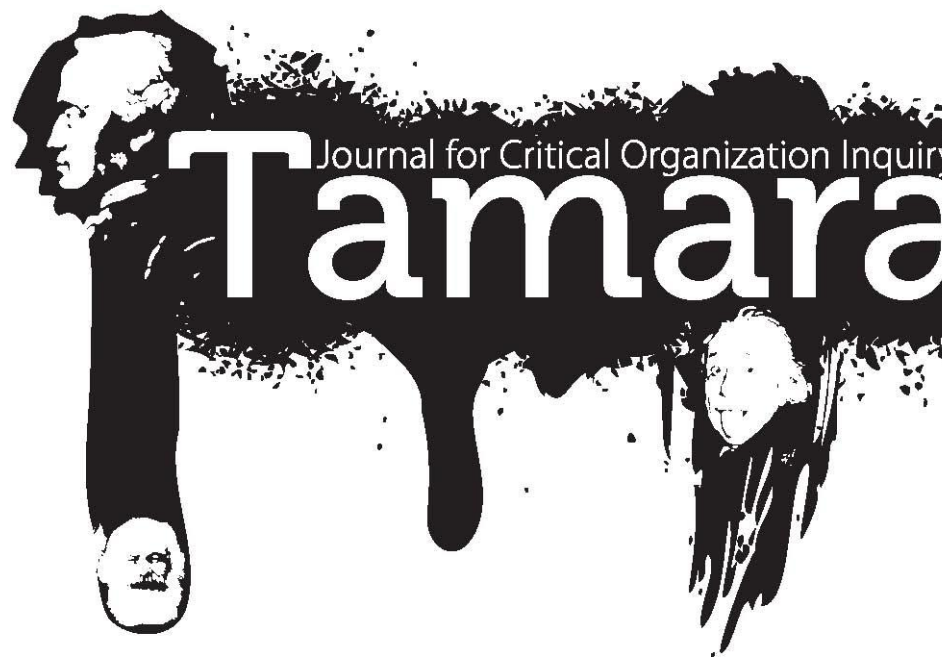


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Sustainability: insights from a business model perspective

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Abstract

This paper uses business model perspective to understand how different organisations can through their corporate sustainability policies contribute to the social innovation/entrepreneurship processes. Since the current literature on social innovation concentrates on an individual level and the topic of social entrepreneurs, we propose a wider view of the scene. We analyse how social innovation can be a part of a business model (design) on one hand; and how the social innovation can be sustainable as a result of the integration with the business models on the other hand.

In our analysis, we identify four levels of business involvement in which organisations can both contribute and benefit from innovative social goods or support social innovation. An organisation may address social needs as a part of its marketing strategy, offsets, R&D model, or as a core-business idea. We argue that in any of these situations a company can benefit from supporting social innovation, for instance by good brand recognition, positive associations, innovative products and services, new markets, etc. Fulfilling social needs may be either a by-product of business-oriented activities, such as investigation of existing demand, addressing specific groups of potential customers, inventing a new market segments; or because of the external pressures such as legal regulations or public protests.

Introduction

Innovation and entrepreneurship are the driving forces of human race. Entrepreneurship is a process by which an innovation is developed. Entrepreneurship studies gave us a vast understanding of the innovation processes, not only in the

economic sense (Schumpeter, 1934; Kirzner, 1973) but also organisational (Hjorth, 2004), institutional (DiMaggio, 1988; Battilana, Leca & Boxenbaum, 2009) or purely social (Thompson, 2002). However, as Bacq, Janssen & Kickul (2011) noticed, the social entrepreneurship research has focused mainly on three themes: a) hybrid organisations, b) the innovation process or c) distinguishing characteristics between social and economic entrepreneurship. Nevertheless, drawing clear demarcation lines do not add clarity, which is blurred by the concept of social innovation itself.

