WELL-BEING: A NEW DIMENSION TO ADDRESS IN BUSINESS MODELS

Monia Melia¹Marina Candi² Maria Colurcio¹

¹University of Catanzaro "Magna Graecia", Viale Europa, Località Germaneto, Catanzaro, Italy.

²Reykjavik University Centre for Research on Innovation and Entrepreneurship, Menntavegur 1, Reykjavik, 112, Iceland.

ABSTRACT

Purpose – The aim of the work is to contribute to the theoretical debate on business model innovation (Chesbrough, 2010; Zott et al., 2011) examining the interplay with a social innovation perspective (Rubalcaba et al., 2013; Russo Spena et al., 2015; Osburg and Schmidpeter, 2013). Specifically the study aims to analyze the relationship between business model innovation for service firms and efforts to improve the well-being of society.

Design/methodology approach – Using quantitative survey data collected from a sample of 184 Northern European service firms, this research explores the relationships among social innovation, service innovation and business model innovation.

Findings – The findings suggest that social innovation and business model innovation are positively related. More specifically, firms that invest effort in business model innovation – which usually involves a holistic approach to a firm's business – are likely to put effort into improving the well-being of society. The tentative conclusion that can be drawn from this research is that it is those firms that are actively involved in developing new business models that are more likely to take the social dimension into account than firms that focus more narrowly on service innovation.

Main implications – The paper contributes to the scientific debate on business model innovation in service firms by taking into account the possibility of a social dimension. This work adds to the existing discourses on business model innovation and social innovation by providing a broader perspective that includes the social dimension as a potential part of, or indeed a goal of, service business model innovation.

Originality/value — This work provides a broader perspective of business model innovation that includes the social dimension. Despite the lively debate in the literature on business model innovation (Chesbrough, 2010; Zott et al., 2011) — as a key to reach business success and higher performance (Boons et al. 2013), and on social innovation — as a new way to resolve societal changes (Osburg and Schmidpeter, 2013), considering these two elements together is a novel approach.

Keywords – Business model innovation, social innovation, service firms.

Paper type – Research paper

Acknowledgement – This research was supported in part by the European Union under the FP7 Marie Curie Industry-Academia Partnerships and Pathways Programme, project number 324448.

Introduction

Interest in business models has grown considerably among scholars and practitioners (Berglund and Sandström, 2013; Zott et al., 2011) and there is a wide range of different perspectives on the topic (Bocken et al., 2014). However, despite the substantial interest and prolific literature on this topic, there is little consensus regarding the definition of what a business model is (Berglund and Sandström, 2013; Zott et al., 2011), its nature, structure and evolution (Morris et al., 2005). As highlighted by Zott et al. (2011 p. 5), the business model has been recognized as a statement (Stewart and Zhao, 2000), a description (Applegate, 2000; Weill and Vitale, 2001), a representation (Morris, Schindehutte and Allen, 2005; Shafer, Smith and Linder, 2005), an architecture (Dubosson-Torbay, Osterwalder and Pigneur, 2002; Timmers, 1998), a conceptual tool or model (Osterwalder, Pigneur and Tucci, 2005), a structural template (Amit and Zott, 2001), a method (Afuah and Tucci, 2001), a framework (Afuah, 2004), a pattern (Brousseau and Penard, 2006) and a set (Seelos and Mair, 2007).

Morris et al. (2005, p. 727) define a business model as "a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets".

Two roles of business models can be distinguished (Baden-Fuller et al., 2010; Wirtz,2011). First, business models can support the strategic marketing of innovative processes, products and services (e.g., Pateli and Giaglis, 2005; Teece, 2010; Zott and Amit, 2008, 2007). Secondly, business models themselves can be changed and innovated to provide competitive advantage by changing the terms of competition(e.g., Chesbrough, 2010; Demil and Lecocq, 2010; Johnson,2010; Zott and Amit, 2010). Indeed, recently, the challenge of achieving sustainable competitiveness in the modern global ecosystem has drawn attention to the potential opportunities of business model innovation (Chesbrough, 2010; Zott et al., 2011).

