# INNOVACIÓN EN MODELOS DE COLABORACIÓN Y EMPRENDIMIENTO COLLABORATION AND ENTREPRENEURSHIP INNOVATION MODELS

Joaquin Jose Carvalho Proença.

Alumni Universitat Politècnica de València. E-mail: joaquinproenca@icloud.com

#### Resumen

Cómo generar valor a través de un modelo de innovación para destinos basado en enfoques de colaboración y emprendimiento. La innovación abierta, el diseño de servicios, los living labs, las TIC vinculadas a los nuevos desarrollos en tecnología y ciencia, la globalización directa o a través de redes y los productos y procesos de ecoinnovación son factores que se deben tener en cuenta al pensar en la innovación en los destinos. En la actualidad, la confluencia de economías abiertas, basadas en redes de colaboración con usuarios, proveedores, comunidades y actores institucionales; participación de los stakeholders para desarrollar nuevos servicios; calidad del medio ambiente a través de innovaciones que conllevan un beneficio ambiental; economía social, las organizaciones que persiguen objetivos no estrictamente comerciales proporcionan una colaboración entre el mercado y las fuerzas sociales, contribuyendo así a la innovación en los destinos.

Palabras claves: Innovación Abierta, Living Labs, Generación de Valor, Modelos

Colaborativos, Emprendimiento Clasificación JEL: O31, M31

## **Abstract**

How to generate value through an innovation model for destinations based on collaborative approaches and entrepreneurship. Open innovation, service design, living labs, ICT's linked to new developments in technology and science, globalization either direct or through networks and eco-innovation products and processes are factors to take into consideration when thinking about innovativeness in destinations. Nowadays the confluence of open economies —based on collaboration networks with users, suppliers, communities and institutional actors—, participation —of its stakeholders to develop new services— environment quality —eco-innovations that entail an environmental benefit— and social economy —as of organizations pursuing objectives not strictly commercial— provide a collaboration between the market and social forces thus contributing for innovation in destinations.

Keywords: Open Innovation, Living Labs, Value Generation, Collaborative Models,

Entrepreneurship

JEL Classification: O31, M31

#### 1. LITERATURE REVIEW

Innovation in Ancient Greece meant "cutting fresh into" (Godin, 2012). The preferred expression related to innovation would be gradual, novelties should be introduced gradually rather than in a sudden manner. The evolution of the concept of innovation had associated a pejorative connotation and it was rarely used until the twentieth century thought it had some popularity at the time of the Reformation.

The innovation theoretical discussion inception began with Joseph Schumpeter (1939), and in the decades of the sixties and seventies, governments and researchers acted as "innovative ideologists" (Skinner, 2002) ascribing to innovation an economic and technological meaning (Godin, 2012). The linear model of innovation prevalent in the fifties and sixties tended to assume that a product that did not change was disseminated in an environment that remained unchanged (Bush, 1945).

The value proposition concept emerged in the eighties in a McKinsey paper titled "A business is a value delivery system" that **emphasized** the importance of a value proposition for the targeted market segment. **The value** proposition was then defined as "the benefits that the company intends to provide to each customer segment, along with the approximate price that the company will charge each segment for those benefits" (Lanning & Michaels, 1984).

At that time, innovation started to be considered an interactive model according to Rothwell and Zegveld (1985) and Kline and Rosenberg (1986), innovation should not be seen as a linear process, whether led by demand or technology, but as a complex interaction that links potential users with new developments in science, technology and demand.

Empirical studies of the 1980s and 1990s (Lundvall, 1985;1992) had already shown that success in the innovation process lies in the nature and intensity of the interaction with current and future (presumers, prosumers) users of innovations. Studies on business innovation indicate continuous interactive learning (Lundvall, ed., 1992).

Firms learn both from their own experience as from external sources including consumers, suppliers, competitors, other organizations such as universities, innovation labs, **and** consultants in the services design, development, production, and marketing. Von Hippel (1988), Slaughter (1993) have shown the initiative and influence that users can take when it comes to encouraging and organizing innovation.

In the 1980s with the strong growth of private funding for R&D, scientific knowledge began to be seen as something that could, or even should, be commercialized, sold and patented (Bauer, 2008). Today, techno-science shares with business and industry vocabulary, several norms and practices...synergy, efficiency, spin-offs, failure/success, marketing, proactivity and entrepreneurialism (Polino & Castelfranchi, 2012).