We distinguish the following notions of the social innovation (Pol & Ville, 2009). It can be closely linked to the institutional change, as its prime mover. In this meaning social innovation is equal with changes in cultural, normative and regulative structures (Heisala, 2007). Economic innovation differs from the social one by its purpose: profit versus improving quantity and quality of life (Young Foundation, 2007 quoted in Pol & Ville, 2009). However, Forum on Social Innovation indicates that social innovation is often carried out in the areas of needs that are not taken on by the commercial sector. Finally, social innovation can be identified with production of the public goods. This last concept is closest to our understanding of the nature of social innovation because of its relativity for business concepts. At the same time we argue that there is a need in shifting research efforts from defining social innovation to determine its chances for sustainability (Pol & Ville, 2009).

The sustainability that is understood as action towards long-time maintenance of (eco)system has in fact not only environmental sense (Davies and Mullin, 2010), but also purely social and economic dimensions. Once some argue that economic growth is restricted by the social and environmental sustainability (Scott Cato, 2009); the more appropriate is to say that there is no sustainable growth without three supporting pillars: economic growth, environment protection and social progress (Adams, 2006; Cunha Callado & Fensterseifer, 2011). Economic growth is possible if we operate on sustainable business models, which makes effective use of technical and social developments.

At the same time social innovation is conceptually differentiated from the classical understanding of economic entrepreneurship leading to a business innovation. In particular, the argument is that business innovation tends to create private goods, when social innovation helps to improve living conditions of human kind in general (Pol and Ville, 2009). Brooks (1982) clearly distinguishes various types of innovation, separating purely technical from socio-technical and purely social innovation. But he is not making any clear distinction between business and social innovation. On contrary, he states that market innovation (credit cards or leasing), management innovation (flexible working hours or project structures), political innovation (summit meetings) or institutional innovation (self-help/support groups); they all fall into one category of social innovation (Hans-Werner Franz et al., 2012).

Therefore, there is no fundamental problem in combining business activities with addressing social needs as long as the gain will be mutual. Even more we believe that social and economic innovation do not have to be completely exclusive. In fact there is an overlap of social and business activities. These can be either entrepreneurial or simply providing support for social innovation. But those activities have to fit into a particular business model, and in return offer some kind of an economic and quantifiable gain. In line with those arguments, inclusion of social impact in the business model itself can play an essential role in commercialising and sustaining social entrepreneurship ideas (Amores Salvado, 2011; Yunus, Moingeon, & Lehmann-Ortega, Steiner and Brock, 2009; Guclu, Dees & Anderson, 2002). Moreover, Steiner and Brock (2009) explicitly emphasised the problem of scalability of social entrepreneurial endeavours, which is going back to the business model discussion.

In this paper we aim to explore potentially mutual benefits between businesses and social innovation. Therefore, social innovation is considered as a broader concept, which can not only overlap with commercial activities, but also become a core part of a business model itself. This paper draws on the literature on social innovation & corporate sustainability as well as insights from a multidisciplinary research project on Social Inclusion Through the Digital Economy (SiDE). It is also informed by research on online communities, assisted living, and open source software and the short case-examples were used as vignettes to illustrate our theoretical argument and the framework.

Business model perspective

Following Osterwalder et al. (2005), we use the term business model as a conceptual tool, which describes the business logics of a firm. This in particular contains the relations between value proposition – its product/services development and commercialisation, infrastructure and consumer relations' management. Sustainable and robust business model is not only successful in expanding into new markets and differentiating its products/services; but it is also generating profits (Anajana, 2004). Financially sustainable business shall be scalable, i.e. growing profits are combined with the lowering marginal costs. The similar discussion is relevant for the social innovation. A social entrepreneur not only has to have a good idea (innovation), but also motivate contributors and co-workers to sustain it. In traditional sense, it means attracting

governmental or local funds and/or non-for-profit organisations. However, the ongoing sustainability can be also secured by private company's involvement.

Sustainability and business models

In the business model and value creation perspective, social innovation can be expressed by giving away 'public goods' through open collaboration (non-commercial), and by co-creation of economic goods that also address social needs. In the literature and empirical examples, we have found four levels of the business involvement in social innovation and sustainable growth: offsets, marketing and reputation, R&D, and finally a core business (Figure 1).