Kindström (2010) highlights the link between business models and service innovation and proposes a framework of service-based business models, while also acknowledging that little is known about the phenomenon. Shifting towards a successful service-based business model requires firms to change key business model parameters (Chesbrough, 2007), namely the value proposition, revenue mechanisms, value chain, value network, competitive strategy and target market.

A number of authors have analysed the business model concept considering current social and environmental issues (Boons et al., 2013; Boons and Leudeke-Freund, 2013). They underline that firms can readily integrate the well-being of society into their business through deliberate business model redesign.

The complexity of global competition and the increasing relevance of sustainability and ethical issues (Belz and Peattie, 2009) call for business models that combine business needs with social ones and put innovative new systems into place to bring about social change in line with a social innovation perspective (Schmidpeter, 2013; Viñals,2013). Social innovation, is adopted to resolve societal changes and it regards new ideas improving quality or quantity of life (Osburg and Schmidpeter, 2013), not necessarily linked with economic profits (Russo Spena et al., 2015). Recent empirical and theoretical research provides a venue to question whether "business" and "social" can continue to be treated as distinct forms of innovation (Rubalcaba et al., 2013).

Despite the lively debate in the literature on i) business model innovation (Chesbrough, 2010; Zott et al., 2011) as a key to reach business success and higher performance (Boons et al. 2013), and on ii) social innovation as a new way to resolve societal changes (Osburg and Schmidpeter, 2013), considering all these elements together is a novel approach.

In this view, the work aims to contribute to the theoretical debate on business model innovation examining the relationship with the social innovation perspective. Specifically the study search for links between business model innovation for service firms and efforts to improve the well-being of society.

Our study contributes to the ongoing discourse in the literature by offering a wider perspective of service business model innovation by taking into account the possibility of a social dimension at either the core of a service business model's value proposition or as an augmentation implemented in one or more of the peripheral aspects of the business model.

The remainder of this paper is organized as follows. First, we review the literature on business models and social innovation and develop the research hypothesis. Then we present the methodology and discuss the findings. Finally, we propose theoretical and managerial implications, limitations and directions for future research.

Literature Review and Hypothesis

It is widely believed that business model innovation is a key factor to business success (Chesbrough, 2010; Zott et al., 2011), as well as to foster social well-being (Lüdeke-Freund, 2010). Business model innovation makes it possible to respond to current environmental, social and economic challenges, thus re-conceptualising the purpose of the firm and the value creating logic, and rethinking perceptions of value (Boons et al. 2013; Boons and Leudeke-Freund, 2013; Boons et al. 2014). Specifically, the argument is that by redesigning business models according a social perspective, firms can extend and enrich their offerings by addressing the value creation process to all actors and stakeholders.

Nevertheless, designing business models that enable the firm to capture economic value for itself through delivering social benefits is challenging (Schaltegger et al. 2012; Bocken et. al 2014). Boons et al. (2013) propose a new interpretation or conceptualization of the four basic elements of a business model (value proposition, supply chain, customer interface and financial model). According to Boons et al. (2013) the value proposition could reflect a business-society dialogue providing measurable social value in concert with economic value; suppliers, who accept responsibility for their own as well as the focal company's stakeholders, could be actively engaged into sustainable supply chain management; the customer-facing interface could be enhanced to motivate customers to take responsibility for their consumption as well as for the focal company's stakeholders; and finally the financial model could reflect an appropriate distribution of economic costs and benefits among actors involved in the business model and account for the company's ecological and social impacts (Maas and Boons, 2010). Bocken et al. (2014) propose that a shift in the purpose of business and in the way it is conducted could include addressing resource saving, the prioritization of societal and environmental benefits, recycling, or rewarding work experience aimed at enhancing human creativity and satisfaction. Hence, they define the concept of a sustainable business model, which captures economic, social and environmental value for a wide range of stakeholders. The adoption of a societal perspective requires a network oriented business model design. Some authors, e.g. Stubbs and Cocklin (2010) propose the concept of a sustainability business model (SBM), a model where sustainability concepts shape the driving force of the firm and its decision making. They conceptualize it in various ways such as a narrative of sustainability practices; a description of features, attributes, and/or characteristics; a list of necessary and sufficient conditions; a representation of business processes; a firm-level description; a systems-level description; or some combinations of these.

