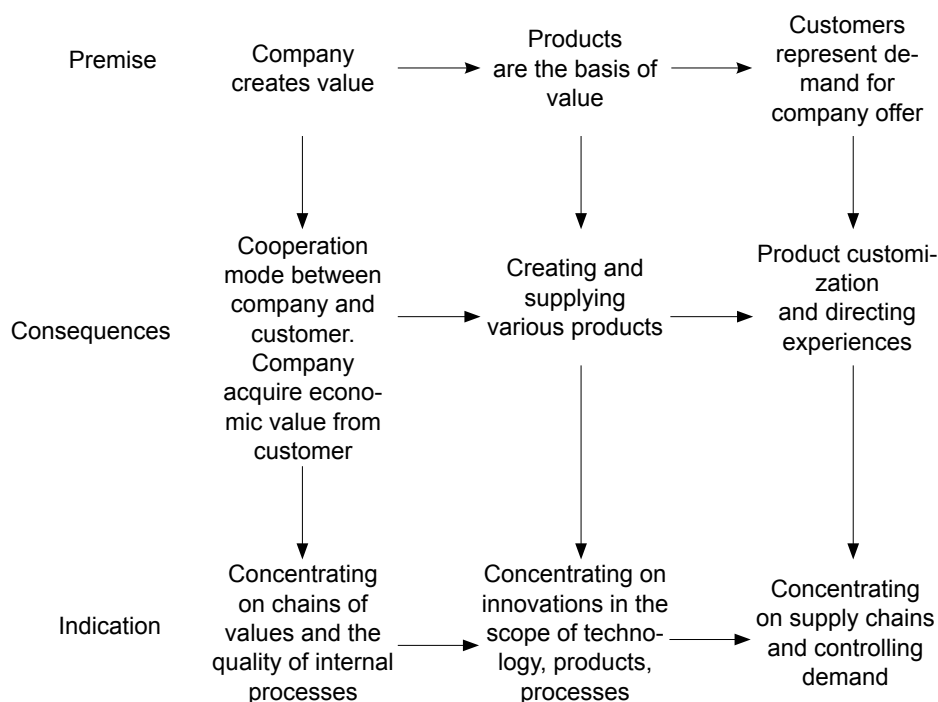


Fig. 1. Traditional frame of reference for value creation

Source: C.K. Prahalad, V. Ramaswamy, *Przyszłość konkurencji. Współtworzenie wyjątkowej wartości wraz z klientami*, PWE, Warsaw 2005, p. 23.

Coimbatore Krishnarao Prahalad and Venkat Ramaswamy offer a new frame of reference for creating value. They start from changing its initial premise. Now a customer, together with an enterprise, creates value (not an enterprise independently) and this experience of co-creation is the basis of value. The creation takes place not within a process of exchanging goods, but within interactions between customers and enterprises that take place on the market. Because plenty of people look for interaction, the process (and the value itself) will consist of various and diversified experiences of co-creation because of the uniqueness of each customer. In this conditions managers should focus on the quality of co-creation experiences rather than the quality of products and business processes. A necessity to build a network of experiences, based on a good infrastructure of interactions between an enterprise and customers, is crucial in order to assure quality and variety of experiences that will eventually become a value co-created by individual interactions between two partners. These interactions have a fundamental significance, because the experience of co-creation, not the offered product, are the basis of a unique value for each of the customers. In this point of view, the market is concentrated around separate customers and their experiences of co-creation with an enterprise, not around