The idea of stakeholders, firms' view to increasing value for parties other than shareholders based on Freeman (1984) Strategic management: A stakeholder approach. Freeman added other constituencies that are affected by the firms' activities and saw the corporation as the

ISSN 0717-9901 ISSN ONLINE 0719-0875 Universidad del Bío-Bío

center of a series of interdependent two-way relationships (Crane & Matten, 2004). The original stakeholder model – Freeman (1984) included government, civil society, competitors. Later Freeman (2003) included five inner stakeholders: suppliers, financiers, employees, customers, and communities, as the central core, and introduced six outer stakeholders: governments, environmentalists, NGOs, critics, the media and others.

Yet according to Waxenberger and Spence (2003) stakeholder 'management' has become an important discourse in the translation of business ethics to management practice and strategy. This research focus on stakeholders not only as elements of the business mission, corporate social responsibility and ethics further as knowledge value resources, coinnovation processes and influencers in the commercialization or back end innovation.

Innovation as a result of the needs, ideas derived from co-creation processes with users and lead users the individuals who first feel the need for a product or service was exposed on *The sources of innovation* from Von Hippel (1988). Prahalad and Ramaswamy (2000) in *Co-opting customer competence* defined co-creation as redefining the way organizations involve users to directly, sometimes repeatedly, participate in the design, development of products, services, experiences, and innovation processes.

Later Open Innovation strategy where companies collaborate with suppliers, distributors, customers, universities, NGOs, innovation centers and living labs to co-create unique value was introduced by Chesbrough (2003) *Open innovation: The new imperative for creating and profiting from technology.* The open innovation paradigm (Chesbrough, 2003) reinforced the stakeholder theory, has confirmed it has a solid basis further as management and governance theory, but as in particular a strategy analysis for competitiveness and for the survival of the businesses.

S-D logic in which all economic activity is an exchange of services since the customer is always a co-creator of value and there is no value until an offering is used comes from Vargo and Lusch (2004) *Evolving to a new dominant logic for marketing*. Design Thinking is a human-centered approach to innovation consisting of empathy, definition, ideation, prototyping and testing to deliver results financially interesting and technically feasible a concept from both Boland and Collopy (2004) *Managing as designing* and Brown (2017) *Change by Design*.

The collaborative consumption concept, initially used by Felson and Spaeth (1978), began to grow exponentially. Sharing and collaborative economy uses the consumer input in commercial exchanges, such as the rating system provided by users, as co-producers of value. The rise of crowdsourcing from Howe (2006) highlights crowdsourcing as fast disseminating knowledge using the potential of the internet for creative destruction and productive networks.

Finally Mulgan (2006) Social Innovation: what is it, why it matters, how it can be accelerated, thought of Social Innovation that **combines** processes of innovation, such as open hardware, open networks, open data and open knowledge and also the innovations which have a social purpose through collaborative approaches and social entrepreneurship.

#### 2. METHODOLOGIES

## 2.1. Collaborative Approaches

Service-Dominant Logic is essentially a value-co-creation model that sees all actors as resource integrators, tied together in shared systems of exchange – service ecosystems or markets (Vargo 2011).

Vanhaverbeke (2014) considers the flows of external knowledge strengthens internal competencies and speed up the innovation process. **According to** Vanhaverbeke value is only created when business' knowledge is monetized through paths to the market as with new product development and commercialization. A common feature of innovation is that it must have been implemented. A new or improved product is implemented when it is introduced on the market (Oslo Manual 2005).

However, the theory of free innovation (von Hippel, 2016) differs from the paradigm of the market-oriented innovations not only as of the source of product innovation but with the respect of diffusion mode as well. For free innovation, products and services developed and given away by consumers as a "free good" contribute to improvements in social welfare and are not constrained by the market.

Hippel (2016) further sustains that on the Internet era, the OECD's producer-centric concept, a definitional restriction that innovations must be "introduced on the market" —that is, made available for sale— is obsolete. The flows between firms and free innovators can exist either by appropriation for commercial use of designs developed by free innovators or through platforms that the firms made available to free innovators to develop their creativity. The second place, the innovation changes made by different adopters (von Hippel, 1988) help promote the innovative behavior of the firm. New products and processes normally change significantly during its diffusion namely by the modifications and appropriations made in the innovations by different adopters.

For Kline and Rosenberg (1986), later improvements to the invention, after its first introduction, could be economically much more important than the original invention which encourages producers' organizational culture change from a focus on in-house development to a collaboration division with free innovators (von Hippel, 2016).

