BUSINESS DEVELOPMENT THROUGH INNOVATION AND CO-CREATION

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Abstract

The aim of this paper is to analyze the tight relationship between innovations and co-creation and their contribution for sustainable development of businesses in a competitive global environment. The analysis provides a literature review of the main principles of innovations, innovation management and co-creation. In addition, the paper highlights the necessity for transformation of business practices towards sustainability through implementing innovations. The role of co-creation is discussed in light of the process of developing customer value and improving overall business performance.

Key words: *sustainability, innovations, co-creation, business transformation*

1. INTRODUCTION

While it has been widely acknowledged that innovation implies the realization of a new concept into a product, it still needs to be explicitly highlighted that the real challenge in innovation is not invention, but the process of making these inventions appealing to the market and ultimately turning them into a commercial success. Hence, it is the role of businesses to make innovation compatible with their plans for transformation and process optimization. Meanwhile, the internal transformation needs to be done in tight collaboration with the external environment, i.e. the attentive consumers who put product/service value under severe scrutiny. The establishment of such relationship is not easy and it requires specific close observation in terms of identifying and exploring the links that need to be built and maintained to support the process of successful and sustainable business transformation.

As a consequence of social, technological, political and economic changes, the field of organizations management and engineering becomes highly complex, calling for more effective strategies1. Machado and Davim (2015) discuss innovative technological resources and their implications on organizational policies, strategies, and flexibility, as well as on sustainable management. Furthermore, Tidd (2014) contributes to a shift in the debate from potentially misleading general prescriptions, and provides conceptual and empirical insights into the precise mechanisms and potential limitations of open innovation research and management practice[2]. In essence, all innovation requires the allocation of management priorities, regardless of the field of implementation. Successful innovation—the key to growth and profit—rests on disciplined management and implementation of the innovation process from start to finish[3].

The purpose of this paper is to analyze the close relationship between co-creation and innovations and to comment on their strong potential for transforming businesses in a competitive global environment. In section two the analysis consists of a literature review of the main definitions and principles of innovations and innovation management. In section three we define and comment on the process of co-creation as well as on its contribution towards major changes in the business process. In addition, the paper stresses on the necessity for transforming business practices towards sustainability through implementing innovations. The role of co-creation is discussed in light of the process of developing customer value and improving overall business performance.

[1] Machado, C. & Davim, J.P. (2015). *Innovation Management – In Research and Industry.* Berlin: De Gruyter.
[2] Tidd, J. (2014). *Open Innovation: Research, Management and Practice.* Imperial College Press.
[3] Maital, S. & Seshadri, D.V.R (2012). *Innovation Management: Strategies, Concepts and Tools for Growth and Profit*. New Delhi: Sage Publications Pvt. Ltd.

2. DEFINITIONS ON INNOVATION AND INNOVATION MANAGEMENT[4]

What is innovation? In general, the term is widely known to define something new which is offered on the market – a new product and/or service. But innovation should not be considered to be entirely equal to invention.

Some definitions on innovation include:

- "Innovation is the successful exploitation of new ideas" – Innovation Unit (2004) UK, Department of Trade and Industry
- "Industrial innovation includes the technical, design, manufacturing, management and commercial activities involved in the marketing of a new (or improved) product or the first commercial use of a new (or improved) process or equipment" – Chris Freeman (1982) *The Economics of Industrial Innovation*, 2nd edition, Pinter, London.
- "Innovation does not necessarily imply the commercialization of only a major advance in the technological state of the art (a radical innovation) but it includes also the utilization of even small-scale changes in technological know-how (an improvement or incremental innovation) – Roy Rothwell and Paul Gardiner (1985) Invention, innovation, re-innovation and the role of the user. *Technovation*, 3, 168.
- "Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced" – Peter Drucker (1985) *Innovation and Entrepreneurship*, Harper & Row, New York.
- "Companies achieve competitive advantage through acts of innovation. They approach innovation in its broadest sense, including both new technologies and new ways of doing things". - Michael Porter (1990) *The Competitive Advantage of Nations*, Macmillan, London.
- "An innovation business is one which lives and breathes "outside the box". It is not just good ideas, it is a combination of good ideas, motivated staff and an instinctive understanding of what your customer wants" – Richard Branson (1998) DTI Innovation Lecture.