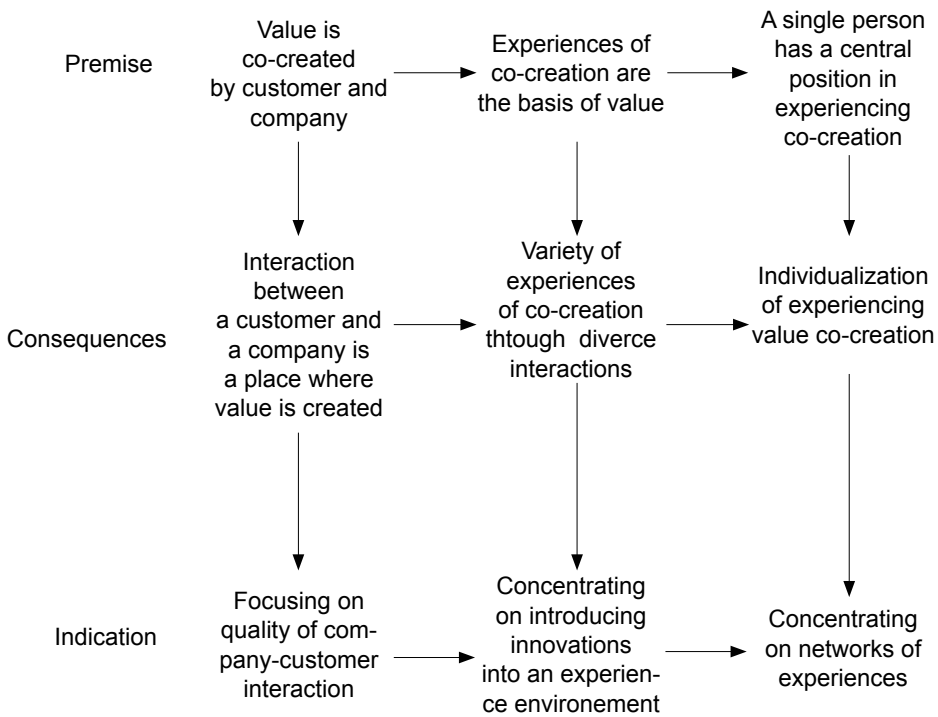


Fig. 2. New frame of reference for value creation

Source: C.K. Prahalad, V. Ramaswamy, *Przyszłość...*, p. 25.

passive roles of production and consumption of an enterprise offer.¹⁴ The figure 2 presents new frame of reference for value creation.

This transformation has five elements that we should be aware of:¹⁵

— Value is moving from products towards solutions and experiences of customers. The borderlines between business-to-business and business-to-consumer relations will be blurring.

— No enterprise has all the resources needed to create unique, personalized experiences, so all of them should have an access to talents, components, products, and resources from the best source available.

— Systems of internal management, unless they are flexible enough, could become a barrier in enterprise development towards co-creation.

— Resources within and around enterprise business environment must be constantly adjusted to changing customers' needs and expectations.

¹⁴ *Ibidem*, pp. 25–26.

¹⁵ Classification and description based on: C.K. Prahalad, M.S. Krishnan, *Nowa Era Innowacji*, Warsaw, 2010, p. 25.

— Specific model should be created in order to allow a company focusing on individual customers among millions.

In a fight for competitiveness there is a shift from creation of value based on a product towards creation of value based on a personalized experience, from customer segmentation towards experiences of one customer, from storing all the resources needed towards diverse suppliers which provide services mutually¹⁶.

5. Elements of co-creation

A system for co-creation of value consist of five blocks:¹⁷

— Dialog — interactivity, engagement, and willingness to take actions. It must concentrate around issues that are interesting for both sides, needs a space to take place (Internet is a perfect one these days), and rules of participation that will ensure proper, structured, and effective interaction. Good example is Innocentive — a project set up by a group of organizations (including NASA, The Economist, P&G, Eli Lilly, etc.) that is a space of ideas exchange between organizations and professionals all over the world to solve users' challenges that have occurred.¹⁸

— Access — which does not necessarily mean ownership. For example Gateway, an American computer hardware company, in 2002 started to offer an access to an experimental service — “Processing on Demand” — an access to a grid computing services (thanks to the use of 272 Gateway computers from company stores in the US and its 8000 showroom PCs) for organizations that do not have a possibility to use high performance computing equipment or to access a supercomputing power, for only 15 cents per one hour of processor work.¹⁹ Another example that reflect people growing tendency to have an access to something (instead of own it) is the idea of car sharing (or car clubs in the UK). It is designed to people who are interested in travelling mainly on short distances for a specified purpose (e.g. do shopping outside the city).²⁰ Not ownership but experience of an individual, raising from a possibility to access something (e.g. different lifestyle) creates value in such situations.