In third place, the collaborative approaches are not only among businesses and free innovators but from peer-to-peer individual contributions as well. "Generally, development activity in the free innovation paradigm is devoted to types of innovative products and services consumed by households, not businesses. In contrast, innovation development activity in the producer innovation paradigm is devoted to addressing both consumer and industrial product and service needs". (von Hippel, 2016).

One of the important factors for this peer-to-peer innovation widespread has been the growing availability of information and communication technologies, which Dodgson, Gann, and Salter (2006) call "innovation technologies".

In the externally sourced innovations Internet has played an important role by facilitating technology intelligence (Veugelers, Bury, & Viaene, 2010), online communities (Dahlander & Wallin, 2006; Füller, Matzler, & Hoppe, 2008), crowdsourcing or broadcast (Ebner, Leimeister, & Krcmar, 2009; Jeppesen & Lakhani, 2010), and Internet platforms such as blogs and virtual worlds (Droge, Stanko, & Pollitte, 2010; Kohler, Matzler, & Füller, 2009), (cited in West and Bogers, 2014).

Chesbrough and Brunswicker's (2014) study signals inbound open innovation to be more widely practiced than outbound being customer co-creation and start-ups as two of the most popular methods. Customers, suppliers, and consumers are considered the most relevant stakeholders for open innovation with competitors and communities a lower priority.

## 2.2. Entrepreneurship Approaches

Just as social media enable peer-to-peer sharing of content, the technologies of the collaborative economy enables peer-to-peer sharing of services and goods. The consumers shift from passive to active collaboration, the use of technology to access underutilized resources and firms "turning to services as a new way of creating and capturing value," (Visnjic, Van Looy, & Neely, 2013) are especially relevant to the collaborative economy.

When defining the sharing-economy the research used Cohen's (2016) **six category classification**. Technology category either tech-driven, tech-enabled, and low/no-tech. There are activities where technology is a business model supporting tool. The tech-enabled dimension represents business models reliant on technology to facilitate the interactions but need offline connections. Finally, in the tech-driven business models technology is essential to connect users and to complete the transaction as well.

The transaction category has three dimensions, the most common market, alternative (e.g. bonus of services for influencers), and free with revenue through sponsorships or advertising models.

The business approaches include profit-driven the most common, a hybrid that looks out to social impact and environmental benefits, and mission-driven for voluntarism and solidarity from people. Profit-driven corporate structure with business to crowd and optimization of new resources as Uber for the first case and Zipcar, Airbnb a disintermediation model that favored independent travel compared with established business models such as bundling, affinity club, or fractionalization as the second case. Travelers might prefer to rent apartments instead of rooms in large hotel chains in order to value authenticity, maximize resource utilization and community sustainability.

The shared resources category includes optimization of new resources, find a new gain for used resources, optimization of underutilized existing resources. Car2Go, LeftoverSwap, W hotel partnership with DesksNearMe to list available space to work are examples of all three. In the governance model, there are traditional corporate structures, collaborative governance models and cooperative models, corporate structures seem to be the favored option. Organizations embrace collaborative approaches to working with other stakeholders in sourcing, implementing projects through platforms or through cooperative models.

ISSN 0717-9901 ISSN ONLINE 0719-0875 Universidad del Bío-Bío

The platform type besides B2B includes business to crowd and P2P/brokerage. The difference between the last two has to do who owns shared assets or not with the example of a car-sharing services business or a platform that works as interface owners and buyers.

The collaborative economy encompasses a broad range of business models that offer mainly less formal access to optimized assets through new technologies and new branding. The new models of collaborative consumption and co-production are co-opted by private businesses or through platforms that the firms made available for social creativity.

On the other hand, collaborative social innovation has been described by MSL Group (2013) as "initiatives that involve businesses, governments, non-profits, and change-makers coming together to co-create innovative and sustainable solutions around a shared purpose" a trend attributed to the internet, entrepreneurship and the value of multi-stakeholder solutions that create shared value.

The broad definition of social innovation provided by the Social Innovation Exchange (SIX) platform is "the development and implementation of new ideas (products, services, and models) to meet social needs". Social innovation stresses both the product and process (Phills, Deiglmeier, & Miller, 2008), activities and services to meet a social need predominantly advanced through **organizations** whose primary purposes are social (Mulgan, Tucker, Ali, & Sanders, 2007). Again relationships are a key element added to the entrepreneurial sustainability of social innovations besides their scalability and replicability.