It is interesting to note that some of the most famous inventions of the nineteenth century come from men whose names are forgotten. As a result, the actual names we associate with the products are of the entrepreneurs who brought them into commercial use. For example, the vacuum cleaner was invented by J. Murray Spengler and originally called an "electric suction sweeper". He approached a leather goods maker in the town who knew nothing about vacuum cleaners but had a good idea of how to market and sell them. His name was W. H. Hoover. Evidently, all vacuum cleaners are emblematically known by the name of this Mr. Hoover and even the name was turned into a noun – *hoover*. Another example is the story of the sewing machine. A Boston man called Elias Howe produced the world's first sewing machine in 1846. Unable to sell his ideas despite travelling to England and trying there, he returned to the USA to find that a person by the name of Isaac Singer had stolen the patent and built a successful business from it. Although Singer was eventually forced to pay Howe a royalty on all machines made, the name which most people now associate with sewing machines is Singer not Howe.[5]

These examples explicitly prove the notion that innovation is more than simply coming up with good ideas. Rather, it is the process of growing these ideas into practical use. Therefore, it is extremely important to spot where and how new markets can be created and grown. However, it should be made explicit that innovation is not about opening up new markets, it can also offer new ways of serving established and mature markets. Equally it is not only about manufactured products but also services (e.g. financial innovation), particularly due to lower capital costs which makes it an attractive platform for new entrants and radical change. Online banking and insurance, for example, have radically

[4] Tidd, J. & Bessant, J. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change.* 4th edition. John Wiley & Sons Ltd, p. 16.
[5] Bryson, B. (1994). *Made in America.* Minerva, London.

transformed the efficiencies with which those sectors work and the range of services they can provide, while other businesses have used the internet to transform completely business models around activities such as phone-calls (Skype), post services (Gmail), low-cost airlines (Wizz Air), trading and auctions (Ebay), online shopping (Amazon), etc.[6]

In principle, Tidd and Bessant (2009) identify four dimensions of innovation[7]:

- "Product innovation" – changes in the things (products/services) that an organization offers: a new design (Toyota Prius, LED light bulbs);
- "Process innovation" – changes in the ways in which they are created and delivered: automobile industry, Ebay, Skype;
- "Position innovation" – changes in the context in which the products/services are introduced: Microfinance (Gameenbank), low-cost airlines;
- "Paradigm innovation" – changes in the underlying mental models which frame what the organization does: online financial services; personalized entertainment (iTunes).

The last dimension suggests the engagement of users as designers and builders rather than as passive consumers (e.g. LEGO, Nike, Adidas, etc.), as it will be further discussed in this paper.

Figure 1 demonstrates the 4P model of innovation dimensions and what each one of them implies.