Compared with an absence of innovation, business model innovation has the potential to improve the well-being of society. Nevertheless, there is no guarantee that business model innovation will necessarily focus on the well-being of society. However, it is likely that the re-examination of the key components of a business model will at least raise the issue of societal well-being and we therefore hypothesize that business model innovation in service firms is likely to be related with efforts to improve the well-being of society.

Research hypothesis: A service firm's level of business model innovation effort is positively related with efforts to improve the well-being of society.

Methodology

The hypothesis was tested using data collected in two consecutive years from managers of 184 Northern European firms selling and developing services. The survey covered innovation activities and efforts to improve the well-being of society. The sample was drawn from public records and each year managers were contacted by telephone and asked to fill in an online survey. If they agreed a link to the survey was sent. Up to two reminder phone calls were made within a few weeks to those respondents who had not filled in the survey. A total of 184 surveys were filled in for the same number of companies two years in a row (response rate 80%).

Dependent variables

To avoid the problem of common method bias, the dependent variables were measured in the second year of survey data collection while the independent variables for innovation activities were measured in the first year.

Firms' efforts to improve the well-being of society were measured using 4 survey items, all scored from 1 (disagree) to 5 (agree): "Our company invests in research and development projects to improve the well-being of society in the future", "Our company is responsible towards society", "Our company invests in creating a better life for future generations", "Our company contributes to campaigns and projects that promote the well-being of society". A Cronbach's Alpha of 0.73 confirmed reliability.

Independent variables

To measure the prevalence of business model innovation, managers were asked to assess the relative effort spent on innovation activities in their firms by distributing 100 points among three innovation types: service innovation (the development of new services), business model innovation and process innovation. This is similar to the methodology employed by Bock et al. (2012) in their research on business model innovation. Managers were also asked to provide free-text descriptions of their innovation activities and, where provided, these were used to validate the numerical responses. A high degree of validity was noted, which provides confidence in the numerical data.

Control variables

Respondents were asked to specify the proportion of turnover spent on research and development as a measure of innovation activity in general and this was included as a control variable. In the same vein, firms' efforts spent on service innovation (measured as described above) were included as a control variable. Firm size (logarithm of number of employees) was also included as a control variable.

Findings

Pairwise correlations among the independent variables and dependent variable are shown in Table 1. The method used to measure service innovation and business model innovation involves distributing 100 points among these two types of innovation plus process innovation. This means that if a large proportion of points is allocated to one type of innovation, the other two types will obviously be allocated fewer points and negative correlations can be expected. Indeed, this is what we see in Table 1, where there is a large negative correlation between level of service innovation effort and level of business model innovation effort.

T 11 1 C	1 1 1 1		1	** ~ ~ ~ 1	* -0.05
Table 1: Summary) statistics and	nairwise	correlations	**n< [] [] [~n<11111
I word I. Dullilliai)	bidilbiles and	pantisc	corretations.	ρ '0.01,	p .0.05.

		Mean	Min	Max	Std.dev.	1		2	3	4
1	efforts to improve the well-being of society	3.70	1.00	5.00	0.77					•
2	level of service innovation effort	0.49	0.00	1.00	0.28	-0.03				
3	level of business model innovation effort	0.21	0.00	0.75	0.16	0.10	-0.6	8 **	•	
4	proportion of turnover spent on research and development	0.22	0.00	3.50	0.34	0.19	** 0.2	26 **	-0.11	
5	logarithm of firm size	0.00	0.00	2.76	0.00	0.18	* -0.0)5	-0.09	-0.04

The hypothesis was tested using robust ordinary least squares (OLS) regression models. The results are shown in Table 2.