In order for firms to generate shared value Pfitzer, Bockstette and Stamp (2013) have identified five elements that include a social purpose, defining the problem being addressed, measuring shared value, creating the optimal innovation structure and co-creating with external stakeholders.

## 2.3. Innovation Model for Destinations

Organizations benefit from inbound knowledge flows **with** Open Innovation and user-centered design for easier access to user needs — consumer insights— and prototyping. Users are equal partners of co-creation of value in order to create, develop and implement new products and services. Organizations mostly appropriate ideas and the users or adopters are resource actors in ideation, validation workshops or as influencers and word of mouth in diffusion processes. User-centered design methods, 3D printing, cloud computing, **and** social media shorten product design and reduce innovation-related costs.

Open Innovation **might evolve** Service Design with users collaboration, innovation culture, structured processes, and Living Labs:

- Collaboration on the front end innovation
- Experimentation on real-world settings
- Ecosystem partnerships beyond 'human-centered' processes to create value for all actors across the product system

Entrepreneurship dynamism it is directly related to innovative behavior, risk assumption and error and trial processes according to the Schumpeterian idea that the entrepreneur's

leadership is not to discover opportunities for profit, but in value creation and capture once it has been perceived (Lara & Peréz, 2011). Regulatory procedures for company setup, market-entry, and exit barriers, funding — direct, indirect and third party such as crowdfunding —, labor force talent and public administration procurement where startups with inclusive business models have preferential treatment than larger companies are all influential factors.

## Entrepreneurship highlights:

- Startups, and unmet needs not covered by the market offer
- Social entrepreneurship, organizations pursuing objectives not strictly commercial.
- The role of services in creating value, for example car sharing provides less pollution

Technology —besides the wireless internet, mobile phone networks access— through **Information and Communication Technologies (ICTs)**, is a factor for absorptive capacity, empowerment, attractiveness, and capabilities for users and businesses (especially SMEs) and NGOs.

As research in the business models in the collaborative economy section, digital platforms can provide services, marketplaces, social media, mediating work and digital economy can improve services and address challenges in destinations.

## ICTs - Technology/Science

- Efficiency, digital platforms for services and marketplaces, exploration of underuse resources, i.e. hotels with platforms for crowd working, platform to access local products either crafts or food
- Reduced Costs
- · Service quality
- · Facilitate dynamic intelligence/inference prediction/absorptive capacity
- Crowdsourcing/e-participation
- Prototyping/Minimum Viable Product (MVP) capabilities
- Influences consumer behavior, through artificial intelligence (AI) recommendations

Globalization includes international visitors, diversity of foreign-born residents, social networking users, cross-border e-commerce buyers, NGOs' active role in policymaking, the presence of multinationals and the input of foreign value-added to local tourism supply chain and final consumption. According to the definition of the International Monetary Fund (1997), globalization refers to the world process of accelerated integration of economy, through production, trade, financial flows, technological diffusion, information networks, and cultural currents.

### Globalization circumscribe:

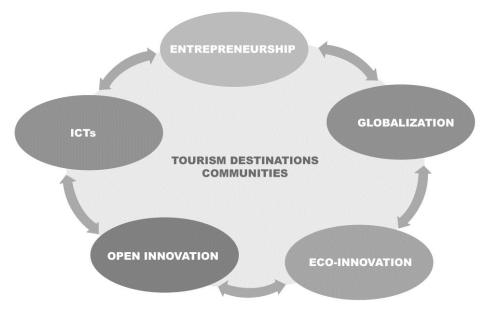
- Global or regional scale
- Supply chain flow of firms, people, knowledge, practices, activities
- · Direct or Networks

Eco-Innovation in products, natural and cultural heritage, processes of environmental certification bring benefits for other subsectors.

Eco-innovation an environmental benefit sought or not.

- Product
- Processes

Contributing to a holistic way to identify the indicators to measure the most innovative destinations a model (based on technological outputs, startups and innovative social entrepreneurship, globalization, eco-innovations initiatives, and service design creative outputs) is advance.



**Figure: Innovation Model at Destinations** 

Source: author

#### 3. CONCLUSIONS

Firms are dependent on their dynamic capabilities to generate, process and apply knowledge-based information. This is a process not exclusive of the large companies with the financial and intellectual capital to invest in research and development of new products and services.