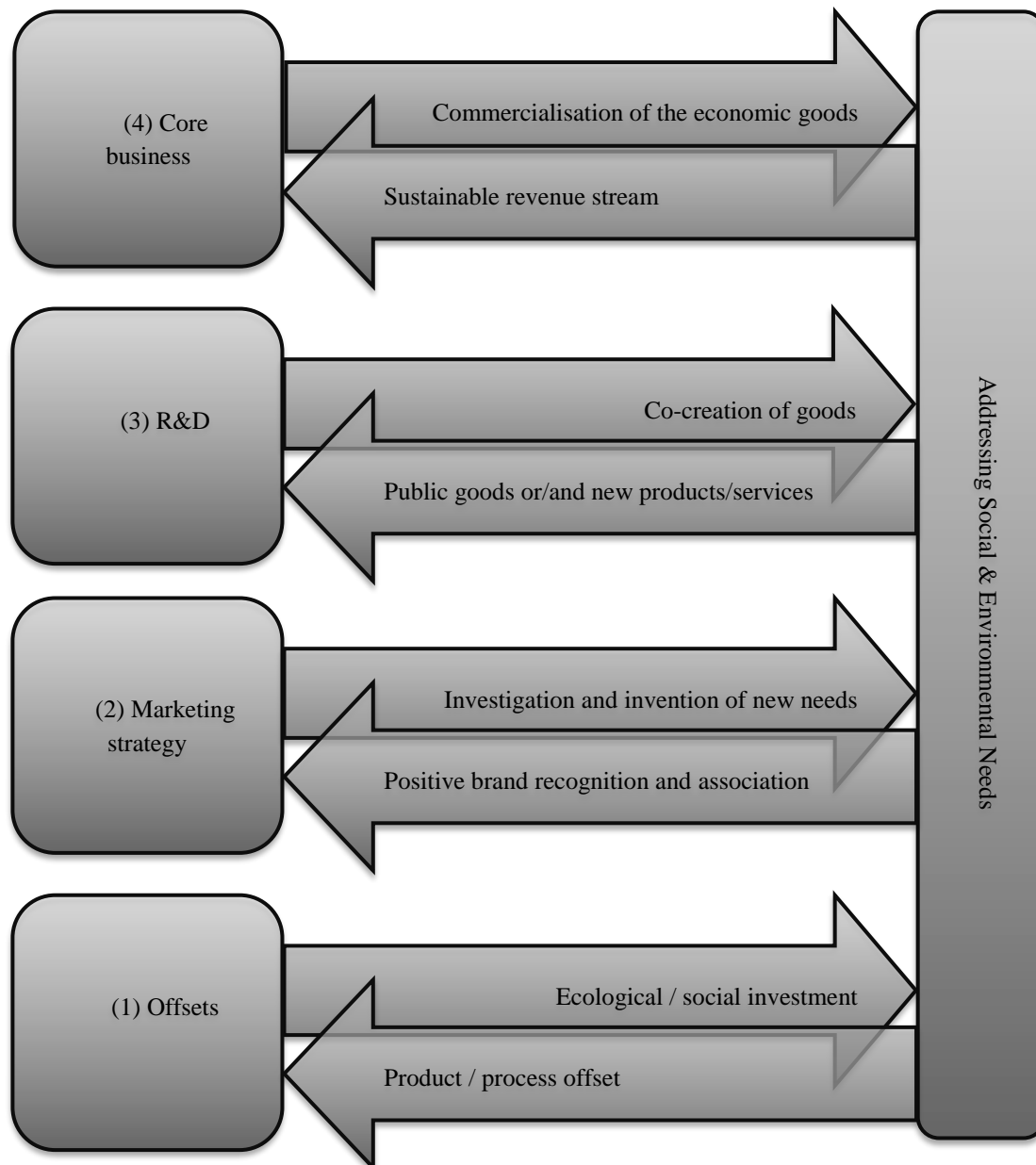


Figure 1: Four levels of business involvement in sustainable social innovation; source: the authors