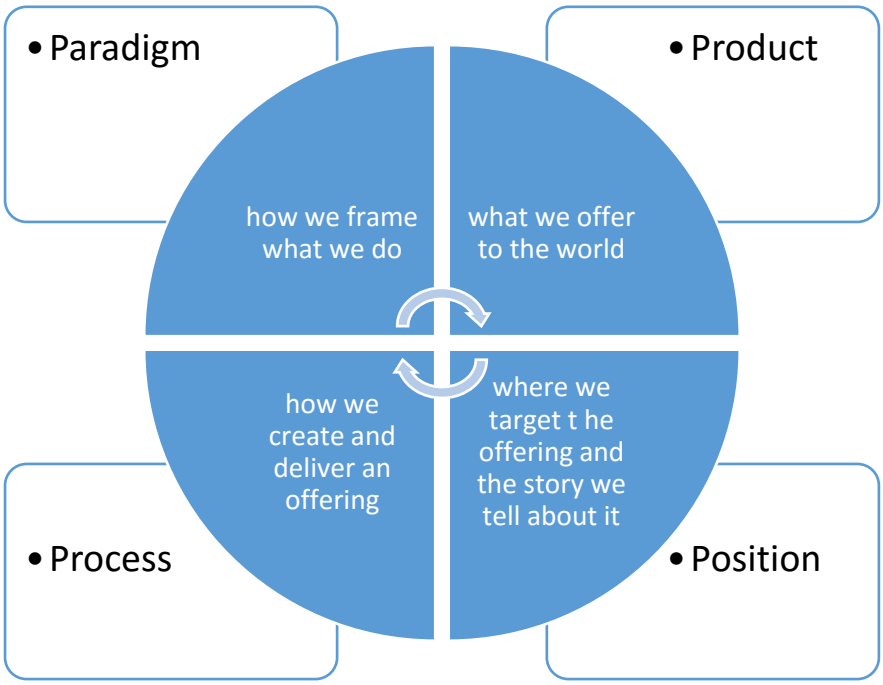


Fig. 1. The 4Ps of innovation space

This model can be successfully used in transforming companies – for example, if the emphasis has been on product and process innovation there may be scope for exploring more around position innovation.

[6] Tapscott, D and A. Williams (2006) *Wikinomiks – How Mass Collaboration Changes Everything*, Portfolio, New York.
[7] Tidd, J. & Bessant, J. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change.* 4th edition. John Wiley & Sons Ltd, p. 21.

The process of innovation in all companies follows a specific common model (fig. 2). It involves four basic stages[8]:

- *Searching* – scanning the environment (internal and external) for, and processing relevant signals about, threats and opportunities for change;
- *Selecting* – deciding (on the basis of a strategic view of how the enterprise can best develop) which of these signals to respond to;
- *Implementing* – translating the potential in the trigger idea into something new and launching it in external or internal markets.
- *Capturing value from the innovation* – both in terms of sustaining adoption and diffusion and also in learning from progressing through this cycle so that the organization can build its knowledge base and improve the ways in which the process is managed.



Fig. 2. A simple model of the innovation process

Successful innovation management requires building and developing routines across the core process[9]. These core abilities include acquiring specific management routines, as described in table 1.

Basic Ability	**Contributing routines**
Recognizing	Searching the environment for technical and economic clues to trigger the process of change
Aligning	Ensuring a good fit between the overall business strategy and the proposed change – not innovating because it is fashionable or as a knee-jerk response to a competitor
Acquiring	Recognizing the limitations of the company's own technology base and being able to connect to external sources of knowledge, information, equipment, etc. Transferring technology from various outside sources and connecting to the relevant internal points in the organization.
Generating	Having the ability to create some aspects of technology in-house – through R&D, internal engineering groups, etc.
Choosing	Exploring and selecting the most suitable response to the environmental triggers which fit the strategy and the internal resource base/external technology network
Executing	Managing development projects for new products or processes from initial idea through to final launch. Monitoring and controlling such projects.
Implementing	Managing the introduction of change – technical and otherwise – in the organization to ensure acceptance and effective use of innovation
Learning	Having the ability to evaluate and reflect upon the innovation process and identify lessons for improvement in the management routines
Developing the organization	Embedding effective routines in place – in structures, processes, underlying behaviors, etc.

Table 1. Core abilities in managing innovation

[8] Tidd, J. & Bessant, J. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change.* 4th edition. John Wiley & Sons Ltd, p. 54.
[9] Tidd, J. & Bessant, J. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change.* 4th edition. John Wiley & Sons Ltd, p. 73.

However, the core capabilities can become core rigidities, particularly when the organization is too committed to the old ways to change. Thus it is important, from the standpoint of innovation management, not only to build routines but also to recognize when and how to destroy them and allow new ones to emerge. Hence, successful innovation is about building and improving successful routines (whether developed in the same enterprise or observed in another enterprise) and facilitating their emergence across the organization, which implies a building up of capability over time.