To check for multi-collinearity, variance inflation factors were checked. The highest variance inflation factor was 1.99, which is well below the conservative threshold of 5 (Marquardt, 1970), so multi-collinearity was deemed to be unlikely to be a problem in the analysis.

Table 2: Results of OLS regression analysis with efforts to improve the well-being of society as the dependent variable. **p<0.01, *p<0.05. R²=10%.

	β	Std.err.	р
level of business model innovation effort	0.884	0.385	0.023 *
proportion of turnover spent on research and development	0.448	0.174	0.011 *
level of service innovation effort	0.191	0.233	0.412
logarithm of firm size	0.284	0.095	0.003 **

From Table 2, we see that the hypothesis about the relationship between business model innovation effort and efforts to improve the well-being of society is supported by the data. Thus, those firms that put a large proportion of their innovation investments into business model innovation are also likely to put effort into improving the well-being of society.

We see that the control variable for proportion of turnover spent on research and development (R&D) is statistically significant, which indicates that firms with a high level of R&D investment are more likely than firms that invest less in R&D to put effort into improving the well-being of society.

We also see that the relationship between service innovation effort and efforts to improve the well-being of society is not statistically significant.

Finally, we see that firm size is statistically significant, which indicates that larger firms are more likely to put effort into improving the well-being of society than smaller firms.

Conclusions

This research examines the relationship between business model innovation and social innovation in an attempt to better understand the conditions under which service firms are likely to make efforts to improve the well-being of society. Specifically, our work analyses how business model innovation and social innovation are interrelated, highlighting how service firms innovate their business models by taking the well-being of society into account.

There is no doubt that firms have a large influence on the economy and life in general (Schaltegger, Lüdeke-Freund and Hansen, 2012). The increasing attention of scholars and practitioners towards sustainability and ethical issues (Belz and Peattie, 2009) puts a normative demand on innovation to become more environmentally and socially benign and, at the same, provide new sources of innovation and competitive advantage for firms (Hansen, Grosse-Dunker and Reichwald, 2009).

In our study, we considered these social challenges conceptualizing the "well-being of society" as the condition pursued by firms through investments in research and development projects, campaigns and activities that promote the well-being of society and support the creation of a better life for future generations, and projects with a more attention and responsibility towards society.

As our data revealed, firms that invest in business model innovation, e.g. with more R&D investments, are also likely to put effort into improving the well-being of society. More and more, Firms design their business models by linking the technical domain with the social domain (Van der Meer, 2007; Rubalcaba et al., 2013) highlighting the value created for society.

Conversely, the relationship between service innovation effort and efforts to improve the well-being of society was not found to be statistically significant. This indicates that firms' propensity to put efforts into improving the well-being of society is not related with whether or not they put a large proportion of their innovation investments into developing new services. Indeed, coupled with the findings for the hypothesized relationship, this might suggest that business model innovation is more likely to be associated with improving the well-being of society than service innovation.

Implications for theory

The main theoretical implications of the work concern the framing of three streams of research through an integrated perspective. Indeed, whereas business model innovation, service innovation and social innovation have been widely studied in literature, the overlap or interplay among these types of innovation remains understudied. This research offers relevant insights about how they interrelate. We find that business model innovation and social innovation are related. This suggests that perhaps business model innovation, which involves a holistic examination of a firm's activities, is likely to result in efforts to improve the well-being of society.

Conversely, service innovation and social innovation are not related. This suggests that firms that pursue service innovation, which typically involves a focused effort to develop a new service or improve an existing one – perhaps due in part to its narrower focus – are less likely to put effort into improving the well-being of society.

Implications for practice

According to the findings of this research, the more holistic view typical of innovating business models is more likely to afford ways to improve the well-being of society than a more narrow focus on innovating services.