— Transparency — the asymmetry between companies and customers was a feature of mutual relations that enterprises benefited from. However, with growing availability of information about products, technologies, companies itself, and ubiquitous connectivity a customer is able to access as many information as needed. Both access and transparency are crucial for a dialog between company and customer to be effective.

¹⁶ *Ibidem*.

¹⁷ Classification and description based on: C.K. Prahalad, V. Ramaswamy, (2004), *Co-creation experiences: The next practice in value creation*. J. Interactive Mark., 18: 5–14. doi: 10.1002/dir.20015.

¹⁸ See: <http://www.innocentive.com/about-innocentive> (access: 14.11.2012).

¹⁹ G. Hyman, *Gateway Finds Good Use For Showroom PCs*, The IT Business Edge Network, <http://www.internetworks.com/ent-news/article.php/1554991/Gateway+Finds+Good+Use+For+Showroom+PCs.htm> (access: 14.11.2012).

²⁰ See: <http://www.carsharing.org/about/what-is-car-sharing/> (12.11.2012).

— Risk-benefits — although traditionally, it is an enterprise that manage an evaluate risk better than a customer and there is no or a little need to share information concerning threats to the public, an active dialog about threats and benefits (connected with using company products) can raise the level of trust between an enterprise and its customers.

The quality of experience connected with co-creation is absolutely different than experiences while purchasing a product traditionally. The basis of value moves from the product itself to the entire experience of co-creation of value, including co-designing and other interactions between a customer, their bigger community, and a company. The experience of co-creation of value depends on the level of access to company employees and customer community, as well as transparency for each of the sides.²¹ The table on the next page, created by Coimbatore Krishnarao Prahalad and Venkat Ramaswamy (published in 2004 in volume 18 of the „Journal of Interactive Marketing”), presents the main points of co-creation of value for clear understanding of the issue.

Table 1. The Concept of Co-creation

Co-creation is not about:	Co-creation is about:
Customer focus. Customer is king or customer is always right. Delivering good customer service or pampering the customer with lavish customer service. Mass customization of offerings that suit the industry's supply chain. Transfer of activities from the firm to the customer as in self-service. Customer as product manager or co-designing products and services.	Co-creation is about <i>joint</i> creation of value by the company and the customer. It is not the firm trying to please the customer. Allowing the customer to co-construct the service experience to suit her context. Joint problem definition and problem solving. Creating an experience environment in which consumers can have active dialogue and co-construct personalized experiences; product may be the same (e.g., Lego Mindstorms) but customers can construct different experiences.
Product variety.	Experience variety.
Segment of one.	Experience of one.
Meticulous Market research.	Experiencing the business as consumers do in real time. Continuous dialogue.
Staging experiences.	Co-constructing personalized experiences.
Demand-side innovation for new products and services.	Innovating experience environments for new co-creation experiences.

Source: C.K. Prahalad, V. Ramaswamy, (2004), *Co-creation experiences: The next practice in value creation*. J. Interactive Mark., 18: 5–14. doi: 10.1002/dir.20015.

²¹ C.K. Prahalad, V. Ramaswamy, *Przyszłość...*, p. 30.

6. Contemporary forms of business cooperation

A changing character of competition in global economy, transition from mass to custom production, and mutual communication opportunities are stimulating organizations to establish cooperation. In order to compete in contemporary conditions, enterprises must specialize and join their competences (abilities) with those, owned by other organizations. Such network cooperation between companies, that includes actions and resources, causes that a new, qualitatively better configuration occurs. A group (network) of enterprises can achieve goals by using their resources more effectively than a single company. Moreover, acting in a network causes that an organization is less exposed to unexpected changes in its business environment. Together with others it can easier react and defend against threats. A network has also bigger possibilities to influence its environment than a single company.²² Literature offers plenty of enterprise network classifications according to position of a company in a network,²³ environment variability and type of network connections,²⁴ form of network cooperation,²⁵ etc. A good classification is presented in Stanisław Łobejko's book *Przedsiębiorstwo sieciowe. Zmiany uwarunkowań i strategii w XXI wieku* (*Network enterprise. Changes of conditions and strategies in the 21st century*). The author presents such types of enterprise network cooperation as:²⁶