The successful innovation management requires a thorough knowledge of the entire process described in figure 2[10]. This includes the following phases:

Search – the first phase in innovation involves detecting signals in the environment about potential for change. These could take the form of new technological opportunities, or changing requirements on the part of markets. Most innovations result from the interplay of several forces, some coming from the need for change pulling through innovation and others from the push which comes from new opportunities.

Selection – innovation is inherently risky and even well-endowed firms cannot take unlimited risks. Therefore, it is essential that some selection is made of the various market and technological opportunities and that the choice made fit with the overall business strategy of the firm. Three inputs feed this phase. The first is the flow of signals about possible technological and market opportunities available to the enterprise. The second input concerns the current knowledge base of the company, its distinctive competence. By this it is meant what it knows about its product or service and how that is produced or delivered effectively, to ensure that there is a good fit between what the firm currently knows about and the proposed changes it wants to make. And the third input requires to relate the proposed innovation to improvements in overall business performance.

Implementing – turning the potential ideas into reality. This implementation phase can be seen as one which gradually pulls together different pieces of knowledge and weaves them into an innovation. It is during this stage that most of the time, costs and commitment are incurred, and it is characterized by a series of problem-solving loops dealing with expected and unexpected difficulties in the technical and market areas. Effective management of this stage requires close interaction between market-related and technical activities.

Capture – the purpose of innovating is rarely to create innovations for their own sake but rather to capture some kind of value from them – be it commercial success, market share or cost reduction.

3. THE ROLE OF CO-CREATION FOR BUSINESS TRANSFORMATION

Business transformation is undergoing a fundamental transformation, driven by globalization, digitization and ubiquitous connectivity. It is predicted that this transformation will radically change the nature of companies and how they create value. It will impact traditional industries such as education, insurance, health care, automobiles, footwear, as well as emerging industries such as video games, search engines, and social networks[11].

According to Prahalad and Krishnan (2008) this transformation is built on two basic pillars:

1. Value is based on unique, personalized experiences of consumers. Firms have to learn to focus on one consumer and her experience at a time, even if they serve 100 million consumers. *The focus is on the centrality of the individual.*
2. No firm is big enough in scope and size to satisfy the experiences of one consumer at a time. All firms will access resources from a wide variety of other big and small firms – a global ecosystem. *The focus is on access to resources, not ownership of resources.*

[10] Tidd, J. & Bessant, J. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change.* 4th edition. John Wiley & Sons Ltd, p. 79.
[11] Prahalad, C. K. & Krishnan, M. S. (2008). *The new age of innovation: driving co-created value through global networks*. McGraw Hill.

Thus the value of co-creation is 180 degrees different from the model that started the industrial revolution. The consumers of Model T from Ford were treated as an undifferentiated group, and thus the famous dictum was derived: "Any color is OK as long as it is black". What is more, all resources had to be within the firm to capture value.

In the co-creation process there are three distinct transformations that take place:

1. The firm is moving from selling a product to selling a service. The product is an integral part of the service but the value is based on service.
2. The firm is moving from a transactional relationship with a customer to a service relationship with a customer.
3. When the manufacturer is selling a tire (just the physical product) to the fleet owners, this type of business would be described as a business-to-business organization. However, when that company is providing feedback that improves individual driver safety and skills, then it is like a business-to-customer organization.

All businesses need to undergo through this type of transformation. What is more, if companies do not recognize the need for this transformation and how important it is to survive in a competitive environment, they will be left behind. *This transformation is not a choice.*

Prahalad and Krishnan (2008) further identify five key elements of this transformation:

1. Value is shifting from products to solutions to experiences.
2. No company has all the resources it needs to create unique personalized experiences.
3. Internal management systems can become an impediment. Therefore, flexible systems must be developed.
4. Resources in the ecosystem must be continually configured.
5. Specific models must be developed to enable organizations to focus on one consumer from the millions.

The main function of co-creation, in essence, is to support businesses in their efforts towards process transformation. This is not, however, dependent only on the introduction of innovations but it also includes other significant factors (fig. 3).