Different **systems** are established of appropriation for commercial use of designs developed by users, platforms the firms made available for users to develop their creativity and appropriations and modifications made in the innovations by end-users during its diffusion sometimes in peer-to-peer processes.

The change of economic and social paradigm that has accelerated with the 2008 global crisis requires a different analysis of the innovation and new technologies, the growing role of the private capital, but also the participation from civil society, grassroots organizations and the third sector in the innovation ecosystem.

Public administrations might commit to establishing strategies and innovative culture across departments and agencies, requiring facilitators to bring the stakeholders together and embracing new design methods. The creation of networks of incubators, accelerators, innovation living labs to support local small businesses besides incentives such as vouchers, tax incentives, grants, subsidies.

Further research would need to examine if the inter-organizational collaboration approach to destination innovation focuses on R&D technologist approach (based on efficiency, customers operations and quality of service), an integrative approach (creation of new products derived from the combination of existing features) or a Service-Dominant Logic shared meaning approach (based on exchange, relationships, collaboration within actors roles).

Market and social collaborative approaches to innovation — understood as an action, deliberate and persistent, to search for new products, services, processes or social models, sometimes not recognized by the market (as in free innovation) — result in the generation of value for users in destinations.

On on hand, technological context like ICTs that reduces costs, eliminates entry barriers, facilitates dynamic, non-linear intelligence and collaborations added to the fact that many enterprises are organized on a global scale either directly or through networks. On the other hand entrepreneurialism, spin-offs, startups with new practices of innovation and problem/solution-based processes are other agents of change. Further, the diversity of profiles of innovators, entrepreneur, and teams with different characteristics, knowledge, and skills that complement each other contributed to the interdisciplinary and collaboration.

#### 4. REFERENCES

- Bauer, M.W., Falade, B. A. (2008). Public understanding of science, survey research around the world, IN M. Bucci, B. Trench, (Eds.) *Handbook of public communication of science and technology*. London and New York: Routledge.
- Boland, R., Collopy, F. (2004). Managing as designing. Stanford University Press, Stanford, California.
- Brown, T. (2017). Change by Design, Revised and Updated: How Design Thinking Transforms Organizations and Inspires Innovation. New York, N.Y: Harper Collins Publishers.
- Bush, V. (1945). *Science, the endless frontier*. U.S. Government Printing Office, Washington, D. C.
- Chesbrough, H. (2003). Open innovation: The new imperative for creating and profiting from technology. *Harvard Business School Press*.
- Chesbrough, H., Brunswicker, S. (2014). A Fad or a Phenomenon?: The adoption of open innovation practices in large firms. *Research-Technology Management* 57(2), 16-25.
- Cohen, B. (2016). Making sense of the many business models in the sharing economy. June 4. *Fast Company*, Co.Exist.
- Crane, A. Matten D. (2004). Business ethics: A European perspective, pp. 50–52. *Oxford University Press*.
- Dahlander, L. Wallin, M. W. (2006). A man on the inside: Unlocking communities as complementary assets. *Research Policy* 35(8), 1243–1259.
- Dodgson, M., Gann, D., & Salter, A. (2006). The role of technology in the shift towards open innovation: The case of Procter & Gamble. *R&D Management 36*(3), 333–346.
- Droge, C., Stanko, M. A., & Pollitte W. A. (2010). Lead users and early adopters on the web: The role of new technology product blogs. *Journal of Product Innovation Management* 27(1), 66–82.
- Ebner, W., Leimeister J. M., & Krcmar, H. (2009). Community engineering for innovations: The ideas competition as a method to nurture a virtual community for innovations. *R&D Management* 39(4), 342–356.
- Felson, M., Spaeth, J.L. (1978). Community Structure and Collaborative Consumption: A routine activity approach. *American Behavioral Scientist*, 21(March–April), 614–624.
- Freeman, E. (1984). Strategic management: A stakeholder approach. New York.: Cambridge University Press.
- Freeman, E. (2003). Lecture Stakeholder management revisited: What's the state of the art? Leuven, 20 November.
- Füller, J., Matzler, K., & Hoppe, M. (2008). Brand community members as a source of innovation. *Journal of Product Innovation Management* 25(6), 608-619.
- Godin, B., Lucier, P. (2012). Innovation and conceptual innovation in ancient Greece (Working Paper No. 12). Project on the Intellectual History of Innovation, Montréal.
- Howe, J. (2006). The rise of crowdsourcing. Wired June issue.
- International Monetary Fund (1997). World economic outlook.