Innovation Offsets

Relationship between environmental friendly improvements and economic efficiency is often framed as conflicting agendas (Paton, 2003) and there is need for enforcing sustainable and environmentally friendly solutions. These can be either political, legislative or social pressure and can be performed by a proactive administration or citizens' protests (Hjalager, 1996). Adopting 'greener' product may bring initial loses (Barla, Constantatos & Herrmann, 2008). However, Porter & van der Linde (1995) emphasised that businesses, which individually improve their environmental impact, will eventually, under certain circumstances increase their profits. This Porter's hypothesis is valid because of product and

process offsets (Earnhart & Rassier, 2016). These offsets occur when environmental improvements lower the company or customers' costs, for example by cheaper purchase costs, reduction of product-disposal costs, reducing process inputs such as energy (Paton, 2003). We believe that similar hypothesis can be made in relation to social innovation/improvements. For example: the company involved in raising the quality of life in a local community can potentially benefit from healthier and more loyal workforce.

Marketing Strategy

The link between marketing strategy and social innovation has been originated in Corporate Social Responsibility (CSR) movement and closely related to such fields as global conscious movement, ethics, and environmental sustainability. As a part of marketing activity, a company gets involved in investigation and invention of new needs. These needs can be also social needs. By addressing those social needs, the company may not expect direct profits, but a positive brand recognition and good association. For example, Jenkins (2009) designed a framework for a business opportunity of CSR for SMEs, where they argue that companies actively look at how to overcome challenging aspects of CSR by being innovative and flexible; looking for market-driven opportunities that address important societal and environmental conditions. Another example is link between innovation and reputation. Corporate reputation depends on the organisations' ability to promote values that are transformed into corporate identity and image (Chun, 2006). Another example of use of social innovation as a marketing strategy can be found in tourism industry. Tepelus (2007) discusses a particular case of preventing trafficking and child sex tourism in Brazil. As argued, the tourism industry has always had a complex relationship with the rest of society and was dependant on a variety of stakeholders, such as communities where they operate; the media; human rights activists; etc. Involvement in government-led campaigns or engagement in inter-governmental organisations such as UNICEF supports social change in the local communities. This provides a better image of a socially responsible company as well as better environment to spend holidays by its customers (Tepelus, 2007).

As we will show in the following paragraphs, Apple has applied a similar strategy. As we can read in the official statement: Apple Inc. designs, manufactures, and markets a range of digital technologies including mobile and media devices, personal computers (Apple Form 10-K, 2011). The company believes that constant investment in R&D and marketing is crucial to sustain a loyal customer group. At the same time, the company depends on a range of outsourcing companies which are involved in component and product manufacturing as well as logistical services. Many of the partners are located outside of the USA and a significant part of the company's manufacturing is performed in Asia (Apple Form 10-K, 2011).

For some years now, there has been extensive media coverage about poor working conditions and issues on human rights in the employment at Apple's China factory. Such news showed that business involvement in social innovation/interest has become greatly transparent in the digital environment. As a result of public opinion's pressure - an online petition, signed by 155,000 people - Apple has been called to do more to guarantee its Chinese factory workers are treated decently (BBC, 8 March, 2012). Also, a separate SumOfUs petition asked for the iPhone 5 to be made 'ethically' (BBC, 8 March, 2012). This resembles famous cases of Nike and similar companies which regularly used sweatshops with underpaid workers to produce their expensive products.

As a result of such public reaction, Apple acknowledged the demands and confirmed that it cares about all workers employed by subcontractors (BBC, 8 March, 2012). For the first time Apple has published a list of its suppliers and also conducted audits throughout its supply chain (BBC, 8 March, 2012). Additionally, Apple agreed the non-profit Fair Labor Association to monitor the suppliers, and publish the results with details of where violation occur. All this is very important, as 'Apple is going to have much bigger longer-term problems than paying a few extra dollars for its products if it loses its lustre with ethical consumers', said Taren Stinebrickner-Kauffman, executive director of SumOfUs petition (BBC, 8 March, 2012).