Limitations and directions for future research

Some limitations apply to our work. Firstly, the measurement of business model innovation and service innovation – although using an accepted method – forces respondents to take an "either or" approach. This can result in a firm that puts a lot of effort into both business model innovation and service innovation (e.g. allocating 50 points to each) to score "lower" on business model innovation or service innovation than a firm that puts all its (perhaps smaller) effort into one or the other. However, this method does do a good job of measuring relative effort.

Secondly, the limitation of the empirical scope to Northern European firms limits the generalizability of the research findings.

Future research should use (or develop) additional measures of business model innovation and service innovation to complement or replace the method used here. Furthermore, a definition of social innovation and a measurement instrument are sorely needed. Only with reliable validated measurement instruments can we hope to fully understand the interplay between business model innovation, service innovation and social innovation.

References

- Afuah, A. (2004) Business models: A strategic management approach. Irwin/McGraw-Hill, New York
- Afuah, A. and Tucci, C.L. (2001) Internet business models and strategies: Text and cases, McGraw-Hill, New York.
- Amit, R. and Zott, C. (2001) Value creation in e-business, Strategic Management Journal, 22, 6-7, 493-520.
- Applegate, L.M. (2000) E-business models: Making sense of the internet business landscape. In G. Dickson & G. DeSanctis (Eds.), Information technology and the future enterprise: New models for managers: 49-101. Englewood Cliffs, NJ: Prentice-Hall.
- Belz, F.M. and Peattie, P. (2009) Sustainability Marketing. A global perspective. John Wiley & Sons, Chichester.
- Baden-Fuller, C. Demil, B. Lecoq, X. and MacMillan, I.(2010) Special issue "Business Models". Long Range Planning 43, 143-145.
- Berglund, H. and Sandström, C. (2013). "Business model innovation from an open systems perspective: structural challenges and managerial solutions", International Journal of Product Development, 18, 3, 274-285.
- Bocken, N.M.P. Short, S.W. Rana, P. and Evans, S. (2014) A literature and practice review to develop sustainable business model archetypes, Journal of Cleaner Production, 65, 42-56.
- Boons, F. and Lüdeke-Freund, F. (2013) Business models for sustainable innovation: state-of-the-art and steps towards a research agenda. Journal of Cleaner Production, 45, 9-19.
- Boons, F. Montalvo, C. Quist, J. and Wagner, M. (2013) Sustainable innovation, business models and economic performance: an overview, Journal of Cleaner Production, 45, 1-8.
- Brousseau, E. and Penard, T. (2006) The economics of digital business models: A framework for analyzing the economics of platforms, Review of Network Economics, 6, 2, 81-110.
- Chesbrough, H. (2007) Business model innovation: It's not just about technology anymore, Strategy and Leadership, 35, 6, 12-17.

- Chesbrough, H. (2010) Business model innovation: opportunities and barriers, Long Range Plann, 43, 2-3, 354-363.
- Chesbrough, H. and Rosenbloom, R.S. (2002) The Role of the Business Model in capturing value from Innovation: Evidence from XEROX Corporation's Technology Spinoff Companies, Harvard Business School Press, Boston.
- Demil, B. and Lecocq, X. (2010). Business model evolution: in search of dynamic consistency. Long Range Planning 43, 227-246.
- Dubosson-Torbay, M. Osterwalder, A. and Pigneur, Y. (2002) E-business model design, classification, and measurements, Thunderbird International Business Review, 44, 1, 5-23.
- Grönroos, C. 2000. Service management and marketing: A customer relationship management approach (2nd ed.). Chichester, UK: Wiley.
- Hansen, E.G. Grosse-Dunker, F. and Reichwald, R. (2009) Sustainability innovation cube a framework to evaluate sustainability-oriented innovations, International Journal of Innovation Management, 13, 4, 683–713
- Kindstrom, D. (2010) Towards a service based business model. Key aspects for future competitive advantage, European Management Journal, 28, 479-490.
- Lüdeke-Freund, F. (2010). Towards a conceptual framework of business models for sustainability. In ERSCP-EMU Conference, Delft, The Netherlands, 1-28.
- Johnson, M.W.(2010) Seizing the White Space. In: Business Model Innovation for Growth and Renewal. Harvard Business School Press, Boston.
- Maas, K.E.H. and Boons, F.A.A. (2010) CSR as a strategic activity: value creation, redistribution and integration. In Louche, C. Idowu, S. and Leal Filho, W. (eds.), Innovative CSR: From Risk Management to Value Creation, London: Greenleaf, pp. 154-172.
- Morris, M. Schindehutte, M. and Allen, J. (2005) The entrepreneur's business model: toward a unified perspective, Journal of business research, 58, 6, 726-735.
- Osburg, T. and Schmidpeter, R. (2013) Social Innovation Solutions for a Sustainable Future, Spinger, Berlin.
- Osterwalder, A. Pigneur, Y. And Tucci, C.L. (2005) Clarifying business models: Origins, present and future of the concept. Communications of the Association for Information Science (CAIS), 16, 1-25.
- Pateli, A.G. and Giaglis, G.M. (2005) Technology innovation-induced business model change: a contingency approach. Journal of Organizational Change Management18, 167-183.