- Jeppesen, L. B., Lakhani, K. R. (2010). Marginality and problem solving effectiveness in broadcast search. *Organization Science* 21(5), 1016–1033.
- Lanning, M. J., Michaels, E. G. (1988). A Business is a value delivery system. McKinsey staff paper at Atlanta office.
- Lara, P. V., Peréz, J. P. (2011). El empresario innovador y su relación con el desarrollo económico. *TEC Empresarial*, 5(3), 21-27.
- Lundvall, B.A. (1985). Product innovation and user-producer interaction. *Industrial Development Research*. Series 31, Aalborg University Press.
- Lundvall, B. A. (Ed.). (1992). *National systems of innovation: Towards a theory of innovation and interactive learning*. London, Pinter Publishing.
- Mulgan, G., Tucker, S., Ali, R., & Sanders, B. (2007). Social Innovation: What it is, why it matters and how it can be accelerated. Oxford Saïd Business School, Skoll Centre for Entrepreneurship.
- MSL Group (2013). Now and Next: Future of Engagement Report, pp 24/25.
  Retrieved from https://issuu.com/mslgroupofficial/docs/now-next-future-engagement
- Oslo Manual (2005). https://www.oecd.org/sti/inno/2367580.pdf
- Phills Jr, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering Social Innovation. Stanford Social Innovation Review, Fall 2008.
- Pfitzer, M. Bockstette, V., & Stamp, M., (2013). *Harvard Business Review*, September issue.
- Polino C., Castelfranchi, Y. (2012). 'The communicative turn' in contemporary technoscience: Latin American approaches and global tendencies, IN Schiele B., Claessens, M., & Shi, S. (Eds.). Science communication in the world: Practices, theories and trends. New York, London: Springer Dordrecht Heidelberg.
- Prahalad, C.K., Ramaswamy, V. (2000). Co-opting Customer Competence. *Harvard Business Review*, January-February 2000 issue.
- Rothwell, R., Zegveld, W. (1985). *Reindustrialization and technology*. Armonk, New York: M.E. Sharpe.
- Kline, S. J., Rosenberg, N. (1986). An overview of innovation, IN R. Landau, N. Rosenberg, (Eds.), *The positive sum strategy: Harnessing technology for economic growth*, pp. 275–305. Washington, D.C.:National Academy Press.
- Kohler, T., Matzler, K., & Füller, J. (2009). Avatar-based innovation: Using virtual worlds for real-world innovation. *Technovation* 29(6–7), 395–407.
- Schumpeter A. J. (1939). Business cycles, a theoretical, historical and statistical analysis of the capitalist process. New York: McGraw-Hill.
- SIX. Retrieved from https://socialinnovationexchange.org
- Slaughter, S. (1993). Innovation and learning during implementation: a comparison of user and manufacturer innovation. *Research Policy*, 22(1), 81-97.
- Skinner, Q. (2002). *Visions of politics, volume I: Regarding method.* Cambridge, U.K.: University Press.
- Vanhaverbeke, W. (2014). Pushing the Boundaries Part 2: Making open innovation relevant to more economic players, *Innovation Management*, May. Retrieved from
- http://www.innovationmanagement.se/2014/05/06/pushing-the-boundaries-part-2-making-open-innovation-relevant-to-more-economic-players/.

- Vargo S., Lusch, R. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing* 68(1), 1-17.
- Vargo S. L. (2011). Market systems, stakeholders and value propositions. Toward a service-dominant logic-based theory of the market, IN Extending service-dominant logic. *European Journal of Marketing*, 45(1/2), 217-222.
- Veugelers, M., Bury, J., & Viaene, S. (2010). Linking technology intelligence to open innovation. *Technological Forecasting and Social Change* 77(2), 335–343.
- Visnjic, K, Van Looy, B. & Neely, A. (2013). Steering manufacturing firms towards service business model innovation. *California Management Review 56*(1), 100-123.
- von Hippel, E. (1988). The Sources of Innovation. Oxford: Oxford University Press.
- von Hippel, E. (2016). Free innovation. Cambridge, MA: MIT Press.
- Waxenberger, B. L. Spence, (2003). Reinterpretation of a metaphor: From stakes to claims. *Strategic Change* 12, 239–249.
- West, J., Bogers, M. (2014). Leveraging external sources of innovation: A review of research on open innovation. *Journal of Product Innovation Management* 31(4), 814–831.