On the other hand, for more than 20 years Apple is known for its commitment to accessibility as standard features for no additional cost (<https://www.apple.com/uk/accessibility>). The user experience of Apple products was a revolution in assistive technology with hundreds, if not thousands, of apps relating to disabilities. For instance, Apple products include a screen-access technology for the blind and visually impaired as well as those who have cognitive and learning disabilities, Mac computers include an alternative, simplified user interface that rewards exploration and learning (Williams, 2011).

The case of Apple demonstrates that the link between marketing strategy and social innovation has been made already by the Corporate Social Responsibility (CSR) movement and closely related to such fields as global conscious movement, ethics, and environmental sustainability (Ciesielska & Iskoujina, 2012). In the case of Apple, lack of ethical consideration put the company in some problematic situations and faced it with the risk of losing its loyal customers. Therefore, the

company was forced to get involved in investigating and improving the working conditions. At the same time, they are known for their assistive technology approach. By addressing those social needs, the company may not expect direct profits, but a positive brand recognition and association.

R&D

The concept of social innovation as co-creation of public goods can be fairly easily framed in an open innovation approach. There are two main reasons why open innovation became a new paradigm for understanding industrial innovation. Firstly, it is because potential users are perceived as a source of new ideas (Von Hippel, 1988). Secondly, it is because of widely distributed knowledge that leads to innovation processes and occurs at the interspaces between diverse groups and organisations. Therefore organisations, to advance their technology and systems, make use of both internal and external networks in their R&D processes (Ciesielska, 2017). But working in the open collaboration has additional consequences. The outcomes of such collaboration are often becoming public goods. The advantages of this cooperation are clear for all parties involved. A company can benefit from free labour and more advanced products. But the company also has to offer its contribution and give away the final product into the public sphere.

These days many companies are incorporating open innovation models to strengthen their creativity and profits. One of the best known fields in which open innovation takes place is Open Source Software (Ciesielska, 2010). The best-known example of the Open Source Software community project is Linux Kernel, the main component of Linux Operating System responsible for mediating between user space software and hardware. Nowadays the Kernel is being developed by hundreds of independent software engineers alongside with many business partners: Red Hat, IBM, Novell, Oracle, Renesas Technology, The Linux Foundation, SGI, Fujitsu, Parallels, Analog Devices, Nokia to name just key contributors (Westenholz et al, 2012).

A contemporary case that we see as a good example of the use of open source software initiatives is Google, in particular Google Chrome web browser. Google is a global technology leader that aspires to build products that improve the lives of billions of people globally, and to organize the world's information and make it universally accessible and useful. Their innovations in web search and advertising have made Google website a top brand in the world. (Forbes, 2013). Google generates its revenue mainly by delivering relevant, targeted and cost-effective online advertising (Google Form 10-K, 2011).

In 2008 it also released to an open source software Internet Browser - Chrome, which since then has demonstrated dramatic increase in its growth. In 2010, Google Inc. made strategic investments in its critical product areas, including Chrome and Chrome OS – following its 'core philosophy of building open platforms with optionality, and creating infrastructure that allows everyone on the web to succeed' (Google Form 10-K, 2011). Chrome is now used as the primary web browser on 61% of computers worldwide, which doubled for the past 5 years (Net Marketshare, Dec, 2017). Chrome has offered an easy to use, fast and simplified browser to users. On the other hand, apart from the revenues Google has from its activities such as advertising and various applications for businesses (www.google.com/about/company/business.html), there is the question of business revenue for Google from Chrome. One of the benefits is about locking users in using Google services.

To summarise, R&D is an excellent example for the concept of sustaining social innovation as seen from Chrome. Open collaboration methods and open standards have led to the creation of many of the innovations around the Internet (Iskoujina, Z. & Roberts, J., 2015; Mulgan, Salem & Steinberg, 2005). Today also large commercial corporations appreciate the success of OSS development (Iskoujina, Z. & Roberts, J., 2015). Organisations like Google advance their technology and systems through open innovation and outcomes of such collaboration are often becoming public goods (Chesbrough, 2017). The advantages of this cooperation are clear for all parties involved. A company can benefit from free labour and more advanced products. But the company also has to offer its contribution and give away the final product into the public sphere (Ciesielska 2017; Ciesielska & Westenholz, 2016). The classic example of the open innovation and public good production is Open Source Software with its Bazaar model or collaboration (Webber, 2004).