Production networks — in order to meet contemporary market requirements the issue of “where a company should produce” is being replaced by the issue of “where to execute separate production tasks”. Creating customized products which are the result of co-creation between a company and a customer requires a well-organized production process. A good example of such production network is Finnish shoe company – Pomarfin that cooperates with Italian design group — Mazzucato, shoe factories in Estonia, and company dealers who sell Pomarfin shoes and provide services in the scope of company customers’ feet measurement in order to offer special shoes, perfectly adjusted (thanks to specially designed measurement software and digital scanners provided by Finnish IT companies) to a customer’s foot.²⁷ It is an example of how B2B relations intersperse with

²² S. Łobejko, *Przedsiębiorstwo sieciowe. Zmiany uwarunkowań i strategii w XXI wieku*, Warsaw 2010, p. 213.

²³ A. Zydlewska, *Decyzje strategiczne w marketingu na rynku instytucjonalnym*, [in:] *Marketing na rynku instytucjonalnym*, edited by T. Gołębiewski, Warsaw 2003, pp.170–171.

²⁴ G.J. Hooley, J.A. Saunders, N.F. Percy, *Marketing Strategy and Competitive positioning*, Prentice Hall, Englewood Cliffs, N.J. 1998, pp. 182–184.

²⁵ *Why Networks?*, Skillnets Network Series no. 1, http://www.skillnets.ie/sites/skillnets.ie/files/pdf/Network_Series_1-8.pdf (access: 17.11.2012).

²⁶ Classification and description based on: S. Łobejko, *op. cit.*, pp. 222–232.

²⁷ C.K. Prahalad, M.S. Krishnan, *op. cit.*, p. 20.

B2C relations to create both a unique customer experience and support company (and the entire network) position on the market.

Logistics networks — in a simple supply chain each participant is connected with one supplier and/or one recipient. Thanks to development of ICT, in the end of the 20th century supply chains started to evolve into supply chain networks, where each chain link is connected with several others, including those from the outside of the chain. Good example of such chain network is a cooperation between eBay users and Amazon which allowed eBay sellers to send the products their offer via eBay by using Amazon logistics network.

Strategic alliances — a cooperation between two or more companies that combines chosen parts of their resources and skills in order to achieve a chosen strategic goal (goals). For example a joint venture between L'Oréal and Nestlé (in the beginning of the 21st century) resulted in creation of *Innéov Fermeté* — *a skin redensifier which was a high-quality product with very competitive price that became a market hit in three months*.²⁸

Technology alliances — instead spending money on R&D and market competition it is useful to start cooperation in the scope of new technological solutions and share profits after the project completion. This idea contributed to establishing an alliance between Cisco, EMC, and VMware in order to support flexibility of other enterprises business activity by providing them services in the scope of cloud computing. Because virtualization of data centres is regarded as extremely profitable in the nearest future the three companies decided to work together on such a project (instead of competing) and share profits afterwards.

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²⁸ F. Ancarani, M. Costabile, *Coopetition dynamics in convergent industries, : designing scope of connections to combine heterogeneous resources*, [in:] *Coopetition. Winning Strategies for the 21st Century*, edited by: S. Yami et. al., Chettenham 2010, pp. 223–224.

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Summary

The value co-creation, as a method of creating value in relations between enterprises and customers, is a reality that brings benefits for both sides. Practical business solutions presented in the article force to ask a question about topicality of the assumption that only the company is able to create a value to be exchanged on the market. Perhaps the best opinion that sums up this paper was brought by Harvard University mathematical biologist Martin Nowak in his article *Five rules for the evolution of cooperation* published in the Science Magazine: The two fundamental principles of evolution are mutation and natural selection. But evolution is constructive because of cooperation. New levels of organization evolve when the competing units on the lower level begin to cooperate. Cooperation allows specialization and thereby promotes biological diversity. Cooperation is the secret behind the open endedness of the evolutionary process. Perhaps the most remarkable aspect of evolution is its ability to generate cooperation in a competitive world. Thus, we might add ‘natural cooperation’ as a third fundamental principle of evolution beside mutation and natural selection.²⁹

²⁹ M. Nowak, *Five rules for the evolution of cooperation*, “Science”, 2006, 314 (5805), pp. 1560–1563.