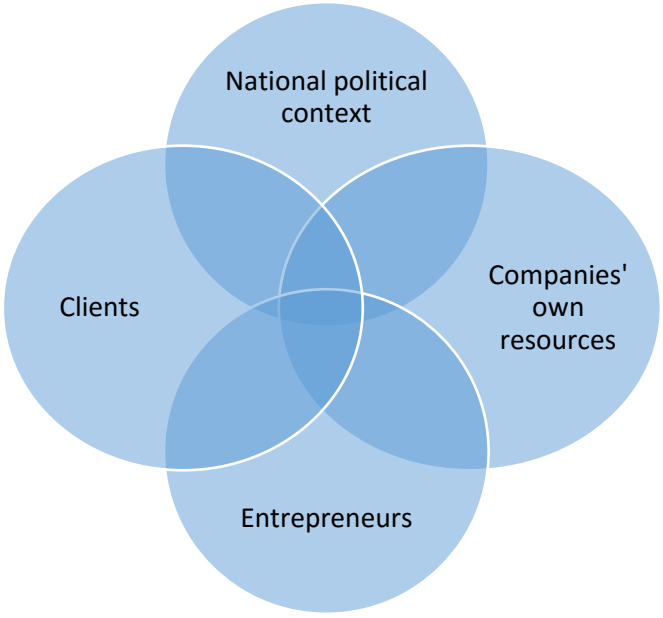


Fig. 3. Main drivers of co-creation – own model

This model focuses on the balanced contribution of the identified four driving factors, placing particular emphasis on the role of the clients and their preferences. Equally as important are the entrepreneurs, who are engaged in the business development processes as well as the companies' available resources and the national political context.

On the first place, entrepreneurship plays a significant role in the process of implementing innovations and co-creation in the enterprises. There are three main approaches towards entrepreneurship:

The functional approach deals mainly with dynamic participants, which make key decisions for investments, production, innovations, placement and development. From this perspective, entrepreneurship is a psychological characteristic, relative to dynamics, creativity and originality. This approach also includes managers from multi-national companies, state-enterprises or non-profit organizations as well as a variety of dynamic entrepreneurs within the companies.

The second approach is focuses on the company as a key economic agent which makes decisions on investments, moving into new activities or sectors, or even relocating in other countries.

The third conceptual approach is focused on enterprises, which are managed by their owners. It considers the entrepreneur as an owner who is fully engaged in the company's activities – mainly SMEs, newly established firms and self-employed.

The role of clients is equally as important as it emphasizes the impact of personal preferences on production choices and the choice of innovation. Clients are a driving factor for implementing major changes in the business models and introducing transformations in order to achieve higher value in the production chain. They build the co-creative relation in the process of both designing and marketing new products or services on the market and choosing the most appropriate innovative mechanisms.

In all cases, however, the main contribution for the effective introduction of innovations is evident in the financial opportunities of the enterprises. Here, financial opportunities are to be understood as access to financial resource for investments in long-term tangible assets and also short-term capital in order to maintain a healthy liquidity. Of course, this resource could be own (generated from the company's ongoing activity and the optimal management of expenses), as well as borrowed through bank financing or state support.

The third main factor in the model – the state of the national political climate – has a decisive role for the development and implementation of innovations. It establishes the prerequisites which are necessary for the implementation of government policies in the process of supporting investments in innovation, training entrepreneurs, maintaining the stability of the financial system as well as that of the entire macroeconomic framework.

4. CONCLUSION

The analysis clearly demonstrates that the competitive environment changes from a process focused on the product to a personalized value creation that stresses on the preferences of the individual, i.e. the emotions of the clients. This process requires the active use of both innovations and co-creation in the transformation of businesses towards more sustainable structures.

Moreover, the basis for value creation also changes from the limitations of the company, which uses all available resources towards companies that use a number of suppliers who participate collectively in the co-creation process. Yet, if the companies do not confront the limitations for competitive innovations in internal business processes, the change in the business model cannot be carried out.

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