Core Business

As argued earlier in this paper, in this era, a social entrepreneur should have a good idea for innovation as well as an ability to motivate contributors to sustain that idea. This shows that integration between social innovation and business activities has been increased. Nowadays both profit and non-profit worlds have moved away in their original purpose. If previously it was either making money or helping others; for the last ten years this distinction has started to weaken (ParisTech Review, 2011). There are several examples when addressing social needs became the basis for a business model.

An example of core business in social innovation is assisted living and monitoring services. In the era of the ageing society, a very special need has been developed – to monitor and assist elderly people within the budget restrictions. In the UK, there are many companies, who offer assisted living services, often co-financed by the local authorities that provide personal monitoring, fall / motion detection, and nurse intervention in emergency situation.

Another interesting case from creative economy is BREEZE CREATIVES COMMUNITY INTEREST COMPANY operating in Newcastle upon Tyne and Sunderland in the North-East of England (<https://breezcreatives.com>). Their main business is in Operation of arts facilities, organizing art galleries and workspace for artists. They have also become involved in reviving city centres by taking over abandoned buildings.

To summarise, integration between social innovation and business activities has been increased, when both profit and non-profit worlds have been combined. Previously, organisations either made money or helped others. Now more and more organisations go for making money while helping others (ParisTech Review, 2011). As seen from the example of Facebook, innovation in a form of a social media site has become the basis for a business model. At the same time, social innovation is sustained and financed by this core business model.

Conclusions

In the last few years, the topics of sustainability and social innovation have become especially relevant for the discussion of knowledge economy, sustainable development and eco-trendiness. Both terms of sustainability and social innovation are used in various contexts and meanings, often overlapping. We argue in this paper that the concept of business model can help understanding the mutual benefits between social and economic innovation. Business activities don't have to be conceptually separated from social innovation and there are several levels of potential company's involvement in co-production of public goods and enhancing overall condition of life.

Once some argue that economic growth is restricted by the social and environmental sustainability (Scott Cato, 2009); we believe that it is more appropriate to say that there is no sustainable growth without three supporting pillars: economic growth, environment protection and social progress (Adams, 2006). In line with the above arguments, inclusion of social impact in the business model itself can play an essential role in commercialising and sustaining entrepreneurship ideas (Amores Salvado, 2011; Yunus, Moingeon, & Lehmann-Ortega, 2009; Brock & Steiner, 2009; Guclu, Dees & Anderson, 2002). Following this line of thought, we argue that there is no fundamental problem in combining business activities with addressing social needs as long as the gain will be mutual. In fact, there is a lot of overlap of social and business activities and these can be either entrepreneurial or simply providing support for social innovation. Based on the three empirical cases and their distinct characteristics we theorise that there are at least four levels of possible business involvement in addressing social needs (Figure 1): as a part of marketing strategy (see the example of Apple), R&D (Google Chrome), and core business activities (Facebook):

- Innovation Offsets - can be beneficial weather the company that either voluntary or compulsory complies with the high environmental standards and social needs.

- Marketing Strategy - The link between marketing strategy and social innovation has been originated in Corporate Social Responsibility movement and closely related to such fields as global conscious, ethics, and sustainability (Chun, 2006; Jenkins, 2009). By addressing issues of social interest, the company build a positive image and brand recognition.

- R&D strategy - The concept of social innovation as co-creation of public goods is compatible with an open innovation approach (Chesbrough, 2017; Ciesielska 2017; Ciesielska & Westenholtz, 2016; 2006a; 2006b; Swan and Scarbrough, 2005; Von Hippel, 1988). Nowadays many organizations, make use of both internal and external networks to advance their R&D processes, and potentially offer a public good in return.

- Core Business - In the third level of involvement the business model is merged with social innovation. It means that the company has both a business face and stakeholders, as well as serves the social purposes. These two elements are not contradictory, but rather interrelated, fulfilling the same goals and enable the model to exist.

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