- Rubalcaba, L. Di Meglio, G. and Gallego, J. (2013) Public-private Innovation networks and social innovation in the service economy. In Viñals, C.R. and Parra Rodriguez, C. (eds) Social Innovation: New Forms of Organisation in Knowledge–Based Societies, London: Routledge.
- Russo Spena, T. Colurcio, M. Casbarra, C. and Melia, M. (2015) Service innovation and social innovation: a proposal of an integrated perspective. In Russo Spena, T. Mele, C. and Nuutinen, M. (eds) Co-innovating: activity, practice, learning and social context in innovation, Springer International Publishing (forthcoming).
- Schaltegger, S. Lüdeke-Freund, F. and Hansen, E. (2012) Business cases for sustainability: the role of business model innovation for corporate sustainability, International Journal of Innovation and. Sustainable. Development 6, 2, 95-119.
- Schmidpeter, R. (2013) Social Innovation: A New Concept for a Sustainable Future? Social Innovation Solutions for a Sustainable Future, Berlin: Springer.
- Shafer, S.M. Smith, H.J. and Linder, J. (2005) The power of business models. Business Horizons, 48, 199-207.
- Seelos, C. and Mair, J. (2007) Profitable business models and market creation in the context of deep poverty: A strategic view. Academy of Management Perspectives, 21, 49-63.
- Stewart, D.W. and Zhao, Q. (2000) Internet marketing, business models and public policy. Journal of Public Policy and Marketing, 19, 287-296.
- Stubb, W. and Cocklin, C. (2010) Conceptualizing a Sustainability Business Model, Organization & Environment, 21, 2, 103-127.
- Teece, D.J. (2010) Business models, business strategy, and innovation, Long Range Planning, 43, 172-194.
- Timmers, P. (1998). Business models for electronic markets. Electronic Markets 8, 2, 3-8.
- Viñals, C.R. (2013) Introduction to social innovation as a new form of organisation in knowledge-based societies. In Viñals C.R. and Parra Rodriguez, C. (eds) Social Innovation: New Forms of Organisation in Knowledge–Based Societies, London: Routledge, p 3.
- Zott, C. and Amit, R. (2007)Business model design and the performance of entrepreneurial firms. Organization Science 18, 181-199.
- Zott, C. and Amit, R. (2008) The fit between product market strategy and business model: implications for firm performance. Strategic Management Journal 29, 1-26.
- Zott, C. Amit, R. and Massa, L. (2011) The business model: recent developments and future research, Journal of Management, 37, 4, 1019-1042.
- Van der Meer, H. (2007) Open Innovation The Dutch Treat: Challenges in Thinking in Business Models, Creativity and Innovation Management, 16, 2, 192-202.

- Weill, P. and Vitale, M.R. (2001) Place to space: Migrating to e-business models. Harvard Business School Press, Boston.
- Wirtz, B.W. (2011) Business Model Management. In: Design e Instruments e Success Factors. Gabler, Wiesbaden.